



# Daily Briefing - October 16, 2025

Your Daily Tech & Programming Digest

Thursday, October 16, 2025

1000

ARTICLES

106509

WORDS

1072

MIN READ

40

SOURCES



## Today's Top Stories

### Gradient Porous Flexible Pressure Sensors with the Relay Effect for High-Accuracy Braille-to-Speech Recognition



Jianming  
Xu



2025-08-25



1  
min



62  
words

BRAILLE

**Summary:** The development of highly sensitive, wide linear-range flexible pressure sensors is crucial for practical applications in human-computer interaction, physiological signal detection, and motion monitoring. However, traditional flexible pressure sensors often suffer from limited compressibility in the...





Read full article:


[https://pubmed.ncbi.nlm.nih.gov/40854103/?](https://pubmed.ncbi.nlm.nih.gov/40854103/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8IvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016034024&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8IvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016034024&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40854103/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8IvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016034024&v=2.18.0.post9+e462414)

## Individual and community level factors influencing modern contraceptive use among women of reproductive age in South Africa: a multilevel analysis

 Million  
Phiri

 2025-08-26  1  
min

 46  
words

**BRAILLE**


**Summary:** CONCLUSION: Sensory disability status influenced women's contraceptive behaviour in South Africa. Current family planning interventions should target women with sensory disabilities by prioritising accessible communication methods (e.g., braille, sign language), disability awareness training for hea...



 **Read full article:**


<https://pubmed.ncbi.nlm.nih.gov/40855574/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016034024&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40855574/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016034024&v=2.18.0.post9+e462414)

## Explosion-powered eversible tactile displays

 Robert F  
Shepherd

 2025-08-27  1  
min

 64  
words

**BRAILLE**


**Summary:** High-resolution electronic tactile displays stand to transform haptics for remote machine operation, virtual reality, and digital information access for people who are blind or visually impaired. Yet, increasing the resolution of these displays requires increasing the number of individually addressa...


 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/40864730/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016034024&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40864730/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016034024&v=2.18.0.post9+e462414)

## A Biomimetic Fiber-Entangled Permeable Electronic Skin for Strain-Insensitive and High-Resolution Tactile Sensing

 Zhijun  
Ma

 2025-08-28

 1  
min

 57  
words

[BRAILLE](#)


**Summary:** Electronic skins (e-skins) incorporating island architectures represent a promising platform for strain-insensitive tactile sensing by mechanically decoupling sensing units from deformations. However, conventional island designs encounter stress concentration issues caused by inherent modulus mismat...


 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/40874468/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8IvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016034024&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40874468/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8IvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016034024&v=2.18.0.post9+e462414)

## High-Density Tactile Sensor Array for Sub-Millimeter Texture Recognition

 Min  
Zhang

 2025-08-28

 1  
min

 64  
words

[BRAILLE](#)

**Summary:** High-density tactile sensor arrays that replicate human touch could restore texture perception in paralyzed individuals. However, conventional tactile sensor arrays face inherent trade-offs between spatial resolution, sensitivity, and crosstalk suppression due to microstructure size limitations and ...

 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/40871941/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8IvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016034024&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40871941/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8IvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016034024&v=2.18.0.post9+e462414)

## A Diachronic Investigation of the Change in Form and Formational-Semantic Systematicity of the Chinese Sign Language Lexicon



Hao  
Lin



2025-09-01



1  
min



72  
words

BRAILLE

**Summary:** It has been argued in previous research that several competing pressures guide the directions of language evolution (economy vs. redundancy; arbitrariness vs. systematicity). For sign languages, however, the effects of competing pressures on their change of lexical systems remain largely unclear. In...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/40889233/?](https://pubmed.ncbi.nlm.nih.gov/40889233/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016034024&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016034024&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40889233/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016034024&v=2.18.0.post9+e462414)

## Wireless Electrotactile System with Hydrogel-Based Electrodes for Conformal Tactile Interaction



Ji  
Liu



2025-09-02



1  
min



56  
words

BRAILLE

**Summary:** A wireless epidermal electrotactile interface is demonstrated through integration of skin-conformal electrodes and flexible circuitry, addressing existing limitations in haptic technology caused by mechanical mismatch and system-level integration challenges. This electrotactile system achieves low s...

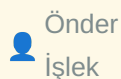


Read full article:

[https://pubmed.ncbi.nlm.nih.gov/40891563/?](https://pubmed.ncbi.nlm.nih.gov/40891563/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016034024&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016034024&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40891563/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016034024&v=2.18.0.post9+e462414)

## Beyond access: rethinking assistive technology for individuals with visual impairments in Türkiye



Önder

İşlek



2025-09-12



1

min



55

words

BRAILLE

**Summary:** CONCLUSION: Despite demonstrating adaptability, individuals with VI in Türkiye face significant structural barriers to equitable AT access. Informal learning limited public support, and a lack of locally adapted tools contribute to digital exclusion. A rights-based approach-emphasizing inclusive fun...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/40937808/?](https://pubmed.ncbi.nlm.nih.gov/40937808/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016034024&v=2.18.0.post9+e462414)[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016034024&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40937808/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016034024&v=2.18.0.post9+e462414)

## High prevalence of bacterial STI, anal HPV, cytological abnormalities and anal lesions among MSM in Togo, 2021: a baseline analysis of the ANRS I MIE 12,400/DepIST-H cohort



Didier K

Ekouevi



2025-09-27



1

min



42

words

BRAILLE


**Summary:** CONCLUSIONS: These findings emphasize the high prevalence of STIs among MSM and confirm the unusual distribution of HPV types in West Africa, with HPV35 being highly prevalent. A national strategy regarding STI screening and HPV vaccination in this key population is needed.




Read full article:


[https://pubmed.ncbi.nlm.nih.gov/41013315/?](https://pubmed.ncbi.nlm.nih.gov/41013315/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016034024&v=2.18.0.post9+e462414)[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016034024&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41013315/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016034024&v=2.18.0.post9+e462414)

## Development and Assessment of a Novel Audiosensory Performance Method for Improving the Oral Health of Visually Impaired Children

 Divya Singh

 2025-10-03

 1 min

 73 words

**BRaille**


**Summary:** This study evaluated the effectiveness of an audiosensory performance method in enhancing oral health knowledge and status among visually impaired children aged 6-12 years in the National Capital Region (NCR), Delhi. An interventional study design was used, involving 251 participants equally divided...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41041413/?](https://pubmed.ncbi.nlm.nih.gov/41041413/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016034024&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016034024&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41041413/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016034024&v=2.18.0.post9+e462414)

## Transcranial direct current stimulation (tDCS): A new, (still) legal form of "neurodoping" in sports?

 James Chmiel

 2025-10-13

 1 min

 64 words

**TDcs TACS TRNS**


**Summary:** Transcranial direct current stimulation (tDCS) has emerged as a widely accessible, noninvasive technique capable of modulating cortical excitability. A rapidly expanding body of sports-science literature suggests that it can produce modest but measurable gains in endurance, strength, skill acquisiti...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41078301/?](https://pubmed.ncbi.nlm.nih.gov/41078301/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016034017&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016034017&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41078301/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016034017&v=2.18.0.post9+e462414)

## Effects of transcranial direct current stimulation on neuro electrical activity in mice with migraine

 Jianliang  
Wu

 2025-10-13

 1  
min

 47  
words

TDCS TACS TRNS

**Summary:** CONCLUSION: These results establish that low-intensity tDCS ameliorates migraine pathophysiology through dual mechanisms:  $\theta$ -band synchronization mediating behavioral normalization and  $\gamma$ -band desynchronization reducing neural noise. The  $\delta/\theta$  power reconfiguration implicates thalamocortical rhythm stab...


 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41079350/?](https://pubmed.ncbi.nlm.nih.gov/41079350/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016034017&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016034017&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41079350/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016034017&v=2.18.0.post9+e462414)

## Transcranial direct current stimulation modulates primate brain dynamics across states of consciousness

 Béchir  
Jarraya

 2025-10-13

 1  
min

 63  
words

TDCS TACS TRNS


**Summary:** The resting primate brain is traversed by spontaneous functional connectivity patterns that show striking differences between conscious and unconscious states. Transcranial direct current stimulation (tDCS), a non-invasive neuromodulatory technique, can improve signs of consciousness in disorders of...


 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41081761/?](https://pubmed.ncbi.nlm.nih.gov/41081761/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016034017&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016034017&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41081761/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016034017&v=2.18.0.post9+e462414)

## High-definition Transcranial Direct Current Stimulation over Right Dorsolateral Prefrontal Cortex to Enhance Metacognitive Sensitivity

 Jialu  
Qin

 2025-10-13

 1  
min

 69  
words

TDCS TACS TRNS

**Summary:** In human-AI collaboration, task delegation is a critical component. Ideally, if a person believes they are capable of completing a task, they should do so themselves; otherwise, the task should be delegated to the other party. Such delegation decisions are influenced by individuals' assessments of t...

 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/41082455/?](https://pubmed.ncbi.nlm.nih.gov/41082455/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016034017&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016034017&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41082455/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016034017&v=2.18.0.post9+e462414)




## Dose-Dependent Enhancement of Coordination through Multibrain Transcranial Stimulation: A fNIRS Hyperscanning Study

 Shengjun Wu

 17 2025-10-13

 1 min

 67 words

TDCS TACS TRNS

**Summary:** Coordination serves as a fundamental driving force in the evolution of human society, and transcranial electrical stimulation (tES) is increasingly recognized for its ability to modulate human coordination. However, the neural mechanisms underlying coordination and whether tES positively influences ...


 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41083052/?](https://pubmed.ncbi.nlm.nih.gov/41083052/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016034017&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016034017&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41083052/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016034017&v=2.18.0.post9+e462414)

## Advances on transcranial electromagnetic stimulation in improving non-motor symptoms of Parkinson's disease

 C F Liu

 17 2025-10-13

 1 min

 1 words

TDCS TACS TRNS

**Summary:** tDCS rTMS  
tDCS rTMS .

 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41083398/?](https://pubmed.ncbi.nlm.nih.gov/41083398/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016034017&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016034017&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41083398/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016034017&v=2.18.0.post9+e462414)

## Modification of inhibitory control and craving through transcranial direct current stimulation as an add-on treatment for substance use disorder: protocol for a randomized controlled study



Sarah  
Gerhardt



2025-10-14



1  
min



68  
words

TDCS TACS TRNS

**Summary:** BACKGROUND: Substance use disorders (SUDs) remain a prevalent public health issue characterized by a substantial disease burden and high relapse rates. The aim of this planned project is to investigate the optimal electrode placement and polarity of transcranial direct current stimulation (tDCS) to ...





Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41084082/?](https://pubmed.ncbi.nlm.nih.gov/41084082/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016034017&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016034017&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41084082/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016034017&v=2.18.0.post9+e462414)

## Heartbeat perception is causally linked to frontal delta oscillations

 Surjo R  
Soekadar

 2025-10-14

 1  
min

 71  
words

TDCS TACS TRNS


**Summary:** The ability to accurately perceive one's own bodily signals, such as the heartbeat, plays a vital role in physical and mental health. However, the neurophysiological mechanisms underlying this ability, termed interoception, are not fully understood. Converging evidence suggests that cardiac rhythms ...

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41087675/?](https://pubmed.ncbi.nlm.nih.gov/41087675/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016034017&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016034017&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41087675/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016034017&v=2.18.0.post9+e462414)

# High-Definition Transcranial Direct Current Stimulation Improves Pain Empathy: A Randomized, Double-Blind, and Sham-Controlled Study Based on Event-Related Potentials (ERPs)

 Yuling Wang

 17

2025-10-15



1 min



69 words

TDCS TACS TRNS

**Summary:** The impact of transcranial direct current stimulation (tDCS) on pain empathy is a subject of debate and controversy. The variations in the results could be attributed to differences in the stimulus parameters. This study aimed to examine the impact of high-definition transcranial direct current stim...

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41089305/?](https://pubmed.ncbi.nlm.nih.gov/41089305/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016034017&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016034017&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089305/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016034017&v=2.18.0.post9+e462414)

## Effectiveness of Transcranial Direct Current Stimulation on Cognitive Function: A Pilot Study



Alireza Akbarzade  
Baghban



2025-10-15



1  
min



68  
words

TDCS TACS TRNS

**Summary:** CONCLUSION: The findings suggest that employing tDCS techniques plays a pivotal role in enhancing specific executive functions, such as working memory, problem-solving, and planning, in patients with traumatic brain injuries. tDCS can be considered a complementary treatment option in the rehabilitat...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41089630/?](https://pubmed.ncbi.nlm.nih.gov/41089630/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016034017&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016034017&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089630/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016034017&v=2.18.0.post9+e462414)

## Type S and M errors as a “rhetorical tool”



noreply@blogger.com (Daniel  
Lakens)



2025-09-28



17  
min



3572  
words

TWENTY PERCENT STATISTICIAN


**Summary:** *Update 30/09/2025: I have added a reply by Andrew Gelman below my original blog post.* We recently posted a preprint criticizing the idea of Type S and M errors ([https://osf.io/2phzb\\_v1](https://osf.io/2phzb_v1)). From our abstract: “While these concepts have been pr...



Read full article:

<http://daniellakens.blogspot.com/2025/09/type-s-and-m-errors-as-rhetorical-tool.html>

## When noncanonical olfaction is optimal

Caitlin LienkaemperMeg A. YoungerGabriel Koch OckeraDepartment of Mathematics and Statistics,  
Boston University, Boston, MA 02215bCenter for Systems Neuroscience, Boston University, Boston,  
 MA 02215cDepartment of Biology, Boston University, Boston, MA 02215dDepartment of  
Bioengineering, Center for Neurophotonics, Boston University, Boston, MA 02215eCenter for  
Neurophotonics, Boston University, Boston, MA 02215



2025-10-07



1

min



52

words

PNAS NEUROSCIENCE

**Summary:** Proceedings of the National Academy of Sciences, Volume 122, Issue 41, October 2025.   
SignificanceThe canonical model of early olfaction is that each olfactory sensory neuron (OSN) expresses one type of olfactory receptor, and neurons with the same receptor project to the same downstream glomer...



Read full article:

<https://www.pnas.org/doi/abs/10.1073/pnas.2508439122?af=R>

## Biologically grounded neocortex computational primitives implemented on neuromorphic hardware improve vision transformer performance

Asim Iqbal Hassan Mahmood Greg J. Stuart Gord Fishell Suraj Honnuraiah Tibbling Technologies, Seattle, WA 98052-5727 bJohn Curtin School of Medical Research, Eccles Institute of Neuroscience, Australian National University, Canberra, ACT 2601, Australia cDepartment of Physiology, Monash University, Melbourne, VIC 3800, Australia dHarvard Medical School, Blavatnik Institute, Department of Neurobiology, Boston, MA 02115 eStanley Center for Psychiatric Research, Broad Institute of MIT and Harvard, Cambridge, MA 02142 fInstitute of Neuroinformatics, ETH Zurich and University of Zurich, Zurich CH-8057, Switzerland



2025-10-07



1  
min



43  
words

PNAS NEUROSCIENCE


**Summary:** Proceedings of the National Academy of Sciences, Volume 122, Issue 41, October 2025.   
Significance We implement a biologically grounded cortical circuit motif in neuromorphic hardware and AI architectures to show how experimentally informed neocortical computations, realized through cell-type-sp...



Read full article:


<https://www.pnas.org/doi/abs/10.1073/pnas.2504164122?af=R>

## VAE deep learning model with domain adaptation, transfer learning and harmonization for diagnostic classification from multi-site neuroimaging data

 D.  
Rangaprakash

 17 2025-09-11

 1  
min

 276  
words


FRONTIERS NEUROINFORMATICS


**Summary:** In large public multi-site fMRI datasets, the sample characteristics, data acquisition methods, and MRI scanner models vary across sites and datasets. This non-neural variability obscures neural differences between groups and leads to poor machine learning based diagnostic classification of neurodev...

 Read full article:


<https://www.frontiersin.org/articles/10.3389/fninf.2025.1553035>

## Software and pipelines for registration and analyses of rodent brain image data in reference atlas space

 Jan G.  
Bjaalie

 17 2025-09-24

 1  
min

 207  
words

FRONTIERS NEUROINFORMATICS

**Summary:** Advancements in methodologies for efficient large-scale acquisition of high-resolution serial microscopy image data have opened new possibilities for experimental studies of cellular and subcellular features across whole brains in animal models. There is a high demand for open-source software and wo...

 Read full article:

<https://www.frontiersin.org/articles/10.3389/fninf.2025.1629388>



## CRISP: a correlation-filtered recursive feature elimination and integration of SMOTE pipeline for gait-based Parkinson's disease screening

 Syed Omer  
Gilani



2025-10-10



1  
min



255  
words

FRONTIERS COMPUTATIONAL NEUROSCIENCE


**Summary:** Introduction Parkinson's disease (PD) is the fastest-growing neurodegenerative disorder, with subtle gait changes such as reduced vertical ground-reaction forces (VGRF) often preceding motor symptoms. These gait abnormalities, measurable via wearable VGRF sensors, offer a non-invasive means for early...



Read full article:

<https://www.frontiersin.org/articles/10.3389/fncom.2025.1660963>

## The articulatory basis of phonological error patterns in childhood speech sound disorders

 Pascal Van  
Lieshout



2025-10-10



1  
min



237  
words

FRONTIERS HUMAN NEUROSCIENCE


**Summary:** Speech acquisition involves complex coordination of articulatory structures, primarily the jaw, lips, and tongue. Typically developing children acquire speech sounds in a hierarchical sequence governed by progressive neuromotor maturation. However, disruptions in speech motor control can lead to sys...






Read full article:

<https://www.frontiersin.org/articles/10.3389/fnhum.2025.1635096>

## Modeling dyslexia in neurotypical adults by combining neuroimaging and neuromodulation techniques: a hypothesis paper


 Shinri Ohta

 2025-10-10  1 min

 263 words


FRONTIERS HUMAN NEUROSCIENCE



**Summary:** Dyslexia is a prevalent developmental disorder marked by deficits in literacy skills. Given that the core deficits of dyslexia are uniquely human, animal models have not been as useful in dyslexia research as they have been in other areas of research. While significant progress has been made through...


 Read full article:

<https://www.frontiersin.org/articles/10.3389/fnhum.2025.1651332>

## Efficacy of snap-needle patch therapy in pediatric epilepsy: a case study

 WeiLan Qin

 2025-10-10  1 min

 374 words

FRONTIERS HUMAN NEUROSCIENCE


**Summary:** BackgroundsEpilepsy is a prevalent neurological disorder in early childhood, often characterized by genetic predisposition and diverse clinical manifestations. Benign epilepsy of childhood with central temporal spikes (BECTS) is the most common form of self-limited focal epilepsy (SeLFE) syndrome in...

 Read full article:


<https://www.frontiersin.org/articles/10.3389/fnhum.2025.1618266>

## Toward accurate single image sand dust removal by utilizing uncertainty-aware neural network

 Yixin  
Wang

 2025-09-10

 1  
min

 189  
words


FRONTIERS NEUROBOTICS



**Summary:** Although deep learning methods have made significant strides in single image sand dust removal, the heterogeneous uncertainty induced by dusty environments poses a considerable challenge. In response, our research presents a novel framework known as the Hierarchical Interactive Uncertainty-aware Net...


 Read full article:

<https://www.frontiersin.org/articles/10.3389/fnbot.2025.1575995>

## Source-free domain adaptation for SSVEP-based brain-computer interfaces

 Osman Berke Guney, Deniz Kucukahmetler and Huseyin  
Ozkan

 2025-10-08  1  
min

 216  
words

JOURNAL NEURAL ENGINEERING

**Summary:** Objective. Steady-state visually evoked potential-based Brain-computer interface (BCI) spellers assist individuals experiencing speech difficulties by enabling them to communicate at a fast rate. However, achieving a high information transfer rate (ITR) in most prominent methods requires an extensiv...

 Read full article:

<http://iopscience.iop.org/article/10.1088/1741-2552/ae0c3d>

## Brain-to-text decoding with context-aware neural representations and large language models



Jingyuan Li, Trung Le, Chaofei Fan, Mingfei Chen and Eli Shlizerman



2025-10-13



1 min



235 words

JOURNAL NEURAL ENGINEERING

**Summary:** Objective. Decoding attempted speech from neural activity offers a promising avenue for restoring communication abilities in individuals with speech impairments. Previous studies have focused on mapping neural activity to text using phonemes as the intermediate target. While successful, decoding neu...



Read full article:

<http://iopscience.iop.org/article/10.1088/1741-2552/adfab1>

## Journalists turn in access badges, exit Pentagon rather than agreeing new rules



2025-10-16



1 min



2 words

HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45602179)



Read full article:

<https://apnews.com/article/pentagon-press-access-hegseth-trump-restrictions-5d9c2a63e4e03b91fc1546bb09ffb12>

## Journalists turn in access badges, exit Pentagon rather than agreeing new rules



pjmlp



2025-10-16

1  
min13  
words

HACKER NEWS

**Summary:**

Article URL: <https://apnews.com/article/pentagon-press-access-hegseth-trump-restrictions-5d9c2a63e4e03b91fc1546bb09ffbf12>

Comments URL:

Read full article:

<https://apnews.com/article/pentagon-press-access-hegseth-trump-restrictions-5d9c2a63e4e03b91fc1546bb09ffbf12>

## Musical Structure Influences the Perception of Sound Location



2025-09-08

1  
min209  
words

COGNITIVE NEUROSCIENCE

**Summary:** The perception of multilayered auditory stimuli, such as music or speech, relies on the integration of progressively more complex and abstract features as they are processed along the auditory pathway. To investigate whether higher-level musical structure modulates auditory perception or merely the ...




Read full article:


<http://ieeexplore.ieee.org/document/11153363>

## Call for Applications: IEEE T-MRB Editor in Chief Search

 Deidre  
Artis


 17 2025-04-03

 1  
min

 18  
words

EMBS


**Summary:** <p>The post <a href="https://www.embs.org/uncategorized/call-for-applications-ieee-tmr-editor-in-chief-search/">Call for Applications: IEEE T-MRB Editor in Chief Search</a> appeared first on <a href="https://www.embs.org">IEEE EMBS</a>.</p>

 Read full article:


<https://www.embs.org/uncategorized/call-for-applications-ieee-tmr-editor-in-chief-search/>

## Call for Applications Editor-in-Chief: IEEE Open Journal of Engineering in Medicine and Biology

 Deidre  
Artis

 17 2025-04-04

 1  
min

 22  
words


EMBS



**Summary:** <p>The post <a href="https://www.embs.org/ojemb/search-for-editor-in-chief/#new\_tab">Call for Applications Editor-in-Chief: IEEE Open Journal of Engineering in Medicine and Biology</a> appeared first on <a href="https://www.embs.org">IEEE EMBS</a>.</p>


 Read full article:

[https://www.embs.org/ojemb/search-for-editor-in-chief/#new\\_tab](https://www.embs.org/ojemb/search-for-editor-in-chief/#new_tab)

## Notice to IEEE EMBS Members: Change to Field of Interest

 Nancy  
Zimmerman

 2025-04-27  1  
min

 19  
words



EMBS


**Summary:** <p>The post <a href="https://www.embs.org/blog-post/change-foi-for-ieee-embs/">Notice to IEEE EMBS Members: Change to Field of Interest</a> appeared first on <a href="https://www.embs.org">IEEE EMBS</a>.</p>

 Read full article:  
<https://www.embs.org/blog-post/change-foi-for-ieee-embs/>

## Notice to IEEE EMBS Members: Change to Field of Interest

 Nancy  
Zimmerman

 2025-04-27  1  
min

 19  
words



EMBS


**Summary:** <p>The post <a href="https://www.embs.org/blog-post/change-foi-for-ieee-embs/#new\_tab">Notice to IEEE EMBS Members: Change to Field of Interest</a> appeared first on <a href="https://www.embs.org">IEEE EMBS</a>.</p>

 Read full article:  
[https://www.embs.org/blog-post/change-foi-for-ieee-embs/#new\\_tab](https://www.embs.org/blog-post/change-foi-for-ieee-embs/#new_tab)

## Open Call for AdCom Nominations


 Nancy  
Zimmerman

 17 2025-05-02  1  
min

 14  
words


EMBS



**Summary:** <p>The post <a href="https://www.embs.org/uncategorized/call-for-adcom-nominations/">Open Call for AdCom Nominations</a> appeared first on <a href="https://www.embs.org">IEEE EMBS</a>.</p>


 Read full article:

<https://www.embs.org/uncategorized/call-for-adcom-nominations/>

## IEEE EMBS Appoints Sunghoon “Ivan” Lee, Ph.D., as Editor-in-Chief of EMBC Proceedings, the Leading Biomedical Engineering Conference Publication

 Nancy  
Zimmerman

 17 2025-08-19  1  
min

 79  
words

EMBS

**Summary:** <p>(Piscataway, N.J., August 12, 2025) Sunghoon “Ivan” Lee, Ph.D., a Donna M. and Robert J. Manning Faculty Fellow and an Associate Professor of computer science, electrical and computer engineering, and&#8230; <a class="continue" href="https://www.embs.org/press/embc-eic-sunghoon-ivan-lee/">Continu...


 Read full article:

<https://www.embs.org/press/embc-eic-sunghoon-ivan-lee/>



## Methodological considerations for quantifying brain asymmetry using neuroimaging techniques

 1  
min

 15  
words


BRAIN RESEARCH

**Summary:**

Publication date: 15 November 2025

Source: Brain Research, Volume 1867


Author(s): Haokun Li, Jingli Qu, Gaolang Gong

 Read full article:

[https://www.sciencedirect.com/science/article/pii/S0006899325005426?dgcid=rss\\_sd\\_all](https://www.sciencedirect.com/science/article/pii/S0006899325005426?dgcid=rss_sd_all)

## Prefrontal transcranial direct current stimulation enhances the analgesic effects of attention bias modification: a randomized controlled trial

 1  
min

 31  
words

BRAIN RESEARCH

**Summary:**

Publication date: 1 December 2025

Source: Brain Research, Volume 1868


Author(s): Xue Jiang, Haozhi Zhao, Ruihan Wan, Chen Gong, Beibei Feng, Yafei Wang, Yangfan Xu, Wangwang Yan, Xueqiang Wang, Yixuan Ku, Yuling Wang

 Read full article:

[https://www.sciencedirect.com/science/article/pii/S0006899325005396?dgcid=rss\\_sd\\_all](https://www.sciencedirect.com/science/article/pii/S0006899325005396?dgcid=rss_sd_all)

## The study of beneficial effect and mechanism of propofol on TNF- $\alpha$ -induced p-Tau increase in HT22 hippocampal neurons

 1  
min

 22  
words

NEUROSCIENCE JOURNAL




**Summary:** <p>Publication date: 10 November 2025</p><p><b>Source:</b></p>Neuroscience, Volume 587</p><p>Author(s): Shuai Gao, Yifei Wang, Zhihong Xu, Minmin Zhu, Zhipeng Meng, Guanghui An, Jiawei Chen</p>

 Read full article:

[https://www.sciencedirect.com/science/article/pii/S0306452225009789?dgcid=rss\\_sd\\_all](https://www.sciencedirect.com/science/article/pii/S0306452225009789?dgcid=rss_sd_all)


# Inter- and intrahemispheric sources of vestibular signals to V1

Guy BouvierAlessandro SanzeniElizabeth HamadaNicolas BrunelMassimo ScanzianiDepartment of Physiology, University of California San Francisco, San Francisco, CA 94158bHHMI, University of California San Francisco, San Francisco, CA 94158cCNRS, Institut des Neurosciences Paris-Saclay, Université Paris-Saclay, Saclay 91400, FranceDepartment of Computing Sciences, Bocconi University, Milan 20100, ItalyCenter for Theoretical Neuroscience, Columbia University, New York, NY 10027fMortimer B Zuckerman Mind Brain Behavior Institute, Columbia University, New York, NY 10027gDepartment of Neurobiology, Duke University, Durham, NC 27710hDepartment of Neurology, University of California San Francisco, San Francisco, CA 94158

 2025-10-10  1 min  48 words

PNAS NEUROSCIENCE

**Summary:** Proceedings of the National Academy of Sciences, Volume 122, Issue 41, October 2025.   
SignificanceInformation about head motion is fundamental to the visual interpretation of our environment. Indeed, head motion signals originating from the vestibular system robustly modulate activity in the vi...


 **Read full article:**




<https://www.pnas.org/doi/abs/10.1073/pnas.2503181122?af=R>

## The locus coeruleus maintains core body temperature and protects against hypothermia during dexmedetomidine-induced sedation

Berta Anuncibay SotoYing MaMathieu NolletSara WongGiulia MiraccaDaniel RastinejadRaquel

YustosAlexei L. VyssotskiNicholas P. FranksWilliam WisdenaDepartment of Life Sciences, Imperial

 College London, London SW7 2AZ, United KingdombUnited Kingdom Dementia Research Institute at Imperial College London, London W12 0BZ, United KingdomcInstitute of Neuroinformatics, University of Zurich and ETH Zurich, Zurich CH8057, Switzerland

 2025-10-07  1 min  48 words


PNAS NEUROSCIENCE

**Summary:** Proceedings of the National Academy of Sciences, Volume 122, Issue 41, October 2025. <br />SignificanceDexmedetomidine (DEX), a widely used sedative in intensive care, induces an arousable state resembling non-rapid eye movement (NREM) sleep and lowers body temperature. For some patients, even sligh...

 Read full article:

<https://www.pnas.org/doi/abs/10.1073/pnas.2422878122?af=R>

## Epileptic brain imaging by source localization CLARA supported by ictal-based semiology and VEEG in resource-limited settings

 Aleksandra Kawala-Sterniuk



2025-08-29



1 min



279 words

FRONTIERS NEUROINFORMATICS


**Summary:** Introduction Accurate localization of the epileptogenic zone is essential for surgical treatment of drug-resistant epilepsy. Standard presurgical evaluations rely on multimodal neuroimaging techniques, but these may be limited by availability and interpretive challenges. This study aimed to assess th...



Read full article:

<https://www.frontiersin.org/articles/10.3389/fninf.2025.1661617>

## Editorial: Neuro-detection: advancements in pattern detection and segmentation techniques in neuroscience

 Ridha Ejbali



2025-09-02



1 min



0 words

FRONTIERS COMPUTATIONAL NEUROSCIENCE




Read full article:

<https://www.frontiersin.org/articles/10.3389/fncom.2025.1685174>

## Editorial: AI and inverse methods for building digital twins in neuroscience

 Maik  
Kschischo

 2025-09-08

 1  
min


 0  
words


FRONTIERS COMPUTATIONAL NEUROSCIENCE

 Read full article:


<https://www.frontiersin.org/articles/10.3389/fncom.2025.1684335>

## Intrinsic calcium resonance and its modulation: insights from computational modeling

 Hanoch  
Kaphzan

 2025-09-18

 1  
min

 254  
words


FRONTIERS COMPUTATIONAL NEUROSCIENCE


**Summary:** Hippocampal neurons generate membrane potential resonance due to specific voltage-gated ion channels, known as resonating conductances, which play crucial physiological roles. However, it is not known whether this phenomenon of resonance is limited to membrane voltage or whether it propagates through...

 Read full article:


<https://www.frontiersin.org/articles/10.3389/fncom.2025.1669841>

## Effects of AC induced electric fields on neuronal firing sensitivity and activity patterns

 Yueyang  
Zhao

 2025-09-18

 1  
min

 218  
words

FRONTIERS COMPUTATIONAL NEUROSCIENCE


**Summary:** Introduction Understanding how neurons respond to time-varying electric fields is essential for both basic neuroscience and the development of neuromodulation strategies. However, the mechanisms by which alternating-current induced electric fields (AC-IEF) influence neuronal sensitivity and firing re...

 Read full article:


<https://www.frontiersin.org/articles/10.3389/fncom.2025.1612314>

## Disentangling indirect versus direct effects of somatosensory cortex microstimulation on neurons in primary motor and ventral premotor cortex

 Brandon Ruzala, Kevin A Mazurek and Marc H  
Schieber

 2025-10-06

 1  
min

 300  
words

JOURNAL NEURAL ENGINEERING

**Summary:** Objective. Intracortical microstimulation in the primary somatosensory cortex (S1-ICMS) is being developed to provide on-line feedback for bidirectional brain-machine interfaces. Because S1-ICMS can alter the discharge of the motor cortex neurons used to decode motor intent, successful application o...

 Read full article:

<http://iopscience.iop.org/article/10.1088/1741-2552/ae087e>

## EEG workload estimation and classification: a systematic review



Jahid Hassan, Shamim Reza, Syed Udoy Ahmed, Nazmul Haque Anik and Md Obaydullah Khan



2025-10-08



1 min



300 words

JOURNAL NEURAL ENGINEERING

**Summary:** Objective. Electroencephalography (EEG) has evolved into an indispensable instrument for estimating cognitive workload in various domains. Machine Learning (ML) and deep learning (DL) techniques have been increasingly employed to develop accurate workload estimation and classification models based o...



Read full article:

<http://iopscience.iop.org/article/10.1088/1741-2552/ad705e>

## Identification of modulated whole-brain dynamical models from nonstationary electrophysiological data



Addison Schwamb, Zongxi Yu and ShiNung Ching



2025-10-09



1 min



198 words

JOURNAL NEURAL ENGINEERING

**Summary:** Objective. Understanding the mechanisms underlying brain dynamics is a long-held goal in neuroscience. However, these dynamics are both individualized and nonstationary, making modeling challenging. Here, we present a data-driven approach to modeling nonstationary dynamics based on principles of neu...





Read full article:

<http://iopscience.iop.org/article/10.1088/1741-2552/ae0d32>




## Association of High-Altitude Polycythemia with JAK2V617F Mutation in Pakistani Population

 Uzma  
Zaidi

 2025-10-14

 1  
min

 74  
words

LOW VISION


**Summary:** To assess the prevalence of the JAK2V617F mutation in polycythemia patients living at high altitude. This was a cross-sectional study, conducted at the National Institute of Blood Diseases and Bone Marrow Transplantation (NIBD-BMT), Karachi from July 2022 to July 2023. A total of 132 patients with polyc...


 Read full article:

<https://pubmed.ncbi.nlm.nih.gov/41084570/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016025356&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41084570/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016025356&v=2.18.0.post9+e462414)

## Neither exogenous, nor endogenous: Evidence for a distinct role of negative emotion during attentional control

 Gilles  
Pourtois

 2025-10-14

 1  
min

 69  
words

LOW VISION


**Summary:** Negative or threatening stimuli capture attention. However, it remains unclear whether this phenomenon is best conceived as bottom-up (i.e., salience-driven) or top-down (i.e., goal-directed) instead. To address this question, we conducted two experiments using a previously validated dot-probe task ...


 Read full article:

<https://pubmed.ncbi.nlm.nih.gov/41086156/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016025356&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41086156/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016025356&v=2.18.0.post9+e462414)

## Improving object detection in challenging weather for autonomous driving via adversarial image translation

 Yaohua  
Zhao

 2025-10-14

 1  
min

 65  
words

LOW VISION

**Summary:** Vision-based environmental perception is fundamental to autonomous driving, as it enables reliable detection and recognition of diverse objects in complex traffic environments. However, adverse weather conditions (such as rain, fog, and low-light conditions) significantly degrade image quality, ther...


 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41086174/?](https://pubmed.ncbi.nlm.nih.gov/41086174/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016025356&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016025356&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41086174/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016025356&v=2.18.0.post9+e462414)

## Shared mechanisms of presaccadic and exogenous attention in modulating visual perception of contrast

 Yongchun  
Cai

 2025-10-14

 1  
min

 59  
words

LOW VISION


**Summary:** Different types of attention alter subjective visual perception in fundamentally distinct ways. Previous studies have focused on covert attention without concurrent eye movements, revealing that covert exogenous (involuntary) attention enhances contrast appearance of low-contrast stimuli while dimin...

 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41086688/?](https://pubmed.ncbi.nlm.nih.gov/41086688/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016025356&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016025356&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41086688/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016025356&v=2.18.0.post9+e462414)

## Halide Perovskites for Neuromorphic Sensing and Computing

 Ho Won  
Jang



2025-10-14



1  
min



56  
words

LOW VISION

**Summary:** The development of semiconductor-based electronic devices has significantly advanced sensor-based data acquisition and processor-driven data analysis. However, conventional complementary metal-oxide-semiconductor technologies are now facing fundamental limitations in scaling, speed, and power effici...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41087317/?](https://pubmed.ncbi.nlm.nih.gov/41087317/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016025356&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016025356&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41087317/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016025356&v=2.18.0.post9+e462414)

## HZO/HSO Superlattice ReFET Array Integrating Optical Sensing for Neuromorphic Vision Computing

 Jingsheng  
Chen



2025-10-15



1  
min



58  
words

LOW VISION

**Summary:** Neuromorphic vision systems require artificial synapses that integrate sensing, memory, and computation with high precision and stability. Conventional memristors face limitations including forming requirements, few multilevel states, low endurance, and poor integration density, while ferroelectric ...




Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41089064/?](https://pubmed.ncbi.nlm.nih.gov/41089064/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016025356&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016025356&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089064/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016025356&v=2.18.0.post9+e462414)

## Mapping political commitments: Analysing health priorities in Indian election manifestos

 Shilpi S  
Das

 17 2025-10-15

 1  
min

 35  
words

LOW VISION

**Summary:** CONCLUSION: India's political manifestos recognize health as important but fail to address systemic challenges. Greater political will and citizen engagement, is essential to elevate health as a governance priority, fostering universal health coverage and equity.


 Read full article:

<https://pubmed.ncbi.nlm.nih.gov/41089958/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnVslegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016025356&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089958/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnVslegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016025356&v=2.18.0.post9+e462414)

## Does cannulation site affect outcomes of antegrade cerebral perfusion in aortic arch surgery? A meta-analysis of axillary versus innominate access

 Tomasz  
Płonek

 17 2025-10-15

 1  
min

 67  
words

LOW VISION


**Summary:** BackgroundThe optimal arterial cannulation strategy for establishing antegrade cerebral perfusion during aortic arch surgery remains a subject of ongoing debate. Our meta-analysis compares outcomes between axillary artery (AxA) and innominate artery (InA) cannulation.MethodsA literature search was c...


 Read full article:

<https://pubmed.ncbi.nlm.nih.gov/41090996/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnVslegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016025356&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41090996/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnVslegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016025356&v=2.18.0.post9+e462414)

## A systematic review of ionizing radiation-induced glaucoma: clinical manifestations, pathogenesis, and current treatment approaches

 Heng  
Zhou

 2025-10-15

 1  
min

 51  
words

LOW VISION

**Summary:** CONCLUSIONS: IRG represents a dose-dependent entity with distinct phenotypes and mechanisms. Current therapies provide partial benefit but remain unsatisfactory in terms of durability and standardization. Advancing the field will require mechanistic studies to clarify radiation-induced optic neuropa...


 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41091454/?](https://pubmed.ncbi.nlm.nih.gov/41091454/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnVSlégfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016025356&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnVSlégfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016025356&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41091454/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnVSlégfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016025356&v=2.18.0.post9+e462414)

## Choroidal Vascularity Index, Retinal Vascularity and Hemoglobin Levels in Pediatric Sick Cell Maculopathy

 Nimesh A  
Patel

 2025-10-15

 1  
min

 69  
words

LOW VISION

**Summary:** CONCLUSION: In pediatric SCD patients, there was a significant decrease in CVI when compared to healthy age matched controls. Decreased CVI was associated with a loss of retinal VD in the inferotemporal macular quadrant as well as lower Hgb levels. These findings suggest a role of choroidal ischemia...


 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41092070/?](https://pubmed.ncbi.nlm.nih.gov/41092070/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnVSlégfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016025356&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnVSlégfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016025356&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41092070/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnVSlégfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016025356&v=2.18.0.post9+e462414)

## The taste of trigeminal sensations: relation between taste, lingual tactile acuity, and spicy perception in patients with taste dysfunction

 Thomas Hummel

 2025-05-28  1 min  70 words


TACTILE ACUITY

**Summary:** In the oral cavity, oral stereognosis and chemesthesis refer to the abilities to recognize shapes and detect noxious substances, respectively, through various receptors distributed on the tongue. The absence of standardized methods to assess oral somatosensory perception has led to a lack of consens...

 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/40434896/?utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016025340&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40434896/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016025340&v=2.18.0.post9+e462414)

## Measuring the Distribution of Tactile Acuity at the Index Finger and Thumb Fingertips

 Hiroyuki Kajimoto

 2025-06-17  1 min  75 words


TACTILE ACUITY

**Summary:** In our day-to-day activities, we utilize not only the pads of our fingers but also the sides and hemispherical tips when manipulating objects. For teleoperation systems to replicate these real-life interactions, tactile sensation must be presented and distributed across the entire fingertip. Thus, u...

 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/40526544/?utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016025340&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40526544/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016025340&v=2.18.0.post9+e462414)

## Optimizing Vibrotactile Feedback for Sensory Substitution in the Thigh: Spatial Acuity and Frequency Characteristics

 Leah R  
Bent



2025-06-27



1  
min



69  
words

TACTILE ACUITY


**Summary:** Amputation of a lower limb not only affects mobility but also interferes with sensory feedback, leading to an elevated risk of falls among individuals living with amputation. Sensory substitution, achieved through tactile displays embedded in transfemoral prosthetic sockets, presents a promising non...

 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/40577301/?](https://pubmed.ncbi.nlm.nih.gov/40577301/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016025340&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016025340&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40577301/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016025340&v=2.18.0.post9+e462414)

## Directional vibro-tactile hazard warnings for drivers with vision impairments

 Alex R  
Bowers



2025-07-02




1  
min



80  
words

TACTILE ACUITY


**Summary:** Vision impairment may delay responses to hazards when driving. In a proof-of-concept driving simulator study, we evaluated a hazard warning device designed for vision impaired drivers. Three groups participated: 11 persons with central vision loss (CVL; median age 60 years), 12 with homonymous field...



 Read full article:


[https://pubmed.ncbi.nlm.nih.gov/40601880/?](https://pubmed.ncbi.nlm.nih.gov/40601880/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016025340&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016025340&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40601880/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016025340&v=2.18.0.post9+e462414)

## Sensitivity and vagal reactivity to C-tactile-mediated affective touch in mild cognitive impairment due to Alzheimer's disease

 Cecilia  
Guariglia

 2025-08-01  1  
min

 64  
words

TACTILE ACUITY

**Summary:** BackgroundC-tactile (CT) afferents preferentially activate in response to slow caress-like touch, evoking a diffuse pleasant sensation and promoting autonomic regulation. According to Braak's classic model, the neurodegenerative process in Alzheimer's disease (AD) only affects somatosensory cortices...



 **Read full article:**


<https://pubmed.ncbi.nlm.nih.gov/40746091/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016025340&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40746091/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016025340&v=2.18.0.post9+e462414)

## Differences in tactile grid localization accuracy between people with back pain compared to individuals without pain

 Eric  
Fjeldheim

 2025-08-24  1  
min

 22  
words

TACTILE ACUITY

**Summary:** OBJECTIVES: The study aimed to investigate the grid localization test (GLT) between patients with lower back pain and those without back pain.

 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/40850311/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016025340&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40850311/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016025340&v=2.18.0.post9+e462414)



## Eye Drop Instillation Success and Hand Function in Adults with Glaucoma: A Pilot Study



Paula Anne Newman-  
Casey



2025-09-09



1  
min



74  
words

TACTILE ACUITY

**Summary:** CONCLUSIONS: Despite hand function deficits, in this exploratory pilot study, adults with glaucoma demonstrated eye drop instillation success comparable to those without glaucoma, though with higher rates of bottle tip contact with the eye, skin, or eyelashes, suggesting an increased risk of potenti...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/40924900/?](https://pubmed.ncbi.nlm.nih.gov/40924900/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016025340&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016025340&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40924900/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016025340&v=2.18.0.post9+e462414)

## Functional evidence for early origin of tactile acuity in the vertebrate somatosensory system



Sviatoslav N  
Bagriantsev



2025-09-13



1  
min



58  
words

TACTILE ACUITY

**Summary:** Mammals and reptiles possess a sophisticated somatosensory system for precise tactile discrimination via mechanosensory end-organs, such as Meissner and Pacinian corpuscles and others. These structures detect sustained pressure, velocity, and vibrations, thereby facilitating nuanced environmental in...






Read full article:


[https://pubmed.ncbi.nlm.nih.gov/40945511/?](https://pubmed.ncbi.nlm.nih.gov/40945511/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016025340&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016025340&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40945511/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016025340&v=2.18.0.post9+e462414)

## The coarse mental map of the breast is anchored on the nipple

 Charles M  
Greenspon

 2025-09-18  1  
min

 86  
words

TACTILE ACUITY


**Summary:** Touch plays a key role in our perception of our body and shapes our interactions with the world, from the objects we manipulate to the people we touch. While the tactile sensibility of the hand has been extensively characterized, much less is known about touch on other parts of the body. Despite the...



 Read full article:


[https://pubmed.ncbi.nlm.nih.gov/40964349/?](https://pubmed.ncbi.nlm.nih.gov/40964349/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016025340&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016025340&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40964349/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016025340&v=2.18.0.post9+e462414)

## Haptic Feedback Systems for Lower-Limb Prosthetic Applications: A Review of System Design, User Experience, and Clinical Insights

 Runar  
Unnthorsson

 2025-09-27  1  
min

 65  
words

TACTILE ACUITY


**Summary:** Systems presenting haptic information have emerged as an important technological advance in assisting individuals with sensory impairments or amputations, where the aim is to enhance sensory perception or provide sensory substitution through tactile feedback. These systems provide information on lim...


 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41007234/?](https://pubmed.ncbi.nlm.nih.gov/41007234/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016025340&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016025340&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41007234/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016025340&v=2.18.0.post9+e462414)

## Sensitivity Analysis of the Balloon Model Parameters in Functional Near-Infrared Spectroscopy Simulation

 Murad  
Althobaiti

 17 2025-10-11

 1  
min

 43  
words

**FNIRS**


**Summary:** CONCLUSIONS: The fNIRS hemodynamic response is highly sensitive to the Balloon model's  $\alpha$  and  $\tau$  parameters. These findings highlight the importance of accounting for physiological variability in fNIRS analysis and provide a robust framework for generating synthetic data to test signal processing algo...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41076093/?](https://pubmed.ncbi.nlm.nih.gov/41076093/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016025211&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016025211&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41076093/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016025211&v=2.18.0.post9+e462414)

## Machine learning assessment of cognitive reserve using functional near-infrared spectroscopy in older adults with cognitive frailty

 Zheng  
Li

 17 2025-10-11

 1  
min

 59  
words

**FNIRS**


**Summary:** Cognitive reserve mitigates aging-related cognitive decline and frailty, yet current assessments lack neurobiological specificity. We aimed to develop a noninvasive, functional near infrared spectroscopy (fNIRS)-based machine learning model to classify cognitive reserve levels in older adults with c...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41076505/?](https://pubmed.ncbi.nlm.nih.gov/41076505/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016025211&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016025211&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41076505/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016025211&v=2.18.0.post9+e462414)

## Exploring age and hemispheric differences in cortical plasticity after iTBS using fNIRS

 Melanie  
Burke

 2025-10-12

 1  
min

 67  
words

**fNIRS**


**Summary:** Non-invasive brain stimulation applied to the prefrontal cortex (PFC) has been shown to improve cognitive outcomes in older adults with cognitive impairments (Miller et al., 2023). However, the differential impact of left versus right dorsolateral prefrontal cortex (DLPFC) stimulation on prefrontal ...


 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/41077115/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016025211&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41077115/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016025211&v=2.18.0.post9+e462414)

## Single video games improve cognitive functioning in college students: evidence from behavioral and fNIRS assessments

 Shen  
Wang

 2025-10-13

 1  
min

 43  
words

**fNIRS**

**Summary:** CONCLUSIONS: Cognitively engaging video games can effectively enhance the cognitive abilities of male college students. The underlying mechanism may be closely related to the promotion of prefrontal lobe activation by video games, which in turn improves reflective ability, processing speed, and deci...

 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/41080773/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016025211&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41080773/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016025211&v=2.18.0.post9+e462414)

## Prefrontal activation in bipolar and unipolar depression patients in the letter fluency tasks and category fluency tasks: a functional near-infrared spectroscopy study

 Zhaohui  
Zhang

 17

2025-10-13



1  
min



46  
words

**FNIRS**

**Summary:** CONCLUSION: Our findings indicate that the LFT elicits more extensive prefrontal activation, with differential engagement of the VLPFC in BD compared to UD. These results suggest potential neuroimaging biomarkers for distinguishing between UD and BD, while also providing insights into the neural sub...

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41080778/?](https://pubmed.ncbi.nlm.nih.gov/41080778/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016025211&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016025211&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41080778/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016025211&v=2.18.0.post9+e462414)

## Neural predictors of hidden, persistent psychological states at work

 Matthew D  
Lieberman

 17

2025-10-13



1  
min



69  
words

**FNIRS**

**Summary:** Common workplace challenges such as feeling overwhelmed, burned out, or disengaged often remain hidden due to fear of judgment or social norms, contributing to rising mental health crises and organizational dysfunction. This study presents a brain-based framework for predicting these hidden and pers...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41082670/?](https://pubmed.ncbi.nlm.nih.gov/41082670/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016025211&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016025211&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41082670/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016025211&v=2.18.0.post9+e462414)

## Dose-Dependent Enhancement of Coordination through Multibrain Transcranial Stimulation: A fNIRS Hyperscanning Study

 Shengjun Wu


 2025-10-13

 1 min

 67 words

**FNIRS**


**Summary:** Coordination serves as a fundamental driving force in the evolution of human society, and transcranial electrical stimulation (tES) is increasingly recognized for its ability to modulate human coordination. However, the neural mechanisms underlying coordination and whether tES positively influences ...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41083052/?](https://pubmed.ncbi.nlm.nih.gov/41083052/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016025211&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016025211&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41083052/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016025211&v=2.18.0.post9+e462414)

## Functional connectivity in whole-brain and network analysis differentiates minimally conscious from unresponsive patients: a resting-state fNIRS study

 Liying Zhang

 2025-10-15

 1 min

 24 words

**FNIRS**

**Summary:** CONCLUSION: fNIRS could effectively detect abnormal brain network functional connectivity in DOC patients and could provide valuable insights for differentiating MCS and VS/UWS patients.

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41088235/?](https://pubmed.ncbi.nlm.nih.gov/41088235/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016025211&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016025211&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41088235/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016025211&v=2.18.0.post9+e462414)

# Predicting Individual Response to Acupuncture in Sensorineural Tinnitus Using Integrated Functional Near-Infrared Spectroscopy and Machine Learning: Protocol for a Model Development and Validation Study



Hantong  
Hu



2025-10-15



1  
min



63  
words

FNIRS

**Summary:** CONCLUSION: This study represents the first attempt to integrate fNIRS detection with machine learning techniques for predicting acupuncture efficacy in SNT treatment. The methodology addresses several key challenges in acupuncture research through comprehensive data collection and advanced analytic...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41089742/?](https://pubmed.ncbi.nlm.nih.gov/41089742/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016025211&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016025211&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089742/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016025211&v=2.18.0.post9+e462414)

## Online Regulation of Task Difficulty based on Neuro- and Motor-feedback to improve engagement in Visual-motor Task

Rong  
Song

2025-10-15

1  
min

36  
words

FNIRS

**Summary:** CONCLUSION: Our findings suggest that the proposed NMF system can enable online neural activity regulation in visual-motor tasks and achieve enhanced integration between cognitive and sensorimotor areas, with the potential to improve the rehabilitation training outcomes.

 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/41091617/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016025211&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41091617/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016025211&v=2.18.0.post9+e462414)

## Electroceuticals for Paralympic Athletes: A Fair Play and Classification Concern?

Tom E  
Nightingale

2025-10-13

1  
min

66  
words

BRAIN COMPUTER INTERFACE

**Summary:** Electroceuticals such as brain computer interfaces and spinal cord stimulation (SCS) represent transformative strategies for neuromodulation. Research has demonstrated that SCS can ameliorate motor and autonomic cardiovascular dysfunctions, particularly in individuals with spinal cord injury (SCI). ...

 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/41082173/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016025140&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41082173/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016025140&v=2.18.0.post9+e462414)



## Cell-to-cell communication: from physical calling to remote emotional touching



Azadeh Imani  
Rad



2025-10-14



1  
min



55  
words

BRAIN COMPUTER INTERFACE

**Summary:** The emerging paradigm of cell-to-cell communication represents a transformative shift from device-mediated contact to bio-integrated, emotion-driven interactions. This article introduces a novel, multi-layered framework for enabling biologically integrated communication between cells, devices, and c...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41083759/?](https://pubmed.ncbi.nlm.nih.gov/41083759/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016025140&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016025140&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41083759/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016025140&v=2.18.0.post9+e462414)

## Virtual Reality Experience as Reflected in EEG Microstates



Ke  
Ma



2025-10-14



1  
min



73  
words

BRAIN COMPUTER INTERFACE

**Summary:** The development of virtual reality technology has provided psychological research with powerful tools by presenting stimuli and constructing scenarios, and the combination of VR and neuroimaging techniques begins to provide particularly interesting insights into the experience of virtual events and ...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41085777/?](https://pubmed.ncbi.nlm.nih.gov/41085777/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016025140&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016025140&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41085777/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016025140&v=2.18.0.post9+e462414)

## An incremental adversarial training method enables timeliness and rapid new knowledge acquisition



Chengli  
Wang



2025-10-14



1  
min



69  
words

BRAIN COMPUTER INTERFACE

**Summary:** Adversarial training is an effective defense method for deep models against adversarial attacks. However, current adversarial training methods require retraining the entire neural network, which consumes a significant amount of computational resources, thereby affecting the timeliness of deep models...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41087533/?](https://pubmed.ncbi.nlm.nih.gov/41087533/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016025140&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016025140&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41087533/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016025140&v=2.18.0.post9+e462414)

## Gut microbiota remodeling and sensory-emotional functional disruption in adolescents with bipolar depression



Jianbo  
Lai



2025-10-15



1  
min



57  
words

BRAIN COMPUTER INTERFACE

**Summary:** CONCLUSION: This study first characterized the gut microbiota architecture in adolescent BD. Combining gut microbiota and brain function biomarkers may benefit disease diagnosis and predict treatment outcome. Nonetheless, these findings should be carefully interpreted considering the limitations of ...





Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41088296/?](https://pubmed.ncbi.nlm.nih.gov/41088296/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016025140&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016025140&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41088296/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016025140&v=2.18.0.post9+e462414)

## Does brain-computer interface-based mind reading threaten mental privacy? ethical reflections from interviews with Chinese experts

 Haidan  
Chen

 2025-10-15

 1  
min

 64  
words


BRAIN COMPUTER INTERFACE



**Summary:** CONCLUSION: We summarize the interpretations, feasibility, and limitations of BMR and introduce a distinction between "strong BMR" and "weak BMR" to clarify their technical and ethical implications. Based on our analysis, we argue that current BMR does not pose unique ethical challenges compared wit...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41088329/?utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016025140&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41088329/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016025140&v=2.18.0.post9+e462414)

## Precision TMS through the integration of neuroimaging and machine learning: optimizing stimulation targets for personalized treatment


 Panxiao  
Bao

 2025-10-15  1  
min

 60  
words

BRAIN COMPUTER INTERFACE


**Summary:** Transcranial Magnetic Stimulation (TMS), a non-invasive neuromodulation technique based on electromagnetic induction, modulates cortical excitability by inducing currents with a magnetic field. TMS has demonstrated significant clinical potential in the treatment of various neuropsychiatric disorders...

 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/41089381/?utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016025140&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089381/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016025140&v=2.18.0.post9+e462414)

## A time-frequency feature fusion-based deep learning network for SSVEP frequency recognition

 Jijun  
Tong

 2025-10-15

 1  
min

 62  
words

BRAIN COMPUTER INTERFACE

**Summary:** INTRODUCTION: Steady-state visual evoked potential (SSVEP) has emerged as a pivotal branch in brain-computer interfaces (BCIs) due to its high signal-to-noise ratio (SNR) and elevated information transfer rate (ITR). However, substantial inter-subject variability in electroencephalographic (EEG) sig...


 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41089660/?](https://pubmed.ncbi.nlm.nih.gov/41089660/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016025140&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016025140&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089660/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016025140&v=2.18.0.post9+e462414)

## Participant Engagement, Epistemic Injustice, and Early-Phase Implanted Neural Device Research

 Ashley  
Feinsinger

 2025-10-15

 1  
min

 66  
words

BRAIN COMPUTER INTERFACE

**Summary:** In recent years, participant engagement initiatives in research on implanted neural devices have significantly increased. However, there remains little consensus on the motivations, goals, and best practices for engagement efforts. Drawing on the concept of participatory epistemic injustice, we argu...



 Read full article:


[https://pubmed.ncbi.nlm.nih.gov/41091050/?](https://pubmed.ncbi.nlm.nih.gov/41091050/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016025140&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016025140&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41091050/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016025140&v=2.18.0.post9+e462414)

## Recommendations for Combining Brain-Computer Interface, Motor Imagery, and Virtual Reality in Upper Limb Stroke Rehabilitation: Qualitative Participatory Design Study


 Carla Mendes  
Pereira

 2025-10-15  1  
min

 60  
words

BRAIN COMPUTER INTERFACE

**Summary:** CONCLUSIONS: Current results contribute to establishing clear guidelines on patient selection, task design, intervention structuring, motivation factors, and tailoring of sensory feedback. This framework presents a foundation for optimal implementation of VR-BCI-based interventions that associate ML...



 Read full article:


[https://pubmed.ncbi.nlm.nih.gov/41092418/?](https://pubmed.ncbi.nlm.nih.gov/41092418/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016025140&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41092418/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016025140&v=2.18.0.post9+e462414)

[tbw4049Wgf\\_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016025140&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41092418/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016025140&v=2.18.0.post9+e462414)


## Cognitive performance fatigability, perceived fatigability, and trait fatigue in post-COVID-19 condition: A cross-sectional study.

 2025-07-24  1  
min

 270  
words


NEUROPSYCHOLOGY

**Summary:** Objective: Earlier research on fatigue in post-COVID-19 condition (PCC) has mainly studied subjective fatigue, either over a prolonged period (trait fatigue) or in relation to a certain situation (state fatigue) in the form of perceived fatigability. Another aspect of state fatigue, cognitive perfor...

 Read full article:

<http://doi.org/10.1037/neu0001020>

## Embodied concepts in Parkinson's disease: Insights from fruits versus animals semantic fluency impairments.

 2025-07-24  1 min  262 words

NEUROPSYCHOLOGY

**Summary:** Objective: Initial findings indicate that semantic memory retrieval of different categories, such as fruits and animals, is variably impacted in Parkinson's disease (PD). Importantly, theories of embodied cognition propose that these variances may stem from compromised motor processing in PD patient...

 **Read full article:**  
<http://doi.org/10.1037/neu0001026>

## Using the Modified Taylor Complex Figure–Recognition Trial (MTCF-RT) to differentiate amnesic patients with Alzheimer's disease from patients with memory deficits due to Parkinson's disease or subcortical ischemic vascular dementia.

 2025-08-25  1 min  257 words

NEUROPSYCHOLOGY

**Summary:** Objective: The Modified Taylor Complex Figure–Recognition Trial (MTCF-RT) is a visual recognition memory measure that consists of a recognition trial to be administered after the copy and the delayed reproduction of the Modified Taylor Complex Figure Test. The aim of this study was to validate the M...

 **Read full article:**  
<http://doi.org/10.1037/neu0001036>

## Affliction class moderates the dementing impact of amyloidopathy.



2025-07-28

1  
min188  
words

NEUROPSYCHOLOGY

**Summary:** Objective: The treatment of dementia is increasingly likely to focus on dementia-related biomarkers. Unfortunately, there is variability with regard to biomarker-related effects. This analysis tests an algorithm capable of identifying persons adversely impacted by any dementia-related biomarker in t...



Read full article:

<http://doi.org/10.1037/neu0001021>

## Semantic processing in subjective cognitive decline: An eye-tracking study.



2025-09-11

1  
min205  
words

NEUROPSYCHOLOGY

**Summary:** Objectives: Alzheimer's disease progresses through several stages, starting with a preclinical phase characterized by subjective cognitive decline (SCD), where individuals express concerns about their memory despite normal cognitive test results. Recent research has indicated subtle semantic difficu...






Read full article:

<http://doi.org/10.1037/neu0001022>



## Monthly Updates [Oct]





 2025-10-01  3 min  696 words

[FMHY](#)

**Summary:** `<div class="info custom-block"><p class="custom-block-title">INFO</p><p>These update threads only contains major updates. If you're interested in seeing all minor changes you can follow our <a href="https://github.com/fmhy/FMHYedit/commits/main" rel="noreferrer" target="_blank">Commits Page</a> on ...`

 **Read full article:**  
<https://fmhy.net/posts/oct-2025>

## Acid Drop

 kordlessagain  2025-10-16  1 min  13 words


[HACKER NEWS](#)

**Summary:** `<p>Article URL: <a href="https://github.com/acidvegas/acid-drop">https://github.com/acidvegas/acid-drop</a></p><p>Comments URL: <a href="https://news.ycombinator.com/item?id=45601139">https://news.ycombinator.com/item?id=45601139</a></p><p>Points: 7</p><p># Comments: 1</p>`

 **Read full article:**  
<https://github.com/acidvegas/acid-drop>

## Associations of screen time and physical activity with TMS-based measures of motor cortical excitability in adolescents

 1  
min

 20  
words

NEUROSCIENCE JOURNAL

**Summary:**

Publication date: 10 November 2025


Source: Neuroscience, Volume 587


Author(s): Hannamari Skog, Sara Määttä, Laura Säisänen, Timo A. Lakka, Eero A. Haapala

 Read full article:


[https://www.sciencedirect.com/science/article/pii/S0306452225009844?dgcid=rss\\_sd\\_all](https://www.sciencedirect.com/science/article/pii/S0306452225009844?dgcid=rss_sd_all)

## Brain-wide activity across labs

 Luis A.  
Mejia

 2025-10-06

 1  
min

 12  
words

NATURE NEUROSCIENCE

**Summary:**

Nature Neuroscience, Published online: 06 October 2025; [doi:10.1038/s41593-025-02084-0](https://www.nature.com/articles/s41593-025-02084-0)

Brain-wide activity across labs

 Read full article:

<https://www.nature.com/articles/s41593-025-02084-0>

## The impact of CSF-filled cavities on scalp EEG and its implications



Maria Carla  
Piastra



2024-06-14



1  
min



64  
words

OOSTENVELD ROBERT

**Summary:** Previous studies have found electroencephalogram (EEG) amplitude and scalp topography differences between neurotypical and neurological/neurosurgical groups, being interpreted at the cognitive level. However, these comparisons are invariably accompanied by anatomical changes. Critical to EEG are the...



Read full article:

<https://pubmed.ncbi.nlm.nih.gov/38873838/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016023247&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/38873838/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016023247&v=2.18.0.post9+e462414)

## Motion-BIDS: an extension to the brain imaging data structure to organize motion data for reproducible research



Julius  
Welzel



2024-07-02



1  
min



72  
words

OOSTENVELD ROBERT

**Summary:** We present an extension to the Brain Imaging Data Structure (BIDS) for motion data. Motion data is frequently recorded alongside human brain imaging and electrophysiological data. The goal of Motion-BIDS is to make motion data interoperable across different laboratories and with other data modalities...






Read full article:


<https://pubmed.ncbi.nlm.nih.gov/38956071/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016023247&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/38956071/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016023247&v=2.18.0.post9+e462414)


## One hundred years of EEG for brain and behaviour research

 Pedro Valdes-Sosa

 2024-08-22  1 min

 2 words

OOSTENVELD ROBERT



 Read full article:


[https://pubmed.ncbi.nlm.nih.gov/39174725/?](https://pubmed.ncbi.nlm.nih.gov/39174725/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxObIm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016023247&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxObIm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016023247&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/39174725/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxObIm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016023247&v=2.18.0.post9+e462414)

## Freezing of gait in Parkinson's disease is related to imbalanced stopping-related cortical activity


 Richard J A van Wezel

 2024-09-04  1 min

 65 words

OOSTENVELD ROBERT

**Summary:** Freezing of gait, characterized by involuntary interruptions of walking, is a debilitating motor symptom of Parkinson's disease that restricts people's autonomy. Previous brain imaging studies investigating the mechanisms underlying freezing were restricted to scan people in supine positions and yie...


 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/39229492/?](https://pubmed.ncbi.nlm.nih.gov/39229492/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxObIm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016023247&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxObIm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016023247&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/39229492/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxObIm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016023247&v=2.18.0.post9+e462414)

## The past, present, and future of the brain imaging data structure (BIDS)

 Krzysztof J  
Gorgolewski

 2024-09-23

 1  
min

 82  
words

OOSTENVELD ROBERT


**Summary:** The Brain Imaging Data Structure (BIDS) is a community-driven standard for the organization of data and metadata from a growing range of neuroscience modalities. This paper is meant as a history of how the standard has developed and grown over time. We outline the principles behind the project, the ...


 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/39308505/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016023247&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/39308505/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016023247&v=2.18.0.post9+e462414)

## Human cortical high-gamma power scales with movement rate in healthy participants and stroke survivors

 Fanny  
Quandt

 2025-01-09

 1  
min

 65  
words

OOSTENVELD ROBERT


**Summary:** Motor cortical high-gamma oscillations (60-90 Hz) occur at movement onset and are spatially focused over the contralateral primary motor cortex. Although high-gamma oscillations are widely recognized for their significance in human motor control, their precise function on a cortical level remains el...


 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/39786979/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016023247&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/39786979/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016023247&v=2.18.0.post9+e462414)

## NIRS-BIDS: Brain Imaging Data Structure Extended to Near-Infrared Spectroscopy

 Luca  
Pollonini

 2025-01-27

 1  
min

 70  
words

OOSTENVELD ROBERT


**Summary:** Functional near-infrared spectroscopy (fNIRS) is an increasingly popular neuroimaging technique that measures cortical hemodynamic activity in a non-invasive and portable fashion. Although the fNIRS community has been successful in disseminating open-source processing tools and a standard file forma...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/39870674/?](https://pubmed.ncbi.nlm.nih.gov/39870674/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016023247&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016023247&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/39870674/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016023247&v=2.18.0.post9+e462414)

## Pseudonymisation of neuroimages and data protection: Increasing access to data while retaining scientific utility

 Lyuba  
Zehl

 2025-06-26

 1  
min

 67  
words

OOSTENVELD ROBERT


**Summary:** For a number of years, facial features removal techniques such as 'defacing', 'skull stripping' and 'face masking/blurring', were considered adequate privacy preserving tools to openly share brain images. Scientifically, these measures were already a compromise between data protection requirements a...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/40568426/?](https://pubmed.ncbi.nlm.nih.gov/40568426/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016023247&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016023247&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40568426/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016023247&v=2.18.0.post9+e462414)

## Cycling on the Freeway: The perilous state of open-source neuroscience software

 Tim M  
Tierney

 17 2025-08-13

 1  
min

 74  
words

OOSTENVELD ROBERT


**Summary:** Most scientists need software to perform their research (Barker et al., 2020;Carver et al., 2022;Hettrick, 2014;Hettrick et al., 2014;Switters & Osimo, 2019), and neuroscientists are no exception. Whether we work with reaction times, electrophysiological signals, or magnetic resonance imaging data, ...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/40800958/?](https://pubmed.ncbi.nlm.nih.gov/40800958/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016023247&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016023247&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40800958/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016023247&v=2.18.0.post9+e462414)

## Optimal configuration of on-scalp OPMs with fixed channel counts

 Robert  
Oostenveld

 17 2025-08-13

 1  
min

 69  
words

OOSTENVELD ROBERT


**Summary:** Recent technological developments have brought optically pumped magnetometers (OPMs) within reach of the larger neuroscientific community. The current state-of-the-art consists of whole-head systems that measure the magnetic field at >100 locations. OPM sensors can be constructed to measure the fiel...

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/40800964/?](https://pubmed.ncbi.nlm.nih.gov/40800964/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016023247&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016023247&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40800964/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016023247&v=2.18.0.post9+e462414)

## Gradient Porous Flexible Pressure Sensors with the Relay Effect for High-Accuracy Braille-to-Speech Recognition

 Jianming  
Xu



2025-08-25



1  
min



62  
words

BRAILLE

**Summary:** The development of highly sensitive, wide linear-range flexible pressure sensors is crucial for practical applications in human-computer interaction, physiological signal detection, and motion monitoring. However, traditional flexible pressure sensors often suffer from limited compressibility in the...




Read full article:

[https://pubmed.ncbi.nlm.nih.gov/40854103/?](https://pubmed.ncbi.nlm.nih.gov/40854103/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016023134&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016023134&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40854103/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016023134&v=2.18.0.post9+e462414)

## Individual and community level factors influencing modern contraceptive use among women of reproductive age in South Africa: a multilevel analysis

 Million  
Phiri



2025-08-26



1  
min



46  
words

BRAILLE

**Summary:** CONCLUSION: Sensory disability status influenced women's contraceptive behaviour in South Africa. Current family planning interventions should target women with sensory disabilities by prioritising accessible communication methods (e.g., braille, sign language), disability awareness training for hea...




Read full article:



[https://pubmed.ncbi.nlm.nih.gov/40855574/?](https://pubmed.ncbi.nlm.nih.gov/40855574/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016023134&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016023134&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40855574/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016023134&v=2.18.0.post9+e462414)



## Explosion-powered eversible tactile displays


 Robert F  
Shepherd

 2025-08-27  1  
min

 64  
words

**BRAILLE**


**Summary:** High-resolution electronic tactile displays stand to transform haptics for remote machine operation, virtual reality, and digital information access for people who are blind or visually impaired. Yet, increasing the resolution of these displays requires increasing the number of individually addressa...



 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/40864730/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016023134&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40864730/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016023134&v=2.18.0.post9+e462414)

## A Biomimetic Fiber-Entangled Permeable Electronic Skin for Strain-Insensitive and High-Resolution Tactile Sensing


 Zhijun  
Ma

 2025-08-28  1  
min

 57  
words

**BRAILLE**


**Summary:** Electronic skins (e-skins) incorporating island architectures represent a promising platform for strain-insensitive tactile sensing by mechanically decoupling sensing units from deformations. However, conventional island designs encounter stress concentration issues caused by inherent modulus mismat...


 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/40874468/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016023134&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40874468/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016023134&v=2.18.0.post9+e462414)

# High-Density Tactile Sensor Array for Sub-Millimeter Texture Recognition

 Min  
Zhang

 2025-08-28

 1  
min

 64  
words

BRAILLE


**Summary:** High-density tactile sensor arrays that replicate human touch could restore texture perception in paralyzed individuals. However, conventional tactile sensor arrays face inherent trade-offs between spatial resolution, sensitivity, and crosstalk suppression due to microstructure size limitations and ...

 Read full article:


[https://pubmed.ncbi.nlm.nih.gov/40871941/?utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016023134&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40871941/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016023134&v=2.18.0.post9+e462414)

# A Diachronic Investigation of the Change in Form and Formational-Semantic Systematicity of the Chinese Sign Language Lexicon

 Hao  
Lin

 2025-09-01

 1  
min

 72  
words

BRAILLE

**Summary:** It has been argued in previous research that several competing pressures guide the directions of language evolution (economy vs. redundancy; arbitrariness vs. systematicity). For sign languages, however, the effects of competing pressures on their change of lexical systems remain largely unclear. In...

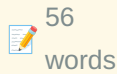
 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/40889233/?utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016023134&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40889233/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016023134&v=2.18.0.post9+e462414)

## Wireless Electrotactile System with Hydrogel-Based Electrodes for Conformal Tactile Interaction

Ji  
Liu

2025-09-02

1  
min56  
words

BRAILLE

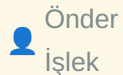
**Summary:** A wireless epidermal electrotactile interface is demonstrated through integration of skin-conformal electrodes and flexible circuitry, addressing existing limitations in haptic technology caused by mechanical mismatch and system-level integration challenges. This electrotactile system achieves low s...



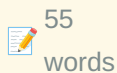
Read full article:

<https://pubmed.ncbi.nlm.nih.gov/40891563/?>[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8IvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016023134&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40891563/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8IvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016023134&v=2.18.0.post9+e462414)

## Beyond access: rethinking assistive technology for individuals with visual impairments in Türkiye

Önder  
İşlek

2025-09-12

1  
min55  
words

BRAILLE


**Summary:** CONCLUSION: Despite demonstrating adaptability, individuals with VI in Türkiye face significant structural barriers to equitable AT access. Informal learning limited public support, and a lack of locally adapted tools contribute to digital exclusion. A rights-based approach-emphasizing inclusive fun...






Read full article:

<https://pubmed.ncbi.nlm.nih.gov/40937808/?>[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8IvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016023134&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40937808/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8IvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016023134&v=2.18.0.post9+e462414)

## High prevalence of bacterial STI, anal HPV, cytological abnormalities and anal lesions among MSM in Togo, 2021: a baseline analysis of the ANRS I MIE 12,400/DepIST-H cohort


 Didier K  
Ekouevi

 2025-09-27  1  
min

 42  
words


**BRAILLE**


**Summary:** CONCLUSIONS: These findings emphasize the high prevalence of STIs among MSM and confirm the unusual distribution of HPV types in West Africa, with HPV35 being highly prevalent. A national strategy regarding STI screening and HPV vaccination in this key population is needed.

 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/41013315/?utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016023134&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41013315/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016023134&v=2.18.0.post9+e462414)

## Development and Assessment of a Novel Audiosensory Performance Method for Improving the Oral Health of Visually Impaired Children

 Divya Singh

 2025-10-03

 1 min

 73 words

**BRaille**


**Summary:** This study evaluated the effectiveness of an audiosensory performance method in enhancing oral health knowledge and status among visually impaired children aged 6-12 years in the National Capital Region (NCR), Delhi. An interventional study design was used, involving 251 participants equally divided...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41041413/?](https://pubmed.ncbi.nlm.nih.gov/41041413/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016023134&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016023134&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41041413/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016023134&v=2.18.0.post9+e462414)

## Transcranial direct current stimulation (tDCS): A new, (still) legal form of "neurodoping" in sports?

 James Chmiel

 2025-10-13

 1 min

 64 words

**TDcs TACS TRNS**

**Summary:** Transcranial direct current stimulation (tDCS) has emerged as a widely accessible, noninvasive technique capable of modulating cortical excitability. A rapidly expanding body of sports-science literature suggests that it can produce modest but measurable gains in endurance, strength, skill acquisiti...

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41078301/?](https://pubmed.ncbi.nlm.nih.gov/41078301/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016023105&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016023105&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41078301/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016023105&v=2.18.0.post9+e462414)

## Effects of transcranial direct current stimulation on neuro electrical activity in mice with migraine

Jianliang  
Wu

2025-10-13

1  
min

47  
words

TDCS TACS TRNS

**Summary:** CONCLUSION: These results establish that low-intensity tDCS ameliorates migraine pathophysiology through dual mechanisms:  $\theta$ -band synchronization mediating behavioral normalization and  $\gamma$ -band desynchronization reducing neural noise. The  $\delta/\theta$  power reconfiguration implicates thalamocortical rhythm stab...

 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41079350/?](https://pubmed.ncbi.nlm.nih.gov/41079350/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016023105&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016023105&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41079350/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016023105&v=2.18.0.post9+e462414)

## Transcranial direct current stimulation modulates primate brain dynamics across states of consciousness

Béchir  
Jarraya

2025-10-13

1  
min

63  
words

TDCS TACS TRNS


**Summary:** The resting primate brain is traversed by spontaneous functional connectivity patterns that show striking differences between conscious and unconscious states. Transcranial direct current stimulation (tDCS), a non-invasive neuromodulatory technique, can improve signs of consciousness in disorders of...


 Read full article:


[https://pubmed.ncbi.nlm.nih.gov/41081761/?](https://pubmed.ncbi.nlm.nih.gov/41081761/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016023105&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016023105&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41081761/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016023105&v=2.18.0.post9+e462414)

## High-definition Transcranial Direct Current Stimulation over Right Dorsolateral Prefrontal Cortex to Enhance Metacognitive Sensitivity

 Jialu  
Qin

 2025-10-13  1  
min

 69  
words

TDCS TACS TRNS

**Summary:** In human-AI collaboration, task delegation is a critical component. Ideally, if a person believes they are capable of completing a task, they should do so themselves; otherwise, the task should be delegated to the other party. Such delegation decisions are influenced by individuals' assessments of t...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41082455/?](https://pubmed.ncbi.nlm.nih.gov/41082455/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016023105&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016023105&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41082455/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016023105&v=2.18.0.post9+e462414)

## Dose-Dependent Enhancement of Coordination through Multibrain Transcranial Stimulation: A fNIRS Hyperscanning Study

 Shengjun Wu

 17 2025-10-13

 1 min

 67 words

TDCS TACS TRNS

**Summary:** Coordination serves as a fundamental driving force in the evolution of human society, and transcranial electrical stimulation (tES) is increasingly recognized for its ability to modulate human coordination. However, the neural mechanisms underlying coordination and whether tES positively influences ...


 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41083052/?](https://pubmed.ncbi.nlm.nih.gov/41083052/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016023105&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016023105&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41083052/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016023105&v=2.18.0.post9+e462414)

## Advances on transcranial electromagnetic stimulation in improving non-motor symptoms of Parkinson's disease

 C F Liu

 17 2025-10-13

 1 min

 1 words

TDCS TACS TRNS

**Summary:** tDCS rTMS  
tDCS rTMS .

 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41083398/?](https://pubmed.ncbi.nlm.nih.gov/41083398/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016023105&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016023105&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41083398/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016023105&v=2.18.0.post9+e462414)



## Modification of inhibitory control and craving through transcranial direct current stimulation as an add-on treatment for substance use disorder: protocol for a randomized controlled study



Sarah  
Gerhardt



2025-10-14



1  
min



68  
words

TDCS TACS TRNS

**Summary:** BACKGROUND: Substance use disorders (SUDs) remain a prevalent public health issue characterized by a substantial disease burden and high relapse rates. The aim of this planned project is to investigate the optimal electrode placement and polarity of transcranial direct current stimulation (tDCS) to ...





Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41084082/?](https://pubmed.ncbi.nlm.nih.gov/41084082/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016023105&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016023105&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41084082/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016023105&v=2.18.0.post9+e462414)

## Heartbeat perception is causally linked to frontal delta oscillations

 Surjo R  
Soekadar

 2025-10-14

 1  
min

 71  
words

TDCS TACS TRNS

**Summary:** The ability to accurately perceive one's own bodily signals, such as the heartbeat, plays a vital role in physical and mental health. However, the neurophysiological mechanisms underlying this ability, termed interoception, are not fully understood. Converging evidence suggests that cardiac rhythms ...

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41087675/?](https://pubmed.ncbi.nlm.nih.gov/41087675/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016023105&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016023105&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41087675/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016023105&v=2.18.0.post9+e462414)

# High-Definition Transcranial Direct Current Stimulation Improves Pain Empathy: A Randomized, Double-Blind, and Sham-Controlled Study Based on Event-Related Potentials (ERPs)

 Yuling Wang

 17

2025-10-15



1 min



69 words

TDCS TACS TRNS

**Summary:** The impact of transcranial direct current stimulation (tDCS) on pain empathy is a subject of debate and controversy. The variations in the results could be attributed to differences in the stimulus parameters. This study aimed to examine the impact of high-definition transcranial direct current stim...

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41089305/?](https://pubmed.ncbi.nlm.nih.gov/41089305/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016023105&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016023105&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089305/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016023105&v=2.18.0.post9+e462414)

## Effectiveness of Transcranial Direct Current Stimulation on Cognitive Function: A Pilot Study



Alireza Akbarzade  
Baghban



2025-10-15



1  
min



68  
words

TDCS TACS TRNS

**Summary:** CONCLUSION: The findings suggest that employing tDCS techniques plays a pivotal role in enhancing specific executive functions, such as working memory, problem-solving, and planning, in patients with traumatic brain injuries. tDCS can be considered a complementary treatment option in the rehabilitat...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41089630/?](https://pubmed.ncbi.nlm.nih.gov/41089630/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016023105&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016023105&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089630/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251016023105&v=2.18.0.post9+e462414)

## Electroceuticals for Paralympic Athletes: A Fair Play and Classification Concern?



Tom E  
Nightingale



2025-10-13



1  
min



66  
words

BRAIN COMPUTER INTERFACE

**Summary:** Electroceuticals such as brain computer interfaces and spinal cord stimulation (SCS) represent transformative strategies for neuromodulation. Research has demonstrated that SCS can ameliorate motor and autonomic cardiovascular dysfunctions, particularly in individuals with spinal cord injury (SCI). ...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41082173/?](https://pubmed.ncbi.nlm.nih.gov/41082173/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016023003&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016023003&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41082173/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016023003&v=2.18.0.post9+e462414)

## Cell-to-cell communication: from physical calling to remote emotional touching



Azadeh Imani  
Rad



2025-10-14



1  
min



55  
words

BRAIN COMPUTER INTERFACE

**Summary:** The emerging paradigm of cell-to-cell communication represents a transformative shift from device-mediated contact to bio-integrated, emotion-driven interactions. This article introduces a novel, multi-layered framework for enabling biologically integrated communication between cells, devices, and c...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41083759/?](https://pubmed.ncbi.nlm.nih.gov/41083759/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016023003&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016023003&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41083759/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016023003&v=2.18.0.post9+e462414)

## Virtual Reality Experience as Reflected in EEG Microstates



Ke  
Ma



2025-10-14



1  
min



73  
words

BRAIN COMPUTER INTERFACE

**Summary:** The development of virtual reality technology has provided psychological research with powerful tools by presenting stimuli and constructing scenarios, and the combination of VR and neuroimaging techniques begins to provide particularly interesting insights into the experience of virtual events and ...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41085777/?](https://pubmed.ncbi.nlm.nih.gov/41085777/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016023003&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016023003&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41085777/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016023003&v=2.18.0.post9+e462414)

## An incremental adversarial training method enables timeliness and rapid new knowledge acquisition



Chengli  
Wang



2025-10-14



1  
min



69  
words

BRAIN COMPUTER INTERFACE

**Summary:** Adversarial training is an effective defense method for deep models against adversarial attacks. However, current adversarial training methods require retraining the entire neural network, which consumes a significant amount of computational resources, thereby affecting the timeliness of deep models...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41087533/?](https://pubmed.ncbi.nlm.nih.gov/41087533/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016023003&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016023003&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41087533/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016023003&v=2.18.0.post9+e462414)

## Gut microbiota remodeling and sensory-emotional functional disruption in adolescents with bipolar depression



Jianbo  
Lai



2025-10-15



1  
min



57  
words

BRAIN COMPUTER INTERFACE

**Summary:** CONCLUSION: This study first characterized the gut microbiota architecture in adolescent BD. Combining gut microbiota and brain function biomarkers may benefit disease diagnosis and predict treatment outcome. Nonetheless, these findings should be carefully interpreted considering the limitations of ...




Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41088296/?](https://pubmed.ncbi.nlm.nih.gov/41088296/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016023003&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016023003&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41088296/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016023003&v=2.18.0.post9+e462414)

## Does brain-computer interface-based mind reading threaten mental privacy? ethical reflections from interviews with Chinese experts

 Haidan  
Chen



2025-10-15



1  
min



64  
words

BRAIN COMPUTER INTERFACE

**Summary:** CONCLUSION: We summarize the interpretations, feasibility, and limitations of BMR and introduce a distinction between "strong BMR" and "weak BMR" to clarify their technical and ethical implications. Based on our analysis, we argue that current BMR does not pose unique ethical challenges compared wit...




**Read full article:**



[https://pubmed.ncbi.nlm.nih.gov/41088329/?](https://pubmed.ncbi.nlm.nih.gov/41088329/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016023003&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41088329/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016023003&v=2.18.0.post9+e462414)

[tbw4049Wgf\\_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016023003&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41088329/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016023003&v=2.18.0.post9+e462414)

## Precision TMS through the integration of neuroimaging and machine learning: optimizing stimulation targets for personalized treatment

 Panxiao  
Bao

 2025-10-15  1  
min

 60  
words

BRAIN COMPUTER INTERFACE


**Summary:** Transcranial Magnetic Stimulation (TMS), a non-invasive neuromodulation technique based on electromagnetic induction, modulates cortical excitability by inducing currents with a magnetic field. TMS has demonstrated significant clinical potential in the treatment of various neuropsychiatric disorders...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41089381/?utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016023003&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089381/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016023003&v=2.18.0.post9+e462414)




## A time-frequency feature fusion-based deep learning network for SSVEP frequency recognition

 Jijun  
Tong


 17 2025-10-15

 1  
min

 62  
words

BRAIN COMPUTER INTERFACE

**Summary:** INTRODUCTION: Steady-state visual evoked potential (SSVEP) has emerged as a pivotal branch in brain-computer interfaces (BCIs) due to its high signal-to-noise ratio (SNR) and elevated information transfer rate (ITR). However, substantial inter-subject variability in electroencephalographic (EEG) sig...


 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41089660/?](https://pubmed.ncbi.nlm.nih.gov/41089660/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016023003&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016023003&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089660/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016023003&v=2.18.0.post9+e462414)

## Participant Engagement, Epistemic Injustice, and Early-Phase Implanted Neural Device Research

 Ashley  
Feinsinger

 17 2025-10-15

 1  
min

 66  
words

BRAIN COMPUTER INTERFACE

**Summary:** In recent years, participant engagement initiatives in research on implanted neural devices have significantly increased. However, there remains little consensus on the motivations, goals, and best practices for engagement efforts. Drawing on the concept of participatory epistemic injustice, we argu...



 Read full article:


[https://pubmed.ncbi.nlm.nih.gov/41091050/?](https://pubmed.ncbi.nlm.nih.gov/41091050/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016023003&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016023003&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41091050/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016023003&v=2.18.0.post9+e462414)

## Recommendations for Combining Brain-Computer Interface, Motor Imagery, and Virtual Reality in Upper Limb Stroke Rehabilitation: Qualitative Participatory Design Study


 Carla Mendes  
Pereira

 2025-10-15  1  
min

 60  
words


BRAIN COMPUTER INTERFACE



**Summary:** CONCLUSIONS: Current results contribute to establishing clear guidelines on patient selection, task design, intervention structuring, motivation factors, and tailoring of sensory feedback. This framework presents a foundation for optimal implementation of VR-BCI-based interventions that associate ML...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41092418/?utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016023003&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41092418/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251016023003&v=2.18.0.post9+e462414)

## Interactive HMTL

 /u/  
gps100

 2025-10-16  1  
min

 103  
words



REDDIT PYTHON

**Summary:** <!-- SC\_OFF --><div class="md"><p>Hi guys</p> <p>I'm creating an interactive HTML page to study graphs. The idea is to create an interface where the user can click on each node and see information about it. Another feature is to display the graph legend in a pop-up window. I'm using NetworkX to crea...

 **Read full article:**

[https://www.reddit.com/r/Python/comments/1o7u9q1/interactive\\_html/](https://www.reddit.com/r/Python/comments/1o7u9q1/interactive_html/)

## TurboTax's 20-Year Fight to Stop Americans from Filing Their Taxes for Free (2019)

 2025-10-16  1 min  2 words




HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45601750)

 Read full article:

<https://www.propublica.org/article/inside-turbotax-20-year-fight-to-stop-americans-from-filing-their-taxes-for-free>

## New coding models and integrations

 2025-10-16  1 min  2 words

HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45601834)

 Read full article:

<https://ollama.com/blog/coding-models>

## TurboTax's 20-Year Fight to Stop Americans from Filing Their Taxes for Free (2019)



Ielandfe



2025-10-16



1  
min



13  
words

HACKER NEWS

**Summary:**

Article URL: <https://www.propublica.org/article/inside-turbotax-20-year-fight-to-stop-americans-from-filing-their-taxes-for-free>

Comments URL: <https://...>



Read full article:

<https://www.propublica.org/article/inside-turbotax-20-year-fight-to-stop-americans-from-filing-their-taxes-for-free>

## New coding models and integrations



meetpateltech



2025-10-16



1  
min



13  
words

HACKER NEWS

**Summary:**

Article URL: <https://ollama.com/blog/coding-models>

Comments URL: <https://news.ycombinator.com/item?id=45601834>

Points: 33


# Comments: 6




Read full article:


<https://ollama.com/blog/coding-models>

## Gradient Porous Flexible Pressure Sensors with the Relay Effect for High-Accuracy Braille-to-Speech Recognition

 Jianming  
Xu

 2025-08-25

 1  
min

 62  
words

**BRAILLE**


**Summary:** The development of highly sensitive, wide linear-range flexible pressure sensors is crucial for practical applications in human-computer interaction, physiological signal detection, and motion monitoring. However, traditional flexible pressure sensors often suffer from limited compressibility in the...


 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/40854103/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016014126&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40854103/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016014126&v=2.18.0.post9+e462414)

## Individual and community level factors influencing modern contraceptive use among women of reproductive age in South Africa: a multilevel analysis

 Million  
Phiri

 2025-08-26

 1  
min

 46  
words

**BRAILLE**


**Summary:** CONCLUSION: Sensory disability status influenced women's contraceptive behaviour in South Africa. Current family planning interventions should target women with sensory disabilities by prioritising accessible communication methods (e.g., braille, sign language), disability awareness training for hea...



 **Read full article:**


<https://pubmed.ncbi.nlm.nih.gov/40855574/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016014126&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40855574/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016014126&v=2.18.0.post9+e462414)

## Explosion-powered eversible tactile displays

 Robert F  
Shepherd

 2025-08-27  1  
min

 64  
words

**BRAILLE**


**Summary:** High-resolution electronic tactile displays stand to transform haptics for remote machine operation, virtual reality, and digital information access for people who are blind or visually impaired. Yet, increasing the resolution of these displays requires increasing the number of individually addressa...



 **Read full article:**


<https://pubmed.ncbi.nlm.nih.gov/40864730/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016014126&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40864730/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016014126&v=2.18.0.post9+e462414)

## A Biomimetic Fiber-Entangled Permeable Electronic Skin for Strain-Insensitive and High-Resolution Tactile Sensing


 Zhijun  
Ma

 2025-08-28  1  
min

 57  
words

**BRAILLE**


**Summary:** Electronic skins (e-skins) incorporating island architectures represent a promising platform for strain-insensitive tactile sensing by mechanically decoupling sensing units from deformations. However, conventional island designs encounter stress concentration issues caused by inherent modulus mismat...


 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/40874468/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016014126&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40874468/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016014126&v=2.18.0.post9+e462414)

## High-Density Tactile Sensor Array for Sub-Millimeter Texture Recognition

 Min  
Zhang

 2025-08-28

 1  
min

 64  
words

BRAILLE

**Summary:** High-density tactile sensor arrays that replicate human touch could restore texture perception in paralyzed individuals. However, conventional tactile sensor arrays face inherent trade-offs between spatial resolution, sensitivity, and crosstalk suppression due to microstructure size limitations and ...


 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/40871941/?](https://pubmed.ncbi.nlm.nih.gov/40871941/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016014126&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016014126&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40871941/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016014126&v=2.18.0.post9+e462414)

## A Diachronic Investigation of the Change in Form and Formational-Semantic Systematicity of the Chinese Sign Language Lexicon

 Hao  
Lin

 2025-09-01

 1  
min

 72  
words

BRAILLE

**Summary:** It has been argued in previous research that several competing pressures guide the directions of language evolution (economy vs. redundancy; arbitrariness vs. systematicity). For sign languages, however, the effects of competing pressures on their change of lexical systems remain largely unclear. In...

 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/40889233/?](https://pubmed.ncbi.nlm.nih.gov/40889233/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016014126&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016014126&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40889233/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016014126&v=2.18.0.post9+e462414)

## Wireless Electrotactile System with Hydrogel-Based Electrodes for Conformal Tactile Interaction

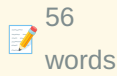


Ji  
Liu

2025-09-02



1  
min



56  
words

BRAILLE

**Summary:** A wireless epidermal electrotactile interface is demonstrated through integration of skin-conformal electrodes and flexible circuitry, addressing existing limitations in haptic technology caused by mechanical mismatch and system-level integration challenges. This electrotactile system achieves low s...

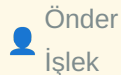


Read full article:

[https://pubmed.ncbi.nlm.nih.gov/40891563/?](https://pubmed.ncbi.nlm.nih.gov/40891563/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8IvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016014126&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8IvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016014126&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40891563/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8IvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016014126&v=2.18.0.post9+e462414)

## Beyond access: rethinking assistive technology for individuals with visual impairments in Türkiye

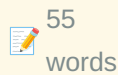


Önder  
İşlek

2025-09-12



1  
min



55  
words

BRAILLE

**Summary:** CONCLUSION: Despite demonstrating adaptability, individuals with VI in Türkiye face significant structural barriers to equitable AT access. Informal learning limited public support, and a lack of locally adapted tools contribute to digital exclusion. A rights-based approach-emphasizing inclusive fun...




Read full article:



[https://pubmed.ncbi.nlm.nih.gov/40937808/?](https://pubmed.ncbi.nlm.nih.gov/40937808/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8IvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016014126&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8IvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016014126&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40937808/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8IvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016014126&v=2.18.0.post9+e462414)



## High prevalence of bacterial STI, anal HPV, cytological abnormalities and anal lesions among MSM in Togo, 2021: a baseline analysis of the ANRS I MIE 12,400/DepIST-H cohort

 Didier K  
Ekouevi

 2025-09-27  1  
min

 42  
words


**BRAILLE**


**Summary:** CONCLUSIONS: These findings emphasize the high prevalence of STIs among MSM and confirm the unusual distribution of HPV types in West Africa, with HPV35 being highly prevalent. A national strategy regarding STI screening and HPV vaccination in this key population is needed.

 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/41013315/?utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016014126&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41013315/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016014126&v=2.18.0.post9+e462414)

## Development and Assessment of a Novel Audiosensory Performance Method for Improving the Oral Health of Visually Impaired Children

 Divya Singh

 2025-10-03

 1 min

 73 words

**BRAILLE**


**Summary:** This study evaluated the effectiveness of an audiosensory performance method in enhancing oral health knowledge and status among visually impaired children aged 6-12 years in the National Capital Region (NCR), Delhi. An interventional study design was used, involving 251 participants equally divided...

 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/41041413/?](https://pubmed.ncbi.nlm.nih.gov/41041413/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016014126&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016014126&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41041413/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251016014126&v=2.18.0.post9+e462414)

## Looking at kmalloc() and the SLUB Memory Allocator (2019)

 2025-10-12

 1 min

 2 words




**HACKER NEWS**

**Summary:** [Comments](https://news.ycombinator.com/item?id=45557217)

 **Read full article:**

<https://ruffell.nz/programming/writeups/2019/02/15/looking-at-kmalloc-and-the-slub-memory-allocator.html>

## Silver Snoopy Award

 2025-10-12  1 min  2 words

HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45557591)



Read full article:

<https://www.nasa.gov/space-flight-awareness/silver-snoopy-award/>

## Neuron synchronization analyzed through spatial-temporal attention



Jeffrey A.  
Riffell

 17

2025-10-16



1 min



217 words

FRONTIERS COMPUTATIONAL NEUROSCIENCE


**Summary:** Neuronal synchronization refers to the temporal coordination of activity across populations of neurons, a process that underlies coherent information processing, supports the encoding of diverse sensory stimuli, and facilitates adaptive behavior in dynamic environments. Previous studies of synchroni...






Read full article:

<https://www.frontiersin.org/articles/10.3389/fncom.2025.1655462>

## Modeling cognition through adaptive neural synchronization: a multimodal framework using EEG, fMRI, and reinforcement learning

 Horace T. Crogman

 2025-10-16  1 min

 332 words



FRONTIERS COMPUTATIONAL NEUROSCIENCE


**Summary:** Introduction Understanding the cognitive process of thinking as a neural phenomenon remains a central challenge in neuroscience and computational modeling. This study addresses this challenge by presenting a biologically grounded framework that simulates adaptive decision making across cognitive stat...

 Read full article:

<https://www.frontiersin.org/articles/10.3389/fncom.2025.1616472>

## Psychometric properties of the Chinese version of Nightmare Distress Questionnaire in adolescents with psychiatric disorders.

 2025-01-09  1 min

 245 words




DREAMING

**Summary:** Nightmare Distress Questionnaire (NDQ) is commonly used to assess nightmare distress. The psychometric properties of the Chinese version of NDQ (NDQ-CV) have been shown to be satisfactory in the general population of Chinese adolescents. This study aims to evaluate the psychometric properties of NDQ...

 Read full article:

<http://doi.org/10.1037/drm0000297>

## Assessing attitudes toward dream incubation: A new scale.




 2025-03-06  1 min  81 words

DREAMING

**Summary:** This study aims to develop the Dream Incubation Attitude Scale for assessing attitudes toward dream incubation. The Dream Incubation Attitude Scale underwent psychometric testing based on responses drawn from 109 Hong Kong participants. This resulted in a three-factor structure comprising self-effic...

 Read full article:  
<http://doi.org/10.1037/drm0000306>

## Flying dreams stimulated by targeted movement and sound: Art and science in the dream hotel.




 2025-04-28  1 min  241 words

DREAMING

**Summary:** We present Dream Hotel Room 1, a sculptural artwork by Carsten Höller (with Adam Haar Horowitz) that uses dream engineering techniques to induce flying dreams. Dreams of flying are an exceptional experience; even years after their occurrence, people report these remain some of the most meaningful an...

 Read full article:  
<http://doi.org/10.1037/drm0000308>

## Nightmare disorder in women.


 2025-04-24  1 min  284 words



DREAMING

**Summary:** The aim of this study is to identify the short-term proximate triggers and effects of nightmares in adult women. In total, 85 females and 29 males participated in a 2-week intensive longitudinal assessment of mood, stress, social conflict, and sleep architecture measures. Sleep architecture was moni...

 Read full article:  
<http://doi.org/10.1037/drm0000309>

## Completely rewrote Buridan UI

 /u/Wonderful-  
Today-497

 2025-10-15  1 min  275 words

REDDIT PYTHON

**Summary:** <!-- SC\_OFF --><div class="md"><p>Hey everyone, so today I decided to rewrite my ui lib from scratch and implemented a new site architecture. It's not perfect nor is it the last iteration, but I really liked the results and so I decided to share it here!</p><p><strong>What My Project Does</strong>...

 Read full article:  
[https://www.reddit.com/r/Python/comments/1o7k3y6/completely\\_rewrote\\_buridan\\_ui/](https://www.reddit.com/r/Python/comments/1o7k3y6/completely_rewrote_buridan_ui/)

# What Does George Orwell's '1984' Mean in 2024?

17

2025-10-16

1


min

2


words

HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45601541)

 **Read full article:**  
<https://www.smithsonianmag.com/history/what-does-george-orwells-1984-mean-in-2024-180984468/>

# What Does George Orwell's '1984' Mean in 2024?

 KnuthIsGod

17

2025-10-16

1

min

13


words

HACKER NEWS

**Summary:**




Article URL: <https://www.smithsonianmag.com/history/what-does-george-orwells-1984-mean-in-2024-180984468/><https://www.smithsonianmag.com/history/what-does-george-orwells-1984-mean-in-2024-180984468/>

Comments URL: <https://news.ycombinator.com/item?id=45601541><https://news.ycombinator.com/item?id=45601541>

 **Read full article:**  
<https://www.smithsonianmag.com/history/what-does-george-orwells-1984-mean-in-2024-180984468/>

Page 95 of 546 • Generated October 16, 2025 at 08:28 AM UTC

## Prefrontal and parieto-occipital neural signatures of evidence accumulation and response to computerised Cognitive Behavioural Therapy in depression

 2025-10-14  1 min  0 words

NATURE NEUROSCIENCE SUBJECTS

 Read full article:

<https://www.nature.com/articles/s44184-025-00165-3>

## Safe time thresholds for temporary artery occlusion and surgical approach side strategy in ACOM aneurysm surgery




 2025-10-14  1 min  0 words

NATURE NEUROSCIENCE SUBJECTS

 Read full article:

<https://www.nature.com/articles/s41598-025-16602-4>

## Dynamic learning of the meaning of information changes pain perception

 2025-10-14  1 min  0 words


NATURE NEUROSCIENCE SUBJECTS

 Read full article:

<https://www.nature.com/articles/s41598-025-14299-z>



## Edge participation coefficient unveiling the developmental dynamics of neonatal functional connectome

 2025-10-14  1 min  0 words

NATURE NEUROSCIENCE SUBJECTS


 Read full article:

<https://www.nature.com/articles/s42003-025-08873-4>

## Netrin-1 as a molecular mediator linking APOE $\epsilon$ 4 to alzheimer's disease pathogenesis





 2025-10-14  1 min  0 words

NATURE NEUROSCIENCE SUBJECTS

 Read full article:

<https://www.nature.com/articles/s41598-025-19693-1>

## Poised for action

 William P. Olson  2025-10-06  1 min  11 words

NATURE NEUROSCIENCE

**Summary:** <p>Nature Neuroscience, Published online: 06 October 2025; <a href="https://www.nature.com/articles/s41593-025-02083-1">doi:10.1038/s41593-025-02083-1</a></p>Poised for action

 Read full article:

<https://www.nature.com/articles/s41593-025-02083-1>

## Astrocytes make room for microglia



Rebecca  
Wright



2025-10-06



1  
min



13  
words

NATURE NEUROSCIENCE

**Summary:** <p>Nature Neuroscience, Published online: 06 October 2025; <a href="https://www.nature.com/articles/s41593-025-02082-2">doi:10.1038/s41593-025-02082-2</a></p>Astrocytes make room for microglia



Read full article:

<https://www.nature.com/articles/s41593-025-02082-2>

## This Week in The Journal



McKeon,  
P.



2025-09-17



1  
min



0  
words

JOURNAL NEUROSCIENCE THIS WEEK



Read full article:

<http://www.jneurosci.org/cgi/content/short/45/38/etwij45382025?rss=1>

## This Week in The Journal



McKeon,  
P.



2025-09-24



1  
min



0  
words

JOURNAL NEUROSCIENCE THIS WEEK



Read full article:

<http://www.jneurosci.org/cgi/content/short/45/39/etwij45392025?rss=1>

## This Week in The Journal



McKeon,  
P.



2025-10-01



1  
min



0  
words

JOURNAL NEUROSCIENCE THIS WEEK



Read full article:

<http://www.jneurosci.org/cgi/content/short/45/40/etwij45402025?rss=1>

## Cognitive training improves executive function and self-efficacy in young women with chronic stroke: a pilot study



Lori G.  
Cook



2025-10-13



1  
min



209  
words

FRONTIERS HUMAN NEUROSCIENCE


**Summary:** IntroductionYoung women are increasingly affected by stroke and often experience persistent executive function deficits that impact global functioning. The purpose of this pilot study was to evaluate the feasibility and effectiveness of a strategy-based cognitive training program (Strategic Memory A...






Read full article:

<https://www.frontiersin.org/articles/10.3389/fnhum.2025.1677642>

## As time goes by: SMA neuromodulation and time perception while watching moving images with different editing styles. A tDCS study


 Ruggiero  
Eugeni

 2025-10-13  1  
min

 201  
words

FRONTIERS HUMAN NEUROSCIENCE



**Summary:** Within the framework of a “neurofilmological” approach – which integrates film studies, cognitive psychology, and neuroscience – the present study explored how cinematographic editing influences the viewer’s perception of time. Previous behavioral research has shown that editing density affects temp...


 Read full article:

<https://www.frontiersin.org/articles/10.3389/fnhum.2025.1595599>

## 4D trajectory prediction for inbound flights


 Jie  
Dai

 2025-09-17  1  
min

 177  
words


FRONTIERS NEUROBOTICS



**Summary:** IntroductionTo address the challenges of cumulative errors, insufficient modeling of complex spatiotemporal features, and limitations in computational efficiency and generalization ability in 4D trajectory prediction, this paper proposes a high-precision, robust prediction method.MethodsA hybrid mod...

 Read full article:

<https://www.frontiersin.org/articles/10.3389/fnbot.2025.1625074>

## Correction: Pre-training, personalization, and self-calibration: all a neural network-based myoelectric decoder needs

 Kianoush  
Nazarpour

 2025-09-19  1  
min

 0  
words



FRONTIERS NEUROBOTICS


 Read full article:

<https://www.frontiersin.org/articles/10.3389/fnbot.2025.1675642>

## End-to-end robot intelligent obstacle avoidance method based on deep reinforcement learning with spatiotemporal transformer architecture

 Weizhong  
Zhang

 2025-10-08  1  
min

 261  
words

FRONTIERS NEUROBOTICS

**Summary:** To enhance the obstacle avoidance performance and autonomous decision-making capabilities of robots in complex dynamic environments, this paper proposes an end-to-end intelligent obstacle avoidance method that integrates deep reinforcement learning, spatiotemporal attention mechanisms, and a Transfo...

 Read full article:

<https://www.frontiersin.org/articles/10.3389/fnbot.2025.1646336>

## The impact of CSF-filled cavities on scalp EEG and its implications



Maria Carla  
Piastra



2024-06-14



1  
min



64  
words

OOSTENVELD ROBERT

**Summary:** Previous studies have found electroencephalogram (EEG) amplitude and scalp topography differences between neurotypical and neurological/neurosurgical groups, being interpreted at the cognitive level. However, these comparisons are invariably accompanied by anatomical changes. Critical to EEG are the...



Read full article:

<https://pubmed.ncbi.nlm.nih.gov/38873838/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016004355&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/38873838/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016004355&v=2.18.0.post9+e462414)

## Motion-BIDS: an extension to the brain imaging data structure to organize motion data for reproducible research



Julius  
Welzel



2024-07-02



1  
min



72  
words

OOSTENVELD ROBERT

**Summary:** We present an extension to the Brain Imaging Data Structure (BIDS) for motion data. Motion data is frequently recorded alongside human brain imaging and electrophysiological data. The goal of Motion-BIDS is to make motion data interoperable across different laboratories and with other data modalities...






Read full article:


<https://pubmed.ncbi.nlm.nih.gov/38956071/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016004355&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/38956071/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016004355&v=2.18.0.post9+e462414)

## One hundred years of EEG for brain and behaviour research

 Pedro Valdes-Sosa

 2024-08-22  1 min

 2 words


OOSTENVELD ROBERT



 Read full article:


[https://pubmed.ncbi.nlm.nih.gov/39174725/?](https://pubmed.ncbi.nlm.nih.gov/39174725/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxObIm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016004355&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxObIm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016004355&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/39174725/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxObIm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016004355&v=2.18.0.post9+e462414)

## Freezing of gait in Parkinson's disease is related to imbalanced stopping-related cortical activity

 Richard J A van Wezel

 2024-09-04  1 min

 65 words

OOSTENVELD ROBERT

**Summary:** Freezing of gait, characterized by involuntary interruptions of walking, is a debilitating motor symptom of Parkinson's disease that restricts people's autonomy. Previous brain imaging studies investigating the mechanisms underlying freezing were restricted to scan people in supine positions and yie...


 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/39229492/?](https://pubmed.ncbi.nlm.nih.gov/39229492/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxObIm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016004355&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxObIm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016004355&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/39229492/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxObIm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016004355&v=2.18.0.post9+e462414)

## The past, present, and future of the brain imaging data structure (BIDS)

 Krzysztof J  
Gorgolewski

 2024-09-23

 1  
min

 82  
words

OOSTENVELD ROBERT


**Summary:** The Brain Imaging Data Structure (BIDS) is a community-driven standard for the organization of data and metadata from a growing range of neuroscience modalities. This paper is meant as a history of how the standard has developed and grown over time. We outline the principles behind the project, the ...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/39308505/?](https://pubmed.ncbi.nlm.nih.gov/39308505/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016004355&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016004355&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/39308505/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016004355&v=2.18.0.post9+e462414)

## Human cortical high-gamma power scales with movement rate in healthy participants and stroke survivors

 Fanny  
Quandt

 2025-01-09

 1  
min

 65  
words

OOSTENVELD ROBERT

**Summary:** Motor cortical high-gamma oscillations (60-90 Hz) occur at movement onset and are spatially focused over the contralateral primary motor cortex. Although high-gamma oscillations are widely recognized for their significance in human motor control, their precise function on a cortical level remains el...


 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/39786979/?](https://pubmed.ncbi.nlm.nih.gov/39786979/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016004355&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016004355&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/39786979/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016004355&v=2.18.0.post9+e462414)




## NIRS-BIDS: Brain Imaging Data Structure Extended to Near-Infrared Spectroscopy

 Luca  
Pollonini

 17 2025-01-27

 1  
min

 70  
words

OOSTENVELD ROBERT


**Summary:** Functional near-infrared spectroscopy (fNIRS) is an increasingly popular neuroimaging technique that measures cortical hemodynamic activity in a non-invasive and portable fashion. Although the fNIRS community has been successful in disseminating open-source processing tools and a standard file forma...


 Read full article:

<https://pubmed.ncbi.nlm.nih.gov/39870674/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016004355&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/39870674/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016004355&v=2.18.0.post9+e462414)

## Pseudonymisation of neuroimages and data protection: Increasing access to data while retaining scientific utility

 Lyuba  
Zehl

 17 2025-06-26

 1  
min

 67  
words

OOSTENVELD ROBERT


**Summary:** For a number of years, facial features removal techniques such as 'defacing', 'skull stripping' and 'face masking/blurring', were considered adequate privacy preserving tools to openly share brain images. Scientifically, these measures were already a compromise between data protection requirements a...


 Read full article:

<https://pubmed.ncbi.nlm.nih.gov/40568426/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016004355&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40568426/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016004355&v=2.18.0.post9+e462414)

## Cycling on the Freeway: The perilous state of open-source neuroscience software

 Tim M  
Tierney

 17 2025-08-13

 1  
min

 74  
words

OOSTENVELD ROBERT


**Summary:** Most scientists need software to perform their research (Barker et al., 2020;Carver et al., 2022;Hettrick, 2014;Hettrick et al., 2014;Switters & Osimo, 2019), and neuroscientists are no exception. Whether we work with reaction times, electrophysiological signals, or magnetic resonance imaging data, ...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/40800958/?](https://pubmed.ncbi.nlm.nih.gov/40800958/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016004355&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016004355&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40800958/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016004355&v=2.18.0.post9+e462414)

## Optimal configuration of on-scalp OPMs with fixed channel counts

 Robert  
Oostenveld

 17 2025-08-13

 1  
min

 69  
words

OOSTENVELD ROBERT


**Summary:** Recent technological developments have brought optically pumped magnetometers (OPMs) within reach of the larger neuroscientific community. The current state-of-the-art consists of whole-head systems that measure the magnetic field at >100 locations. OPM sensors can be constructed to measure the fiel...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/40800964/?](https://pubmed.ncbi.nlm.nih.gov/40800964/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016004355&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016004355&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40800964/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251016004355&v=2.18.0.post9+e462414)

## Association of High-Altitude Polycythemia with JAK2V617F Mutation in Pakistani Population

 Uzma  
Zaidi

 2025-10-14

 1  
min

 74  
words

LOW VISION


**Summary:** To assess the prevalence of the JAK2V617F mutation in polycythemia patients living at high altitude. This was a cross-sectional study, conducted at the National Institute of Blood Diseases and Bone Marrow Transplantation (NIBD-BMT), Karachi from July 2022 to July 2023. A total of 132 patients with polyc...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41084570/?](https://pubmed.ncbi.nlm.nih.gov/41084570/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016004325&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016004325&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41084570/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016004325&v=2.18.0.post9+e462414)

## Neither exogenous, nor endogenous: Evidence for a distinct role of negative emotion during attentional control

 Gilles  
Pourtois

 2025-10-14

 1  
min

 69  
words

LOW VISION


**Summary:** Negative or threatening stimuli capture attention. However, it remains unclear whether this phenomenon is best conceived as bottom-up (i.e., salience-driven) or top-down (i.e., goal-directed) instead. To address this question, we conducted two experiments using a previously validated dot-probe task ...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41086156/?](https://pubmed.ncbi.nlm.nih.gov/41086156/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016004325&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016004325&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41086156/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016004325&v=2.18.0.post9+e462414)

## Improving object detection in challenging weather for autonomous driving via adversarial image translation

 Yaohua  
Zhao

 2025-10-14

 1  
min

 65  
words

LOW VISION


**Summary:** Vision-based environmental perception is fundamental to autonomous driving, as it enables reliable detection and recognition of diverse objects in complex traffic environments. However, adverse weather conditions (such as rain, fog, and low-light conditions) significantly degrade image quality, ther...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41086174/?](https://pubmed.ncbi.nlm.nih.gov/41086174/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016004325&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016004325&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41086174/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016004325&v=2.18.0.post9+e462414)

## Shared mechanisms of presaccadic and exogenous attention in modulating visual perception of contrast

 Yongchun  
Cai

 2025-10-14

 1  
min

 59  
words

LOW VISION


**Summary:** Different types of attention alter subjective visual perception in fundamentally distinct ways. Previous studies have focused on covert attention without concurrent eye movements, revealing that covert exogenous (involuntary) attention enhances contrast appearance of low-contrast stimuli while dimin...

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41086688/?](https://pubmed.ncbi.nlm.nih.gov/41086688/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016004325&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016004325&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41086688/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016004325&v=2.18.0.post9+e462414)

## Halide Perovskites for Neuromorphic Sensing and Computing

 Ho Won  
Jang

 2025-10-14

 1  
min

 56  
words

LOW VISION

**Summary:** The development of semiconductor-based electronic devices has significantly advanced sensor-based data acquisition and processor-driven data analysis. However, conventional complementary metal-oxide-semiconductor technologies are now facing fundamental limitations in scaling, speed, and power effici...


 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41087317/?](https://pubmed.ncbi.nlm.nih.gov/41087317/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016004325&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016004325&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41087317/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016004325&v=2.18.0.post9+e462414)

## HZO/HSO Superlattice ReFET Array Integrating Optical Sensing for Neuromorphic Vision Computing

 Jingsheng  
Chen


 2025-10-15

 1  
min

 58  
words

LOW VISION


**Summary:** Neuromorphic vision systems require artificial synapses that integrate sensing, memory, and computation with high precision and stability. Conventional memristors face limitations including forming requirements, few multilevel states, low endurance, and poor integration density, while ferroelectric ...


 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41089064/?](https://pubmed.ncbi.nlm.nih.gov/41089064/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016004325&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016004325&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089064/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016004325&v=2.18.0.post9+e462414)

## Mapping political commitments: Analysing health priorities in Indian election manifestos

 Shilpi S  
Das

 17 2025-10-15

 1  
min

 35  
words

LOW VISION

**Summary:** CONCLUSION: India's political manifestos recognize health as important but fail to address systemic challenges. Greater political will and citizen engagement, is essential to elevate health as a governance priority, fostering universal health coverage and equity.


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41089958/?](https://pubmed.ncbi.nlm.nih.gov/41089958/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnVsIegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016004325&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnVsIegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016004325&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089958/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnVsIegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016004325&v=2.18.0.post9+e462414)

## Does cannulation site affect outcomes of antegrade cerebral perfusion in aortic arch surgery? A meta-analysis of axillary versus innominate access

 Tomasz  
Płonek

 17 2025-10-15

 1  
min

 67  
words

LOW VISION


**Summary:** BackgroundThe optimal arterial cannulation strategy for establishing antegrade cerebral perfusion during aortic arch surgery remains a subject of ongoing debate. Our meta-analysis compares outcomes between axillary artery (AxA) and innominate artery (InA) cannulation.MethodsA literature search was c...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41090996/?](https://pubmed.ncbi.nlm.nih.gov/41090996/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnVsIegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016004325&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnVsIegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016004325&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41090996/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnVsIegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016004325&v=2.18.0.post9+e462414)

## A systematic review of ionizing radiation-induced glaucoma: clinical manifestations, pathogenesis, and current treatment approaches

 Heng  
Zhou

 2025-10-15

 1  
min

 51  
words

LOW VISION


**Summary:** CONCLUSIONS: IRG represents a dose-dependent entity with distinct phenotypes and mechanisms. Current therapies provide partial benefit but remain unsatisfactory in terms of durability and standardization. Advancing the field will require mechanistic studies to clarify radiation-induced optic neuropa...


 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41091454/?](https://pubmed.ncbi.nlm.nih.gov/41091454/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnVSlégfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016004325&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnVSlégfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016004325&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41091454/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnVSlégfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016004325&v=2.18.0.post9+e462414)

## Choroidal Vascularity Index, Retinal Vascularity and Hemoglobin Levels in Pediatric Sick Cell Maculopathy

 Nimesh A  
Patel

 2025-10-15

 1  
min

 69  
words

LOW VISION

**Summary:** CONCLUSION: In pediatric SCD patients, there was a significant decrease in CVI when compared to healthy age matched controls. Decreased CVI was associated with a loss of retinal VD in the inferotemporal macular quadrant as well as lower Hgb levels. These findings suggest a role of choroidal ischemia...




 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41092070/?](https://pubmed.ncbi.nlm.nih.gov/41092070/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnVSlégfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016004325&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnVSlégfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016004325&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41092070/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnVSlégfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251016004325&v=2.18.0.post9+e462414)

## The taste of trigeminal sensations: relation between taste, lingual tactile acuity, and spicy perception in patients with taste dysfunction

 Thomas Hummel

 2025-05-28  1 min  70 words


TACTILE ACUITY

**Summary:** In the oral cavity, oral stereognosis and chemesthesis refer to the abilities to recognize shapes and detect noxious substances, respectively, through various receptors distributed on the tongue. The absence of standardized methods to assess oral somatosensory perception has led to a lack of consens...

 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/40434896/?utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016004320&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40434896/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016004320&v=2.18.0.post9+e462414)

## Measuring the Distribution of Tactile Acuity at the Index Finger and Thumb Fingertips

 Hiroyuki Kajimoto

 2025-06-17  1 min  75 words

TACTILE ACUITY


**Summary:** In our day-to-day activities, we utilize not only the pads of our fingers but also the sides and hemispherical tips when manipulating objects. For teleoperation systems to replicate these real-life interactions, tactile sensation must be presented and distributed across the entire fingertip. Thus, u...


 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/40526544/?utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016004320&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40526544/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016004320&v=2.18.0.post9+e462414)




## Optimizing Vibrotactile Feedback for Sensory Substitution in the Thigh: Spatial Acuity and Frequency Characteristics

 Leah R  
Bent

 2025-06-27

 1  
min

 69  
words

TACTILE ACUITY


**Summary:** Amputation of a lower limb not only affects mobility but also interferes with sensory feedback, leading to an elevated risk of falls among individuals living with amputation. Sensory substitution, achieved through tactile displays embedded in transfemoral prosthetic sockets, presents a promising non...


 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/40577301/?](https://pubmed.ncbi.nlm.nih.gov/40577301/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016004320&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016004320&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40577301/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016004320&v=2.18.0.post9+e462414)

## Directional vibro-tactile hazard warnings for drivers with vision impairments

 Alex R  
Bowers

 2025-07-02

 1  
min

 80  
words

TACTILE ACUITY


**Summary:** Vision impairment may delay responses to hazards when driving. In a proof-of-concept driving simulator study, we evaluated a hazard warning device designed for vision impaired drivers. Three groups participated: 11 persons with central vision loss (CVL; median age 60 years), 12 with homonymous field...



 Read full article:


[https://pubmed.ncbi.nlm.nih.gov/40601880/?](https://pubmed.ncbi.nlm.nih.gov/40601880/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016004320&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016004320&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40601880/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016004320&v=2.18.0.post9+e462414)

## Sensitivity and vagal reactivity to C-tactile-mediated affective touch in mild cognitive impairment due to Alzheimer's disease

 Cecilia  
Guariglia

 2025-08-01  1  
min

 64  
words

TACTILE ACUITY

**Summary:** BackgroundC-tactile (CT) afferents preferentially activate in response to slow caress-like touch, evoking a diffuse pleasant sensation and promoting autonomic regulation. According to Braak's classic model, the neurodegenerative process in Alzheimer's disease (AD) only affects somatosensory cortices...



 Read full article:


[https://pubmed.ncbi.nlm.nih.gov/40746091/?](https://pubmed.ncbi.nlm.nih.gov/40746091/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016004320&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016004320&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40746091/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016004320&v=2.18.0.post9+e462414)

## Differences in tactile grid localization accuracy between people with back pain compared to individuals without pain

 Eric  
Fjeldheim

 2025-08-24  1  
min

 22  
words

TACTILE ACUITY

**Summary:** OBJECTIVES: The study aimed to investigate the grid localization test (GLT) between patients with lower back pain and those without back pain.

 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/40850311/?](https://pubmed.ncbi.nlm.nih.gov/40850311/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016004320&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016004320&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40850311/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016004320&v=2.18.0.post9+e462414)

## Eye Drop Instillation Success and Hand Function in Adults with Glaucoma: A Pilot Study



Paula Anne Newman-  
Casey



2025-09-09



1  
min



74  
words

TACTILE ACUITY

**Summary:** CONCLUSIONS: Despite hand function deficits, in this exploratory pilot study, adults with glaucoma demonstrated eye drop instillation success comparable to those without glaucoma, though with higher rates of bottle tip contact with the eye, skin, or eyelashes, suggesting an increased risk of potenti...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/40924900/?](https://pubmed.ncbi.nlm.nih.gov/40924900/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016004320&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016004320&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40924900/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016004320&v=2.18.0.post9+e462414)

## Functional evidence for early origin of tactile acuity in the vertebrate somatosensory system



Sviatoslav N  
Bagriantsev



2025-09-13



1  
min



58  
words

TACTILE ACUITY

**Summary:** Mammals and reptiles possess a sophisticated somatosensory system for precise tactile discrimination via mechanosensory end-organs, such as Meissner and Pacinian corpuscles and others. These structures detect sustained pressure, velocity, and vibrations, thereby facilitating nuanced environmental in...






Read full article:


[https://pubmed.ncbi.nlm.nih.gov/40945511/?](https://pubmed.ncbi.nlm.nih.gov/40945511/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016004320&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016004320&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40945511/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016004320&v=2.18.0.post9+e462414)

## The coarse mental map of the breast is anchored on the nipple

 Charles M  
Greenspon

 2025-09-18  1  
min

 86  
words

TACTILE ACUITY

**Summary:** Touch plays a key role in our perception of our body and shapes our interactions with the world, from the objects we manipulate to the people we touch. While the tactile sensibility of the hand has been extensively characterized, much less is known about touch on other parts of the body. Despite the...



 Read full article:


<https://pubmed.ncbi.nlm.nih.gov/40964349/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016004320&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40964349/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016004320&v=2.18.0.post9+e462414)

## Haptic Feedback Systems for Lower-Limb Prosthetic Applications: A Review of System Design, User Experience, and Clinical Insights

 Runar  
Unnthorsson

 2025-09-27  1  
min

 65  
words

TACTILE ACUITY

**Summary:** Systems presenting haptic information have emerged as an important technological advance in assisting individuals with sensory impairments or amputations, where the aim is to enhance sensory perception or provide sensory substitution through tactile feedback. These systems provide information on lim...

 Read full article:

<https://pubmed.ncbi.nlm.nih.gov/41007234/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016004320&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41007234/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251016004320&v=2.18.0.post9+e462414)

## Impact of childhood trauma on dreams in adulthood: An Argentine survey.

17

2025-04-24

1  
min177  
words

DREAMING

**Summary:** The aim of this study was to assess whether participants who present more frequently with nightmares or distressing dreams have had traumatic experiences in their childhood and their relationship with current personality traits. Three instruments were administered to a sample of 446 adults from the ...



Read full article:

<http://doi.org/10.1037/drm0000307>

## Free applicatives, the handle pattern, and remote systems

17

2025-10-16

1  
min2  
words

HACKER NEWS





**Summary:** [Comments](https://news.ycombinator.com/item?id=45601177)



Read full article:

<https://exploring-better-ways.bellroy.com/free-applicatives-the-handle-pattern-and-remote-systems.html>

## Free applicatives, the handle pattern, and remote systems

 \_jackdk\_  2025-10-16  1 min  13 words

HACKER NEWS

**Summary:**





Article URL: <https://exploring-better-ways.bellroy.com/free-applicatives-the-handle-pattern-and-remote-systems.html>

Comments URL: <https://news.ycombinator.com/item?...>

 Read full article:

<https://exploring-better-ways.bellroy.com/free-applicatives-the-handle-pattern-and-remote-systems.html>

## TaxCalcBench: Evaluating Frontier Models on the Tax Calculation Task

 handfullflight  2025-10-16  1 min  13 words

HACKER NEWS

**Summary:**

Article URL: <https://arxiv.org/abs/2507.16126>

Comments URL: <https://news.ycombinator.com/item?id=45601230>

Points: 4

# Comments: 0

 Read full article:

<https://arxiv.org/abs/2507.16126>

## Speculating a Tactile Grammar: Toward Task-Aligned Chart Design for Non-Visual Perception



Areen Khalaila, Dylan  
Cashman



2025-10-16



1  
min



172  
words

ARXIV CS HC

**Summary:** arXiv:2510.13731v1 Announce Type: new Abstract: Tactile graphics are often adapted from visual chart designs, yet many of these encodings do not translate effectively to non-visual exploration. Blind and low-vision (BLV) people employ a variety of physical strategies such as measuring lengths with ...



Read full article:

<https://arxiv.org/abs/2510.13731>

## Smart UX-design for Rescue Operations Wearable - A Knowledge Graph Informed Visualization Approach for Information Retrieval in Emergency Situations



Mubaris Nadeem, Johannes Zenkert, Christian Weber, Madjid Fathi, Muhammad  
Hamza



2025-10-16



1  
min



85  
words

ARXIV CS HC

**Summary:** arXiv:2510.13539v1 Announce Type: new Abstract: This paper presents a knowledge graph-informed smart UX-design approach for supporting information retrieval for a wearable, providing treatment recommendations during emergency situations to health professionals. This paper describes requirements tha...



Read full article:

<https://arxiv.org/abs/2510.13539>

## Adapting to the User: A Systematic Review of Personalized Interaction in VR



Tangyao Li, Yitong Zhu, Hai-Ning Liang, Yuyang Wang



2025-10-16



1 min



169 words

ARXIV CS HC

**Summary:** arXiv:2510.13123v1 Announce Type: new Abstract: As virtual reality (VR) systems become increasingly more advanced, they are likewise expected to respond intelligently and adapt to individual user states, abilities, and preferences. Recent work has explored how VR can be adapted and tailored to indi...



Read full article:

<https://arxiv.org/abs/2510.13123>

## Unmasking Hiring Bias: Platform Data Analysis and Controlled Experiments on Bias in Online Freelance Marketplaces via RAG-LLM Generated Contents



Wugeng Zheng, Guohou Shan



2025-10-16



1 min



234 words

ARXIV CS HC

**Summary:** arXiv:2510.13091v1 Announce Type: new Abstract: Online freelance marketplaces, a rapidly growing part of the global labor market, are creating a fair environment where professional skills are the main factor for hiring. While these platforms can reduce bias from traditional hiring, the personal inf...



Read full article:

<https://arxiv.org/abs/2510.13091>



## Deliberate Lab: A Platform for Real-Time Human-AI Social Experiments



Crystal Qian, Vivian Tsai, Michael Behr, Nada Hussein, L'eo Laugier, Nithum Thain, Lucas Dixon



2025-10-16



1  
min



147  
words

ARXIV CS HC

**Summary:** arXiv:2510.13011v1 Announce Type: new Abstract: Social and behavioral scientists increasingly aim to study how humans interact, collaborate, and make decisions alongside artificial intelligence. However, the experimental infrastructure for such work remains underdeveloped: (1) few platforms support...



Read full article:

<https://arxiv.org/abs/2510.13011>

## Developing and Validating the Arabic Version of the Attitudes Toward Large Language Models Scale



Basad Barajeeh, Ala Yankouskaya, Sameha AlShakhsi, Chun Sing Maxwell Ho, Guandong Xu, Raian Ali



2025-10-16



1  
min



245  
words

ARXIV CS HC

**Summary:** arXiv:2510.13009v1 Announce Type: new Abstract: As the use of large language models (LLMs) becomes increasingly global, understanding public attitudes toward these systems requires tools that are adapted to local contexts and languages. In the Arab world, LLM adoption has grown rapidly with both gl...



Read full article:

<https://arxiv.org/abs/2510.13009>

## Deep Learning-Based Visual Fatigue Detection Using Eye Gaze Patterns in VR



Numan Zafar, Johnathan Locke, Shafique Ahmad Chaudhry



2025-10-16



1 min



165 words

ARXIV CS HC

**Summary:** arXiv:2510.12994v1 Announce Type: new Abstract: Prolonged exposure to virtual reality (VR) systems leads to visual fatigue, impairs user comfort, performance, and safety, particularly in high-stakes or long-duration applications. Existing fatigue detection approaches rely on subjective questionnaires...



Read full article:

<https://arxiv.org/abs/2510.12994>

## Behavioral Biometrics for Automatic Detection of User Familiarity in VR



Numan Zafar, Priyo Ranjan Kundu Prosun, Shafique Ahmad Chaudhry



2025-10-16



1 min



229 words

ARXIV CS HC

**Summary:** arXiv:2510.12988v1 Announce Type: new Abstract: As virtual reality (VR) devices become increasingly integrated into everyday settings, a growing number of users without prior experience will engage with VR systems. Automatically detecting a user's familiarity with VR as an interaction medium enable...



Read full article:

<https://arxiv.org/abs/2510.12988>

## TaskAudit: Detecting Functionality Errors in Mobile Apps via Agentic Task Execution



Mingyuan Zhong, Xia Chen, Davin Win Kyi, Chen Li, James Fogarty, Jacob O.

Wobbrock



2025-10-16



1  
min



150  
words

ARXIV CS HC

**Summary:** arXiv:2510.12972v1 Announce Type: new Abstract: Accessibility checkers are tools in support of accessible app development and their use is encouraged by accessibility best practices. However, most current checkers evaluate static or mechanically-generated contexts, failing to capture common accessi...



Read full article:

<https://arxiv.org/abs/2510.12972>

## Changing Oneself by Teaching Others? Exploring the Protégé Effect in Digital Stress Self-Regulation



Sameha Alshakhsi, Ala Yankouskaya, Dena Al-Thani, Raian

Ali



2025-10-16



1  
min



205  
words

ARXIV CS HC

**Summary:** arXiv:2510.12944v1 Announce Type: new Abstract: The protégé effect suggests that individuals learn more effectively when they teach a subject. While this has shown potential for acquiring knowledge and skills, can it also support acquiring a new behaviour? This study evaluated a protégé-ba...



Read full article:

<https://arxiv.org/abs/2510.12944>

## Spike-frequency and h-current based adaptation are dynamically equivalent in a Wilson-Cowan field model



Ronja Strömsdörfer, Klaus Obermayer



2025-10-16



1 min



272 words

ARXIV QBIO NC

**Summary:** arXiv:2510.08436v3 Announce Type: replace-cross Abstract: During slow-wave sleep, the brain produces traveling waves of slow oscillations (SOs;  $\leq 2$  Hz), characterized by the propagation of alternating high- and low-activity states. The question of internal mechanisms that modulate traveling wa...



Read full article:

<https://arxiv.org/abs/2510.08436>

## Of Mice and Machines: A Comparison of Learning Between Real World Mice and RL Agents



Shuo Han, German Espinosa, Junda Huang, Daniel A. Dombeck, Malcolm A. MacIver, Bradly C. Stadie



2025-10-16



1 min



156 words

ARXIV QBIO NC

**Summary:** arXiv:2505.12204v3 Announce Type: replace-cross Abstract: Recent advances in reinforcement learning (RL) have demonstrated impressive capabilities in complex decision-making tasks. This progress raises a natural question: how do these artificial systems compare to biological agents, which have been...



Read full article:

<https://arxiv.org/abs/2505.12204>

## Attractive and Repulsive Perceptual Biases Naturally Emerge in Generative Adversarial Inference



Hyun-Jun Jeon, Hansol Choi, Oh-Sang Kwon



2025-10-16



1 min



147 words

ARXIV QBIO NC

**Summary:** arXiv:2507.19944v2 Announce Type: replace Abstract: Perceptual estimates exhibit a reversal in bias depending on uncertainty: they shift toward prior expectations under high stimulus noise, but away from them when sensory noise dominates. The normative framework of a Bayesian observer model can acc...



Read full article:

<https://arxiv.org/abs/2507.19944>

## Scaling Vision Transformers for Functional MRI with Flat Maps



Connor Lane, Daniel Z. Kaplan, Tanishq Mathew Abraham, Paul S. Scotti



2025-10-16



1 min



147 words

ARXIV QBIO NC

**Summary:** arXiv:2510.13768v1 Announce Type: cross Abstract: A key question for adapting modern deep learning architectures to functional MRI (fMRI) is how to represent the data for model input. To bridge the modality gap between fMRI and natural images, we transform the 4D volumetric fMRI data into videos of...



Read full article:

<https://arxiv.org/abs/2510.13768>

## Data-Driven Reduced Modeling of Recurrent Neural Networks

 Alice Marraffa, Renate Krause, Valerio Mante, George  
Haller


 2025-10-16  1 min  173 words

ARXIV QBIO NC

**Summary:** arXiv:2510.13519v1 Announce Type: cross Abstract: Artificial Recurrent Neural Networks (RNNs) are widely used in neuroscience to model the collective activity of neurons during behavioral tasks. The high dimensionality of their parameter and activity spaces, however, often make it challenging to in...

 **Read full article:**  
<https://arxiv.org/abs/2510.13519>

## Jacobian-Based Interpretation of Nonlinear Neural Encoding Model

 Xiaohui Gao, Haoran Yang, Yue Cheng, Mengfei Zuo, Yiheng Liu, Peiyang Li, Xintao  
Hu

 2025-10-16  1 min  192 words

ARXIV QBIO NC

**Summary:** arXiv:2510.13688v1 Announce Type: new Abstract: In recent years, the alignment between artificial neural network (ANN) embeddings and blood oxygenation level dependent (BOLD) responses in functional magnetic resonance imaging (fMRI) via neural encoding models has significantly advanced research on ...

 **Read full article:**  
<https://arxiv.org/abs/2510.13688>

## Bifurcation of spiking oscillations from a center in resonate-and-fire neurons



Oleg Makarenkov, Marianne Bezaire, Michael Hasselmo



2025-10-16



1 min



176 words

ARXIV QBIO NC

**Summary:** arXiv:2510.13156v1 Announce Type: new Abstract: The theta rhythm is important for many cognitive functions including spatial processing, memory encoding, and memory recall. The information processing underlying these functions is thought to rely on consistent, phase-specific spiking throughout a th...



Read full article:

<https://arxiv.org/abs/2510.13156>

## The difference in immunohistochemical reactivity of monoclonal antibodies against amino-terminal residues of amyloid- $\beta$ peptide



Araki, K., Yamauchi, K., Ito, S., Koike, M., Hioki, H.



2025-10-15



1 min



198 words

BIORXIV NEUROSCIENCE

**Summary:** Immunohistochemistry for amyloid- $\beta$  (A $\beta$ ) peptide is an indispensable method for Alzheimers disease (AD) research. Despite a wide variety of available antibodies against the peptides, the difference of immunohistochemical reactivity is not fully described among anti-A $\beta$  antibodies. Immun...



Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.15.682678v1?rss=1>

## Hippocampal grey matter changes across scales in Alzheimer's Disease



Karat, B. G., Farahani, M. V., Davidson, M., Thurairajah, A., Taha, A., Schmitz, T. W., Khan, A. R.



2025-10-15



1  
min



335  
words

BIORXIV NEUROSCIENCE

**Summary:** Alzheimer's disease (AD) is a progressive and debilitating neurodegenerative disease of the central nervous system, characterized by deterioration in cognitive function including extensive memory impairment. The hippocampus, a medial temporal lobe region, is a key orchestrator in the encoding and re...







Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.15.682705v1?rss=1>



## REST elevation-dependent chromatin remodeling and alternative Grk6 transcript synthesis hyperactivates Cxcr4-Sdf1 signaling in cerebellar granule cell progenitors

 Callegari, K., Swaminathan, J., Guo, L., Singh, A., Yang, Y., Xiao, X., Dobson, T., Haltom, A., Bravo-Alegria, J., Sharma, A., hu, x., Xu, L., Gopalakrishnan, V.

 2025-10-15  1 min  200 words


BIORXIV NEUROSCIENCE

**Summary:** RE1 Silencing Transcription Factor (REST) is a repressor of transcriptional initiation of genes involved in neurogenesis. Here, we show that conditional REST elevation in cerebellar granule cell progenitors (CGNPs) of RESTTG mice perturbed foliation, increased cell migration, and sustained C-X-C mot...

 Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.15.682654v1?rss=1>

## Sensitivity Analysis of the Balloon Model Parameters in Functional Near-Infrared Spectroscopy Simulation

 Murad Althobaiti

 2025-10-11  1 min  43 words


FNIRS



**Summary:** CONCLUSIONS: The fNIRS hemodynamic response is highly sensitive to the Balloon model's  $\alpha$  and  $\tau$  parameters. These findings highlight the importance of accounting for physiological variability in fNIRS analysis and provide a robust framework for generating synthetic data to test signal processing algo...


 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41076093/?utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016002345&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41076093/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016002345&v=2.18.0.post9+e462414)

## Machine learning assessment of cognitive reserve using functional near-infrared spectroscopy in older adults with cognitive frailty

 Zheng  
Li

 2025-10-11  1  
min

 59  
words

**FNIRS**


**Summary:** Cognitive reserve mitigates aging-related cognitive decline and frailty, yet current assessments lack neurobiological specificity. We aimed to develop a noninvasive, functional near infrared spectroscopy (fNIRS)-based machine learning model to classify cognitive reserve levels in older adults with c...

 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/41076505/?](https://pubmed.ncbi.nlm.nih.gov/41076505/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016002345&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016002345&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41076505/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016002345&v=2.18.0.post9+e462414)

## Exploring age and hemispheric differences in cortical plasticity after iTBS using fNIRS

 Melanie  
Burke

 2025-10-12  1  
min

 67  
words

**FNIRS**


**Summary:** Non-invasive brain stimulation applied to the prefrontal cortex (PFC) has been shown to improve cognitive outcomes in older adults with cognitive impairments (Miller et al., 2023). However, the differential impact of left versus right dorsolateral prefrontal cortex (DLPFC) stimulation on prefrontal ...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41077115/?](https://pubmed.ncbi.nlm.nih.gov/41077115/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016002345&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016002345&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41077115/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016002345&v=2.18.0.post9+e462414)

## Single video games improve cognitive functioning in college students: evidence from behavioral and fNIRS assessments

 Shen  
Wang

 17 2025-10-13

 1  
min

 43  
words

**fNIRS**


**Summary:** CONCLUSIONS: Cognitively engaging video games can effectively enhance the cognitive abilities of male college students. The underlying mechanism may be closely related to the promotion of prefrontal lobe activation by video games, which in turn improves reflective ability, processing speed, and deci...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41080773/?](https://pubmed.ncbi.nlm.nih.gov/41080773/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016002345&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016002345&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41080773/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016002345&v=2.18.0.post9+e462414)

## Prefrontal activation in bipolar and unipolar depression patients in the letter fluency tasks and category fluency tasks: a functional near-infrared spectroscopy study

 Zhaohui  
Zhang

 17 2025-10-13

 1  
min

 46  
words

**fNIRS**

**Summary:** CONCLUSION: Our findings indicate that the LFT elicits more extensive prefrontal activation, with differential engagement of the VLPFC in BD compared to UD. These results suggest potential neuroimaging biomarkers for distinguishing between UD and BD, while also providing insights into the neural sub...

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41080778/?](https://pubmed.ncbi.nlm.nih.gov/41080778/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016002345&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016002345&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41080778/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016002345&v=2.18.0.post9+e462414)

## Neural predictors of hidden, persistent psychological states at work



Matthew D  
Lieberman



2025-10-13



1  
min



69  
words

FNIRS

**Summary:** Common workplace challenges such as feeling overwhelmed, burned out, or disengaged often remain hidden due to fear of judgment or social norms, contributing to rising mental health crises and organizational dysfunction. This study presents a brain-based framework for predicting these hidden and pers...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41082670/?](https://pubmed.ncbi.nlm.nih.gov/41082670/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016002345&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016002345&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41082670/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016002345&v=2.18.0.post9+e462414)

## Dose-Dependent Enhancement of Coordination through Multibrain Transcranial Stimulation: A fNIRS Hyperscanning Study



Shengjun  
Wu



2025-10-13



1  
min



67  
words

FNIRS

**Summary:** Coordination serves as a fundamental driving force in the evolution of human society, and transcranial electrical stimulation (tES) is increasingly recognized for its ability to modulate human coordination. However, the neural mechanisms underlying coordination and whether tES positively influences ...




Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41083052/?](https://pubmed.ncbi.nlm.nih.gov/41083052/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016002345&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016002345&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41083052/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016002345&v=2.18.0.post9+e462414)

## Functional connectivity in whole-brain and network analysis differentiates minimally conscious from unresponsive patients: a resting-state fNIRS study

 Liying  
Zhang



2025-10-15



1  
min



24  
words

**fNIRS**

**Summary:** CONCLUSION: fNIRS could effectively detect abnormal brain network functional connectivity in DOC patients and could provide valuable insights for differentiating MCS and VS/UWS patients.



**Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41088235/?](https://pubmed.ncbi.nlm.nih.gov/41088235/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016002345&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016002345&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41088235/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016002345&v=2.18.0.post9+e462414)

# Predicting Individual Response to Acupuncture in Sensorineural Tinnitus Using Integrated Functional Near-Infrared Spectroscopy and Machine Learning: Protocol for a Model Development and Validation Study



Hantong  
Hu



2025-10-15



1  
min



63  
words

FNIRS

**Summary:** CONCLUSION: This study represents the first attempt to integrate fNIRS detection with machine learning techniques for predicting acupuncture efficacy in SNT treatment. The methodology addresses several key challenges in acupuncture research through comprehensive data collection and advanced analytic...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41089742/?utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016002345&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089742/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016002345&v=2.18.0.post9+e462414)

## Online Regulation of Task Difficulty based on Neuro- and Motor-feedback to improve engagement in Visual-motor Task

Rong  
Song

17

2025-10-15

1  
min

36  
words

FNIRS

**Summary:** CONCLUSION: Our findings suggest that the proposed NMF system can enable online neural activity regulation in visual-motor tasks and achieve enhanced integration between cognitive and sensorimotor areas, with the potential to improve the rehabilitation training outcomes.

 Read full article:

<https://pubmed.ncbi.nlm.nih.gov/41091617/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016002345&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41091617/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251016002345&v=2.18.0.post9+e462414)

## Show HN: Shorter – search for shorter versions of your domain

aanesn

17

2025-10-16

1  
min

13  
words


HACKER NEWS



**Summary:** <p>Article URL: <a href="https://shorter.dev">https://shorter.dev</a></p>  
<p>Comments URL: <a href="https://news.ycombinator.com/item?id=45600677">https://news.ycombinator.com/item?id=45600677</a></p> <p>Points: 5</p> <p># Comments: 0</p>

 Read full article:

<https://shorter.dev>

## An EEG Investigation of Neural Dynamics of Empathy Influenced by Congruent and Incongruent Pain Expressions in Autistic and Neurotypical Adults

 Wang, X., Tong, S.  
X.

 2025-10-15  1 min

 221 words

BIORXIV NEUROSCIENCE



**Summary:** Autistic individuals often show difficulties in empathy, but the underlying neural mechanisms of empathy in naturalistic contexts of pain have been less examined. This study employed a kinetic pain empathy paradigm, manipulating the congruence between pain expressions, i.e., body gestures and facial...


 Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.14.681876v1?rss=1>

## The impact of CSF-filled cavities on scalp EEG and its implications

 Maria Carla  
Piastra

 2024-06-14  1 min

 64 words

OOSTENVELD ROBERT

**Summary:** Previous studies have found electroencephalogram (EEG) amplitude and scalp topography differences between neurotypical and neurological/neurosurgical groups, being interpreted at the cognitive level. However, these comparisons are invariably accompanied by anatomical changes. Critical to EEG are the...

 Read full article:

<https://pubmed.ncbi.nlm.nih.gov/38873838/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015233644&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/38873838/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015233644&v=2.18.0.post9+e462414)



## Motion-BIDS: an extension to the brain imaging data structure to organize motion data for reproducible research

 Julius  
Welzel



2024-07-02


1  
min72  
words

OOSTENVELD ROBERT

**Summary:** We present an extension to the Brain Imaging Data Structure (BIDS) for motion data. Motion data is frequently recorded alongside human brain imaging and electrophysiological data. The goal of Motion-BIDS is to make motion data interoperable across different laboratories and with other data modalities...

**Read full article:**[https://pubmed.ncbi.nlm.nih.gov/38956071/?](https://pubmed.ncbi.nlm.nih.gov/38956071/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015233644&v=2.18.0.post9+e462414)[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015233644&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/38956071/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015233644&v=2.18.0.post9+e462414)

## One hundred years of EEG for brain and behaviour research

 Pedro Valdes-  
Sosa



2024-08-22

1  
min2  
words

OOSTENVELD ROBERT

**Read full article:**[https://pubmed.ncbi.nlm.nih.gov/39174725/?](https://pubmed.ncbi.nlm.nih.gov/39174725/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015233644&v=2.18.0.post9+e462414)[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015233644&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/39174725/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015233644&v=2.18.0.post9+e462414)

## Freezing of gait in Parkinson's disease is related to imbalanced stopping-related cortical activity



Richard J A van  
Wezel



2024-09-04



1  
min



65  
words

OOSTENVELD ROBERT

**Summary:** Freezing of gait, characterized by involuntary interruptions of walking, is a debilitating motor symptom of Parkinson's disease that restricts people's autonomy. Previous brain imaging studies investigating the mechanisms underlying freezing were restricted to scan people in supine positions and yie...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/39229492/?](https://pubmed.ncbi.nlm.nih.gov/39229492/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015233644&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015233644&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/39229492/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015233644&v=2.18.0.post9+e462414)

## The past, present, and future of the brain imaging data structure (BIDS)



Krzysztof J  
Gorgolewski



2024-09-23



1  
min



82  
words

OOSTENVELD ROBERT

**Summary:** The Brain Imaging Data Structure (BIDS) is a community-driven standard for the organization of data and metadata from a growing range of neuroscience modalities. This paper is meant as a history of how the standard has developed and grown over time. We outline the principles behind the project, the ...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/39308505/?](https://pubmed.ncbi.nlm.nih.gov/39308505/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015233644&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015233644&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/39308505/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015233644&v=2.18.0.post9+e462414)

## Human cortical high-gamma power scales with movement rate in healthy participants and stroke survivors

Fanny  
Quandt

17 2025-01-09

1  
min

65  
words

OOSTENVELD ROBERT

**Summary:** Motor cortical high-gamma oscillations (60-90 Hz) occur at movement onset and are spatially focused over the contralateral primary motor cortex. Although high-gamma oscillations are widely recognized for their significance in human motor control, their precise function on a cortical level remains el...

 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/39786979/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015233644&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/39786979/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015233644&v=2.18.0.post9+e462414)

## NIRS-BIDS: Brain Imaging Data Structure Extended to Near-Infrared Spectroscopy

Luca  
Pollonini

17 2025-01-27

1  
min

70  
words

OOSTENVELD ROBERT


**Summary:** Functional near-infrared spectroscopy (fNIRS) is an increasingly popular neuroimaging technique that measures cortical hemodynamic activity in a non-invasive and portable fashion. Although the fNIRS community has been successful in disseminating open-source processing tools and a standard file forma...



 **Read full article:**


<https://pubmed.ncbi.nlm.nih.gov/39870674/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015233644&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/39870674/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015233644&v=2.18.0.post9+e462414)

## Pseudonymisation of neuroimages and data protection: **Increasing access to data while retaining scientific utility**

 Lyuba  
Zehl

 2025-06-26  1  
min

 67  
words

OOSTENVELD ROBERT

**Summary:** For a number of years, facial features removal techniques such as 'defacing', 'skull stripping' and 'face masking/blurring', were considered adequate privacy preserving tools to openly share brain images. Scientifically, these measures were already a compromise between data protection requirements a...



 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/40568426/?](https://pubmed.ncbi.nlm.nih.gov/40568426/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015233644&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015233644&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40568426/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015233644&v=2.18.0.post9+e462414)

## Cycling on the Freeway: The perilous state of open-source neuroscience software

 Tim M  
Tierney

 2025-08-13  1  
min

 74  
words

OOSTENVELD ROBERT


**Summary:** Most scientists need software to perform their research (Barker et al., 2020;Carver et al., 2022;Hettrick, 2014;Hettrick et al., 2014;Switters & Osimo, 2019), and neuroscientists are no exception. Whether we work with reaction times, electrophysiological signals, or magnetic resonance imaging data, ...


 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/40800958/?](https://pubmed.ncbi.nlm.nih.gov/40800958/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015233644&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015233644&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40800958/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015233644&v=2.18.0.post9+e462414)

## Optimal configuration of on-scalp OPMs with fixed channel counts

 Robert  
Oostenveld

 2025-08-13  1  
min

 69  
words

OOSTENVELD ROBERT


**Summary:** Recent technological developments have brought optically pumped magnetometers (OPMs) within reach of the larger neuroscientific community. The current state-of-the-art consists of whole-head systems that measure the magnetic field at >100 locations. OPM sensors can be constructed to measure the fiel...

 **Read full article:**


<https://pubmed.ncbi.nlm.nih.gov/40800964/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015233644&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40800964/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015233644&v=2.18.0.post9+e462414)

## Association of High-Altitude Polycythemia with JAK2V617F Mutation in Pakistani Population

 Uzma  
Zaidi

 2025-10-14  1  
min

 74  
words

LOW VISION

**Summary:** To assessthe prevalence of the JAK2V617F mutation in polycythemia patients living at high altitude. This was a cross-sectional study, conducted at the National Institute of Blood Diseasesand Bone Marrow Transplantation (NIBD-BMT), KarachifromJuly 2022 to July 2023. A total of 132 patients with polyc...


 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/41084570/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015233635&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41084570/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015233635&v=2.18.0.post9+e462414)

## Neither exogenous, nor endogenous: Evidence for a distinct role of negative emotion during attentional control

 Gilles  
Pourtois

 2025-10-14

 1  
min

 69  
words

LOW VISION

**Summary:** Negative or threatening stimuli capture attention. However, it remains unclear whether this phenomenon is best conceived as bottom-up (i.e., salience-driven) or top-down (i.e., goal-directed) instead. To address this question, we conducted two experiments using a previously validated dot-probe task ...


 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/41086156/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015233635&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41086156/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015233635&v=2.18.0.post9+e462414)

## Improving object detection in challenging weather for autonomous driving via adversarial image translation

 Yaohua  
Zhao

 2025-10-14

 1  
min

 65  
words

LOW VISION

**Summary:** Vision-based environmental perception is fundamental to autonomous driving, as it enables reliable detection and recognition of diverse objects in complex traffic environments. However, adverse weather conditions (such as rain, fog, and low-light conditions) significantly degrade image quality, ther...

 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/41086174/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015233635&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41086174/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015233635&v=2.18.0.post9+e462414)

## Shared mechanisms of presaccadic and exogenous attention in modulating visual perception of contrast

 Yongchun  
Cai



2025-10-14



1  
min



59  
words

LOW VISION

**Summary:** Different types of attention alter subjective visual perception in fundamentally distinct ways. Previous studies have focused on covert attention without concurrent eye movements, revealing that covert exogenous (involuntary) attention enhances contrast appearance of low-contrast stimuli while dimin...




Read full article:

<https://pubmed.ncbi.nlm.nih.gov/41086688/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnVSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015233635&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41086688/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnVSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015233635&v=2.18.0.post9+e462414)

## Halide Perovskites for Neuromorphic Sensing and Computing

 Ho Won  
Jang



2025-10-14



1  
min



56  
words

LOW VISION

**Summary:** The development of semiconductor-based electronic devices has significantly advanced sensor-based data acquisition and processor-driven data analysis. However, conventional complementary metal-oxide-semiconductor technologies are now facing fundamental limitations in scaling, speed, and power effici...




Read full article:

<https://pubmed.ncbi.nlm.nih.gov/41087317/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnVSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015233635&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41087317/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnVSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015233635&v=2.18.0.post9+e462414)

## HZO/HSO Superlattice ReFET Array Integrating Optical Sensing for Neuromorphic Vision Computing

 Jingsheng  
Chen

 2025-10-15

 1  
min

 58  
words

LOW VISION

**Summary:** Neuromorphic vision systems require artificial synapses that integrate sensing, memory, and computation with high precision and stability. Conventional memristors face limitations including forming requirements, few multilevel states, low endurance, and poor integration density, while ferroelectric ...


 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/41089064/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015233635&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089064/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015233635&v=2.18.0.post9+e462414)

## Mapping political commitments: Analysing health priorities in Indian election manifestos

 Shilpi S  
Das

 2025-10-15

 1  
min

 35  
words

LOW VISION

**Summary:** CONCLUSION: India's political manifestos recognize health as important but fail to address systemic challenges. Greater political will and citizen engagement, is essential to elevate health as a governance priority, fostering universal health coverage and equity.


 **Read full article:**



<https://pubmed.ncbi.nlm.nih.gov/41089958/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015233635&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089958/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015233635&v=2.18.0.post9+e462414)



## Does cannulation site affect outcomes of antegrade cerebral perfusion in aortic arch surgery? A meta-analysis of axillary versus innominate access

 Tomasz  
Płonek

 2025-10-15  1  
min

 67  
words

LOW VISION


**Summary:** BackgroundThe optimal arterial cannulation strategy for establishing antegrade cerebral perfusion during aortic arch surgery remains a subject of ongoing debate. Our meta-analysis compares outcomes between axillary artery (AxA) and innominate artery (InA) cannulation.MethodsA literature search was c...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41090996/?](https://pubmed.ncbi.nlm.nih.gov/41090996/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015233635&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015233635&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41090996/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015233635&v=2.18.0.post9+e462414)

## A systematic review of ionizing radiation-induced glaucoma: clinical manifestations, pathogenesis, and current treatment approaches

 Heng  
Zhou

 2025-10-15

 1  
min

 51  
words

LOW VISION


**Summary:** CONCLUSIONS: IRG represents a dose-dependent entity with distinct phenotypes and mechanisms. Current therapies provide partial benefit but remain unsatisfactory in terms of durability and standardization. Advancing the field will require mechanistic studies to clarify radiation-induced optic neuropa...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41091454/?](https://pubmed.ncbi.nlm.nih.gov/41091454/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnVSlégfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015233635&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnVSlégfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015233635&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41091454/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnVSlégfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015233635&v=2.18.0.post9+e462414)

## Choroidal Vascularity Index, Retinal Vascularity and Hemoglobin Levels in Pediatric Sick Cell Maculopathy

 Nimesh A  
Patel

 2025-10-15

 1  
min

 69  
words

LOW VISION

**Summary:** CONCLUSION: In pediatric SCD patients, there was a significant decrease in CVI when compared to healthy age matched controls. Decreased CVI was associated with a loss of retinal VD in the inferotemporal macular quadrant as well as lower Hgb levels. These findings suggest a role of choroidal ischemia...

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41092070/?](https://pubmed.ncbi.nlm.nih.gov/41092070/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnVSlégfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015233635&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnVSlégfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015233635&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41092070/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnVSlégfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015233635&v=2.18.0.post9+e462414)

## Closer to production quality Python notebooks with `marimo` check`





 2025-10-07  1 min  2 words

HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45509301)

 Read full article:  
<https://marimo.io/blog/marimo-check>

## Who's Submitting AI-Tainted Filings in Court?

 cratermoon  2025-10-16  1 min  13 words

HACKER NEWS

**Summary:**

Article URL: <https://cyberlaw.stanford.edu/whos-submitting-ai-tainted-filings-in-court/>

Comments URL: <https://news.ycombinator.com/item?id=45600263>

 Read full article:  
<https://cyberlaw.stanford.edu/whos-submitting-ai-tainted-filings-in-court/>

## New Alzheimer's Treatment Clears Plaques from Brains of Mice Within Hours



amichail



2025-10-16



1  
min



13  
words

HACKER NEWS

**Summary:**

Article URL: <https://www.sciencealert.com/new-alzheimers-treatment-clears-plaques-from-brains-of-mice-within-hours>

Comments URL: <https://news.ycombinator.com/item?id...>



Read full article:

<https://www.sciencealert.com/new-alzheimers-treatment-clears-plaques-from-brains-of-mice-within-hours>

## We're losing the war against drug-resistant infections faster than we thought



pseudolus



2025-10-16



1  
min



13  
words

HACKER NEWS

**Summary:**

Article URL: <https://www.npr.org/sections/goats-and-soda/2025/10/15/g-s1-93449/antibiotic-resistance-bacteria>

Comments URL: <https://news.ycombinator.com/item?id=45600707>...



Read full article:

<https://www.npr.org/sections/goats-and-soda/2025/10/15/g-s1-93449/antibiotic-resistance-bacteria>

## Retrieving Planned Sample Sizes from AsPredicted Preregistrations

 noreply@blogger.com (Daniel Lakens)

2025-06-23 22 min

4417 words

## TWENTY PERCENT STATISTICIAN

## Summary:

[illegible]

 [Read full article:](#)

<http://daniellakens.blogspot.com/2025/06/retrieving-planned-sample-sizes-from.html>

## Are meta-scientists ignoring philosophy of science?

noreply@blogger.com (Daniel  
Lakens)

2025-07-04 8 min

1681 words


## TWENTY PERCENT STATISTICIAN


**Summary:** <p>Are meta-scientists ignoring philosophy of science (PoS)? Are they re-inventing the wheel? <a href="https://nomadit.co.uk/conference/metascience2025/p/17038">A recent panel at the Metascience conference</a> engaged with this question, and the first sentence of the abstract states “Critics argue t...

 [Read full article:](#)


<http://daniellakens.blogspot.com/2025/07/are-meta-scientists-ignoring-philosophy.html>

## Easily download files from the Open Science Framework with Papercheck

 noreply@blogger.com (Daniel Lakens)

 2025-07-22

 3 min

 765 words


TWENTY PERCENT STATISTICIAN


**Summary:** Researchers increasingly use the [Open Science Framework](https://osf.io/) (OSF) to share files, such as data and code underlying scientific publications, or presentations and materials for scientific workshops. The OSF is an amazing service that has contributed immensely to a changed ...

 Read full article:


<http://daniellakens.blogspot.com/2025/07/easily-download-files-from-open-science.html>

## Applications now being accepted for UC-Davis/SDSU ERP Boot Camp, July 31 – August 9, 2023

 Steve Luck

 2023-01-16

 1 min

 108 words


ERP BOOT CAMP


**Summary:** The next 10-day ERP Boot Camp will be held July 31 – August 9, 2023 in San Diego, California. We are now taking applications, which will be due by April 1, 2023. [Click here](https://erpinfo.org/summer-boot-camp) for more information. We are currently planning t...

 Read full article:


<https://erpinfo.org/blog/2021/12/22/applications-2023>

# ERP Decoding for Everyone: Software and Webinar

 Steve  
Luck

 2023-06-23

 2 min

 420 words


ERP BOOT CAMP


**Summary:**

You can access the recording [https://video.ucdavis.edu/media/Virtual+ERP+Boot+CampA+Decoding+for+Everyone%2C+July+25+2023/1\\_lmwj6bu0](https://video.ucdavis.edu/media/Virtual+ERP+Boot+CampA+Decoding+for+Everyone%2C+July+25+2023/1_lmwj6bu0) You can access the final PDF of the slides <https://ucdavis.box.com/s/f...>


 Read full article:  
<https://erpinfo.org/blog/2023/6/23/decoding-webinar>

# New Papers: Optimal Filter Settings for ERP Research

 Steve  
Luck

 2024-02-04

 2 min

 568 words

ERP BOOT CAMP

**Summary:**

Zhang, G., Garrett, D. R., & Luck, S. J. (in press). Optimal filters for ERP research I: A general approach for selecting filter settings. *Psychophysiology*. <https://doi.org/10.1111/psyp.14531> <https://doi.org/10.1111/psyp.14531> [<https://www...>

 Read full article:  
<https://erpinfo.org/blog/2024/2/4/optimal-filters>

## Education: Legal Issues



Adriel  
Carridice



2025-02-05



1  
min



61  
words

BRAIN

**Summary:** The safety concerns and standards shared in other sections provide an initial foundation for legal protections. However, calls for stricter consumer protection laws must accompany the proliferation of neurotech devices. Special privacy laws must be promulgated to ensure “cognitive privacy” (Nita Far...



Read full article:

<https://brain.ieee.org/publications/neuroethics-framework/education/education-legal-issues/education-legal-issues/>

## Education: Social and Cultural Issues



Adriel  
Carridice



2025-02-05



1  
min



61  
words

BRAIN

**Summary:** Devices that therapeutically aid users with cognitive and learning disabilities/differences should not be equally applied to a general population seeking learning advantages. It must not be assumed that therapies able to improve cognition for mental and cognitive disorders (such as executive control...



Read full article:

<https://brain.ieee.org/publications/neuroethics-framework/education/education-social-and-cultural-issues/education-social-and-cultural-issues/>



## Education: Standards



Adriel  
Carridice



2025-02-13



1  
min



0  
words

BRAIN



Read full article:

<https://brain.ieee.org/publications/neuroethics-framework/education/standards-education/education-standards/>

## Knockdown of endothelial Serpine1 improves stroke recovery by attenuating peri-infarct blood flow and blood brain barrier disruption



Narayana, K., Lambert, I., Burford, S., Gosselin, E., Korbelen, J. E., Brown, C. E.



2025-10-15



1  
min



197  
words

BIORXIV NEUROSCIENCE

**Summary:** Focal stroke leads to complex changes in the cerebral microcirculation in surviving brain tissues that strongly influence recovery. Plasminogen activator inhibitor-1 (PAI-1; encoded by Serpine1) is highly upregulated in endothelial cells after stroke. Since the primary function of PAI-1 is to inhibi...



Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.15.682687v1?rss=1>

## Using Information Geometry to Characterize Higher-Order Interactions in EEG



Albers, E., Marriott, P., Tatsuno, M.



2025-10-15



1 min



212 words

BIORXIV NEUROSCIENCE

**Summary:** In neuroscience, methods from information geometry (IG) have been successfully applied in the modelling of binary vectors from spike train data, using the orthogonal decomposition of the Kullback-Leibler divergence and mutual information to isolate different orders of interaction between neurons. Wh...



Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.15.682672v1?rss=1>

## Spatial and semantic memory reorganize a hippocampal long-axis gradient



Jordan, A. G., Voss, J. L., Kragel, J. E.



2025-10-15



1 min



173 words

BIORXIV NEUROSCIENCE

**Summary:** The hippocampus supports episodic memory by binding spatial and semantic information, yet how this information is simultaneously organized along its long axis remains debated. Gradient accounts propose a continuous shift in representational scale, from coarse coding in anterior to fine coding in pos...



Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.15.682651v1?rss=1>

## Developmental sleep reallocation enables metabolic adaptation in desert flies



Li, S., Szuperak, M., Nave, C., Tang, S. H., Donlea, J. M., Kayser, M. S.



2025-10-15



1 min



208 words

BIORXIV NEUROSCIENCE

**Summary:** Sleep is essential for adaptation and survival across the lifespan, yet the ecological pressures shaping sleep ontogeny remain poorly understood. We investigated sleep across early developmental stages in *Drosophila mojavensis*, a stress-resilient desert-adapted species. While adult *D. mojavensis* exhi...



Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.15.682659v1?rss=1>

## This Week in The Journal



McKeon, P.



2025-10-08



1 min



0 words

JOURNAL NEUROSCIENCE THIS WEEK



Read full article:

<http://www.jneurosci.org/cgi/content/short/45/41/etwij45412025?rss=1>

## Electroceuticals for Paralympic Athletes: A Fair Play and Classification Concern?



Tom E  
Nightingale

2025-10-13

1  
min

66  
words

BRAIN COMPUTER INTERFACE

**Summary:** Electroceuticals such as brain computer interfaces and spinal cord stimulation (SCS) represent transformative strategies for neuromodulation. Research has demonstrated that SCS can ameliorate motor and autonomic cardiovascular dysfunctions, particularly in individuals with spinal cord injury (SCI). ...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41082173/?](https://pubmed.ncbi.nlm.nih.gov/41082173/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015225019&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015225019&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41082173/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015225019&v=2.18.0.post9+e462414)

## Cell-to-cell communication: from physical calling to remote emotional touching



Azadeh Imani  
Rad

2025-10-14

1  
min

55  
words

BRAIN COMPUTER INTERFACE

**Summary:** The emerging paradigm of cell-to-cell communication represents a transformative shift from device-mediated contact to bio-integrated, emotion-driven interactions. This article introduces a novel, multi-layered framework for enabling biologically integrated communication between cells, devices, and c...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41083759/?](https://pubmed.ncbi.nlm.nih.gov/41083759/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015225019&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015225019&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41083759/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015225019&v=2.18.0.post9+e462414)

## Virtual Reality Experience as Reflected in EEG Microstates



2025-10-14



1 min



73 words

BRAIN COMPUTER INTERFACE

**Summary:** The development of virtual reality technology has provided psychological research with powerful tools by presenting stimuli and constructing scenarios, and the combination of VR and neuroimaging techniques begins to provide particularly interesting insights into the experience of virtual events and ...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41085777/?](https://pubmed.ncbi.nlm.nih.gov/41085777/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015225019&v=2.18.0.post9+e462414)
[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41085777/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015225019&v=2.18.0.post9+e462414)
[tbw4049Wgf\\_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015225019&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41085777/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015225019&v=2.18.0.post9+e462414)

## An incremental adversarial training method enables timeliness and rapid new knowledge acquisition



Chengli Wang



2025-10-14



1 min



69 words

BRAIN COMPUTER INTERFACE


**Summary:** Adversarial training is an effective defense method for deep models against adversarial attacks. However, current adversarial training methods require retraining the entire neural network, which consumes a significant amount of computational resources, thereby affecting the timeliness of deep models...




Read full article:


[https://pubmed.ncbi.nlm.nih.gov/41087533/?](https://pubmed.ncbi.nlm.nih.gov/41087533/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015225019&v=2.18.0.post9+e462414)
[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41087533/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015225019&v=2.18.0.post9+e462414)
[tbw4049Wgf\\_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015225019&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41087533/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015225019&v=2.18.0.post9+e462414)

## Gut microbiota remodeling and sensory-emotional functional disruption in adolescents with bipolar depression

 Jianbo  
Lai

 2025-10-15

 1  
min

 57  
words

BRAIN COMPUTER INTERFACE

**Summary:** CONCLUSION: This study first characterized the gut microbiota architecture in adolescent BD. Combining gut microbiota and brain function biomarkers may benefit disease diagnosis and predict treatment outcome. Nonetheless, these findings should be carefully interpreted considering the limitations of ...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41088296/?](https://pubmed.ncbi.nlm.nih.gov/41088296/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015225019&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41088296/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015225019&v=2.18.0.post9+e462414)

[tbw4049Wgf\\_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015225019&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41088296/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015225019&v=2.18.0.post9+e462414)

## Does brain-computer interface-based mind reading threaten mental privacy? ethical reflections from interviews with Chinese experts

 Haidan  
Chen



2025-10-15



1  
min



64  
words

BRAIN COMPUTER INTERFACE

**Summary:** CONCLUSION: We summarize the interpretations, feasibility, and limitations of BMR and introduce a distinction between "strong BMR" and "weak BMR" to clarify their technical and ethical implications. Based on our analysis, we argue that current BMR does not pose unique ethical challenges compared wit...




**Read full article:**



[https://pubmed.ncbi.nlm.nih.gov/41088329/?](https://pubmed.ncbi.nlm.nih.gov/41088329/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015225019&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41088329/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015225019&v=2.18.0.post9+e462414)

[tbw4049Wgf\\_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015225019&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41088329/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015225019&v=2.18.0.post9+e462414)

## Precision TMS through the integration of neuroimaging and machine learning: optimizing stimulation targets for personalized treatment

 Panxiao  
Bao

 2025-10-15  1  
min

 60  
words

BRAIN COMPUTER INTERFACE


**Summary:** Transcranial Magnetic Stimulation (TMS), a non-invasive neuromodulation technique based on electromagnetic induction, modulates cortical excitability by inducing currents with a magnetic field. TMS has demonstrated significant clinical potential in the treatment of various neuropsychiatric disorders...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41089381/?utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015225019&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089381/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015225019&v=2.18.0.post9+e462414)




## A time-frequency feature fusion-based deep learning network for SSVEP frequency recognition

 Jijun  
Tong


 17 2025-10-15

 1  
min

 62  
words

BRAIN COMPUTER INTERFACE

**Summary:** INTRODUCTION: Steady-state visual evoked potential (SSVEP) has emerged as a pivotal branch in brain-computer interfaces (BCIs) due to its high signal-to-noise ratio (SNR) and elevated information transfer rate (ITR). However, substantial inter-subject variability in electroencephalographic (EEG) sig...


 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41089660/?](https://pubmed.ncbi.nlm.nih.gov/41089660/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015225019&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015225019&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089660/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015225019&v=2.18.0.post9+e462414)

## Participant Engagement, Epistemic Injustice, and Early-Phase Implanted Neural Device Research

 Ashley  
Feinsinger

 17 2025-10-15

 1  
min

 66  
words

BRAIN COMPUTER INTERFACE

**Summary:** In recent years, participant engagement initiatives in research on implanted neural devices have significantly increased. However, there remains little consensus on the motivations, goals, and best practices for engagement efforts. Drawing on the concept of participatory epistemic injustice, we argu...



 Read full article:


[https://pubmed.ncbi.nlm.nih.gov/41091050/?](https://pubmed.ncbi.nlm.nih.gov/41091050/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015225019&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015225019&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41091050/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015225019&v=2.18.0.post9+e462414)

## Recommendations for Combining Brain-Computer Interface, Motor Imagery, and Virtual Reality in Upper Limb Stroke Rehabilitation: Qualitative Participatory Design Study


 Carla Mendes  
Pereira

 2025-10-15  1  
min

 60  
words

BRAIN COMPUTER INTERFACE

**Summary:** CONCLUSIONS: Current results contribute to establishing clear guidelines on patient selection, task design, intervention structuring, motivation factors, and tailoring of sensory feedback. This framework presents a foundation for optimal implementation of VR-BCI-based interventions that associate MI...



 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/41092418/?](https://pubmed.ncbi.nlm.nih.gov/41092418/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015225019&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41092418/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015225019&v=2.18.0.post9+e462414)

[tbw4049Wgf\\_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015225019&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41092418/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015225019&v=2.18.0.post9+e462414)

## The impact of unemployment on dream content.

 2025-05-05  1  
min

 110  
words


DREAMING

**Summary:** This study examines the relationship between employment status and dream content using a data set of 6,478 dream reports collected from Reddit. We used machine learning to analyze thematic differences between unemployed individuals and a control group. The results revealed that the dreams of unemplo...

 **Read full article:**

<http://doi.org/10.1037/drm0000310>

## From falling apart to disturbing dreams: A preliminary examination of self-fragmentation and nightmares.




 2024-12-05  1 min  122 words

DREAMING

**Summary:** Previous theory suggested a relationship between fragmentation of the self-structure and nightmares. This article examines this possibility by providing an overview of the theoretical rationale for their relationship and a preliminary empirical study exploring the relationships between a brief measu...

 Read full article:  
<http://doi.org/10.1037/drm0000296>

## Anatomical connectivity-based parcellation of the human orbitofrontal cortex.




 2025-07-10  1 min  222 words

BEHAVIORAL NEUROSCIENCE

**Summary:** The orbitofrontal cortex (OFC) is critical for learning and decision making, but its organization in terms of anatomical connections to other brain areas is not well understood in humans. Here we used diffusion magnetic resonance imaging and probabilistic tractography to characterize the cortical an...

 Read full article:  
<http://doi.org/10.1037/bne0000628>

## Build a Superscalar 8-Bit CPU (YouTube Playlist) [video]

 2025-10-10  1 min  2 words

HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45542536)




 **Read full article:**

[https://www.youtube.com/watch?](https://www.youtube.com/watch?v=bwjMLyBU4RU&list=PLyR4neQXqQo5nPdEiMbaEJxWiy_UuyNN4&index=1)

[v=bwjMLyBU4RU&list=PLyR4neQXqQo5nPdEiMbaEJxWiy\\_UuyNN4&index=1](https://www.youtube.com/watch?v=bwjMLyBU4RU&list=PLyR4neQXqQo5nPdEiMbaEJxWiy_UuyNN4&index=1)

## Early reduction and impaired targeting of myelin-associated glycoprotein to myelin membranes in Huntington disease

 Boudi, A., Sapp, E., Li, Y. Y., Shing, K. L., Kegel-Gleason, K., Petrozziello, T., Sadri-Vakili, G., Aronin, N., DiFiglia, M., Li, X.

 2025-10-15  2 min  400 words

BIORXIV NEUROSCIENCE

**Summary:** Background. Huntington disease (HD) is a hereditary life-threatening disease marked by progressive neuronal loss and atrophy of grey matter structures, particularly the caudate putamen. Brain imaging studies have revealed that the degradation of the white matter occurs many years prior to symptomati...

 **Read full article:**

<https://www.biorxiv.org/content/10.1101/2025.10.15.682629v1?rss=1>

## Oxidation of $\Delta$ FOSB at Cys172 Controls Hippocampal Gene Targets and Learning



Lynch, H., Anderson, D., Hughes, B., Aglyamova, G., Yeh, S.-Y., Ohnishi, Y., Estill, M., Granger, B., Cates, H., Berto, S., Chin, J., Nestler, E. J., Rudenko, G., Robison, A. J.



2025-10-15



1  
min



301  
words

BIORXIV NEUROSCIENCE

**Summary:** Imbalance of reduction/oxidation (redox) in the brain is associated with numerous diseases including Alzheimers disease (AD), substance abuse disorders, and stroke. Moreover, cognitive decline can be caused by neuronal dysfunction that precedes cell death, and this dysfunction is in part produced by...



Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.14.682315v1?rss=1>

## Uncertainty Shapes Neural Dynamics in Motor Cortex During Reaching



Arakeri, T. J., Dill, J. M., Gothard, K. M., Fuglevand, A. J.



2025-10-15



1  
min



243  
words

BIORXIV NEUROSCIENCE


**Summary:** Voluntary reaching movements are often made with incomplete information about the movement goal, which may require the brain to flexibly adjust motor plans and ongoing movements. To examine how uncertainty about a reach target influences neural preparation and execution, we recorded activity from do...






Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.14.682390v1?rss=1>


# Chronic Dietary Exposure to Methylparaben and Ethylparaben Induces Developmental, Biochemical, and Behavioural Toxicity in *Drosophila melanogaster*

 Huchegowda, R., Bhat, S. S., Srinivas, P., Tare, M., Pradeep, D. R., Sahana, S. R., Dubey, R., Kulkarni, R. R., R, M. P.

 2025-10-15  1 min  238 words


BIORXIV NEUROSCIENCE



**Summary:** Abstract Parabens, particularly methylparaben (MP) and ethylparaben (EP), are extensively used preservatives in cosmetics, foods, and pharmaceuticals. Although considered safe at low concentrations, recent evidence questions their biological inertness under chronic exposure. This study evaluated the...

 **Read full article:**

<https://www.biorxiv.org/content/10.1101/2025.10.14.682250v1?rss=1>

## Detection of probable neuronal gene expression changes in skin biopsies from patients with paclitaxel-induced peripheral neuropathy

 Wangzhou, A., Dasari, S., Tavares-Ferreira, D., Hrstka, S., Rieger, S., Staff, N., Price, T. J.

 2025-10-15  1 min  225 words

BIORXIV NEUROSCIENCE

**Summary:** Our inability to obtain nerve samples from the vast majority of neuropathic pain patients impedes our ability to understand the disease, creates challenges in understanding mechanisms in specific patient populations, and limits our ability to make treatment decisions based on quantifiable molecular ...

 **Read full article:**

<https://www.biorxiv.org/content/10.1101/2025.10.15.682581v1?rss=1>

## Biomimetic Cues Enable Predictive Mechanisms in Simulated and Physical Robot-Human Object Handovers



Guenter, C., Gong, Y., Laha, R., Appoltshauser, S., Figueredo, L., Hermsdoerfer, J., Franklin, D. W.



2025-10-15



1  
min



195  
words

BIORXIV NEUROSCIENCE

**Summary:** Object handovers - while representing one of the simplest forms of physical interaction between two agents - involve a complex interplay of predictive and reactive control mechanisms in both agents. As human-human pairs have unrivaled skills in physical collaboration tasks, we take the approach of u...



Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.14.682495v1?rss=1>

## Microglial morphology reflects cognitive status in the aging rat brain



Myers, S. J., Roseborough, A. D., Bayona, C. X., Carrese, C., Allman, B. L., Whitehead, S. N.



2025-10-15



1  
min



198  
words

BIORXIV NEUROSCIENCE

**Summary:** Age-related cognitive decline affects millions of individuals worldwide, but the cellular mechanisms underlying this decline remain incompletely understood. Microglia undergo significant changes with aging, including alterations in morphology, that may reflect or contribute to cognitive dysfunction....



Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.14.682389v1?rss=1>



## Mismatch negativity develops in adolescence and independently of microglia



Rader Groves, A. M., Ricci, D. A., Wargo, J. A., Sutton, V. J., Dalwai, H. S., Ferrell, A. D., Desai, B., Ross, J. M., Gallimore, C. G., West Jacobs, C. L., Bastos, G., Bolton, J. L., Imai, F., Hamm, J. P.



2025-10-15



1  
min



173  
words

BIORXIV NEUROSCIENCE

**Summary:** Higher brain functions and cognition undergo a critical period of development during adolescence, when psychiatric disorders such as schizophrenia typically onset. Understanding how developmental processes during adolescence interact with schizophrenia pathophysiology and risk remains a central goal...



Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.14.682114v1?rss=1>

## Gene therapy-mediated overexpression of wild-type MFN2 improves Charcot-Marie-Tooth disease type 2A



Tessier, M., Hamze, Z., bonello-Palot, N., Roeckel-Trevisiol, N., Attarian, S., Bartoli, M., Delague, V., Schneider, B., Bernard-Marissal, n.



2025-10-15



1  
min



213  
words

BIORXIV NEUROSCIENCE

**Summary:** Charcot-Marie-Tooth disease type 2A (CMT2A) is the most common axonal CMT and is associated with an early onset and severe motor-dominant phenotype. CMT2A is mainly caused by dominant mutations in the MFN2 gene, encoding Mitofusin-2, a GTPase located in the outer membrane of the mitochondria and end...



Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.15.682364v1?rss=1>

## Representational Competition of Spatially and Temporally Overlapped Target and Distractor



Xiong, C., Bo, K., Cui, L., Petro, N., Keil, A., Ding, M.



2025-10-15



1 min



279 words

BIORXIV NEUROSCIENCE

**Summary:** Representational competition occurs when a task-relevant target stimulus and a distractor overlap in space and time. Given limited neural resources, it is expected that stronger representations of the distractor will result in weaker representations of the target, leading to poorer behavioral perfor...



Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.15.682617v1?rss=1>

## Sensitivity Analysis of the Balloon Model Parameters in Functional Near-Infrared Spectroscopy Simulation



Murad Althobaiti



2025-10-11



1 min



43 words

FNIRS

**Summary:** CONCLUSIONS: The fNIRS hemodynamic response is highly sensitive to the Balloon model's  $\alpha$  and  $\tau$  parameters. These findings highlight the importance of accounting for physiological variability in fNIRS analysis and provide a robust framework for generating synthetic data to test signal processing algo...





Read full article:


<https://pubmed.ncbi.nlm.nih.gov/41076093/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015212651&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41076093/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015212651&v=2.18.0.post9+e462414)

## Machine learning assessment of cognitive reserve using functional near-infrared spectroscopy in older adults with cognitive frailty

 Zheng  
Li

 2025-10-11  1  
min

 59  
words

**FNIRS**


**Summary:** Cognitive reserve mitigates aging-related cognitive decline and frailty, yet current assessments lack neurobiological specificity. We aimed to develop a noninvasive, functional near infrared spectroscopy (fNIRS)-based machine learning model to classify cognitive reserve levels in older adults with c...

 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/41076505/?](https://pubmed.ncbi.nlm.nih.gov/41076505/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015212651&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015212651&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41076505/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015212651&v=2.18.0.post9+e462414)

## Exploring age and hemispheric differences in cortical plasticity after iTBS using fNIRS

 Melanie  
Burke

 2025-10-12  1  
min

 67  
words

**FNIRS**

**Summary:** Non-invasive brain stimulation applied to the prefrontal cortex (PFC) has been shown to improve cognitive outcomes in older adults with cognitive impairments (Miller et al., 2023). However, the differential impact of left versus right dorsolateral prefrontal cortex (DLPFC) stimulation on prefrontal ...

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41077115/?](https://pubmed.ncbi.nlm.nih.gov/41077115/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015212651&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015212651&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41077115/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015212651&v=2.18.0.post9+e462414)

## Single video games improve cognitive functioning in college students: evidence from behavioral and fNIRS assessments

Shen  
Wang

2025-10-13

1  
min

43  
words

FNIRS

**Summary:** CONCLUSIONS: Cognitively engaging video games can effectively enhance the cognitive abilities of male college students. The underlying mechanism may be closely related to the promotion of prefrontal lobe activation by video games, which in turn improves reflective ability, processing speed, and deci...

 Read full article:

<https://pubmed.ncbi.nlm.nih.gov/41080773/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015212651&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41080773/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015212651&v=2.18.0.post9+e462414)

## Prefrontal activation in bipolar and unipolar depression patients in the letter fluency tasks and category fluency tasks: a functional near-infrared spectroscopy study

Zhaohui  
Zhang

2025-10-13

1  
min

46  
words

FNIRS

**Summary:** CONCLUSION: Our findings indicate that the LFT elicits more extensive prefrontal activation, with differential engagement of the VLPFC in BD compared to UD. These results suggest potential neuroimaging biomarkers for distinguishing between UD and BD, while also providing insights into the neural sub...

 Read full article:

<https://pubmed.ncbi.nlm.nih.gov/41080778/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015212651&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41080778/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015212651&v=2.18.0.post9+e462414)

## Neural predictors of hidden, persistent psychological states at work



Matthew D  
Lieberman



2025-10-13



1  
min



69  
words

FNIRS

**Summary:** Common workplace challenges such as feeling overwhelmed, burned out, or disengaged often remain hidden due to fear of judgment or social norms, contributing to rising mental health crises and organizational dysfunction. This study presents a brain-based framework for predicting these hidden and pers...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41082670/?](https://pubmed.ncbi.nlm.nih.gov/41082670/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015212651&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015212651&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41082670/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015212651&v=2.18.0.post9+e462414)

## Dose-Dependent Enhancement of Coordination through Multibrain Transcranial Stimulation: A fNIRS Hyperscanning Study



Shengjun  
Wu



2025-10-13



1  
min



67  
words

FNIRS

**Summary:** Coordination serves as a fundamental driving force in the evolution of human society, and transcranial electrical stimulation (tES) is increasingly recognized for its ability to modulate human coordination. However, the neural mechanisms underlying coordination and whether tES positively influences ...




Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41083052/?](https://pubmed.ncbi.nlm.nih.gov/41083052/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015212651&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015212651&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41083052/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015212651&v=2.18.0.post9+e462414)

## Functional connectivity in whole-brain and network analysis differentiates minimally conscious from unresponsive patients: a resting-state fNIRS study

 Liying  
Zhang



2025-10-15



1  
min



24  
words

**fNIRS**

**Summary:** CONCLUSION: fNIRS could effectively detect abnormal brain network functional connectivity in DOC patients and could provide valuable insights for differentiating MCS and VS/UWS patients.



**Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41088235/?](https://pubmed.ncbi.nlm.nih.gov/41088235/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015212651&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015212651&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41088235/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015212651&v=2.18.0.post9+e462414)

## Predicting Individual Response to Acupuncture in Sensorineural Tinnitus Using Integrated Functional Near-Infrared Spectroscopy and Machine Learning: Protocol for a Model Development and Validation Study



Hantong  
Hu



2025-10-15



1  
min



63  
words

FNIRS

**Summary:** CONCLUSION: This study represents the first attempt to integrate fNIRS detection with machine learning techniques for predicting acupuncture efficacy in SNT treatment. The methodology addresses several key challenges in acupuncture research through comprehensive data collection and advanced analytic...

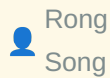


Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41089742/?](https://pubmed.ncbi.nlm.nih.gov/41089742/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015212651&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015212651&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089742/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015212651&v=2.18.0.post9+e462414)

## Online Regulation of Task Difficulty based on Neuro- and Motor-feedback to improve engagement in Visual-motor Task



Rong

Song



2025-10-15



1

min



36

words

FNIRS

**Summary:** CONCLUSION: Our findings suggest that the proposed NMF system can enable online neural activity regulation in visual-motor tasks and achieve enhanced integration between cognitive and sensorimotor areas, with the potential to improve the rehabilitation training outcomes.



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41091617/?](https://pubmed.ncbi.nlm.nih.gov/41091617/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015212651&v=2.18.0.post9+e462414)
[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015212651&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41091617/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015212651&v=2.18.0.post9+e462414)

## I built a modern async Python SDK for Expo Push Notifications (with full type hints!)



/u/

kr\_roach



2025-10-15



2

min



416

words

REDDIT PYTHON

**Summary:** <!-- SC\_OFF --><div class="md"><p>I've been working with Expo push notifications in Python and got frustrated with the limitations of existing SDKs - no async support, limited type safety, and missing modern features. So I built **async-expo-push-notifications**.</p> <p>## What My Project Does</p> <...</div></p>



Read full article:

[https://www.reddit.com/r/Python/comments/1o74arl/i\\_built\\_a\\_modern\\_async\\_python\\_sdk\\_for\\_expo\\_push/](https://www.reddit.com/r/Python/comments/1o74arl/i_built_a_modern_async_python_sdk_for_expo_push/)



## Blood-Sharing Drug Trend Fuels Global HIV Surge

 2025-10-11  1 min  2 words

HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45549770)

 Read full article:

<https://www.nytimes.com/2025/10/08/world/asia/bluetoothing-drug-blood-sharing.html>

## Writing an LLM from scratch, part 22 – training our LLM

 2025-10-15  1 min  2 words



HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45599727)

 Read full article:

<https://www.gilesthomas.com/2025/10/llm-from-scratch-22-finally-training-our-llm>

## I'm recommending my customers switch to Linux rather than Upgrade to Windows 11

 2025-10-16  1 min  2 words

HACKER NEWS




**Summary:** [Comments](https://news.ycombinator.com/item?id=45600338)



Read full article:

<https://www.scottrlarson.com/publications/publication-windows-move-towards-surveillance/>

## IRS Open Sources its Fact Graph

 2025-10-15  1 min  2 words

HACKER NEWS




**Summary:** [Comments](https://news.ycombinator.com/item?id=45599567)



Read full article:

<https://github.com/IRS-Public/fact-graph>

## A Gemma model helped discover a new potential cancer therapy pathway

 alexcos  2025-10-15  1 min  13 words

HACKER NEWS

**Summary:**





Article URL: <https://blog.google/technology/ai/google-gemma-ai-cancer-therapy-discovery/>

Comments URL: <https://news.ycombinator.com/item?id=45597006>

 Read full article:

<https://blog.google/technology/ai/google-gemma-ai-cancer-therapy-discovery/>

## US Dept of Interior denies canceling largest solar project after axing review


 toomuchtodo  2025-10-15  1 min  13 words

HACKER NEWS

**Summary:**





Article URL: <https://www.utilitydive.com/news/department-interior-cancels-review-nevada-solar-project-trump/802704/>

Comments URL: <https://news.ycombinator.com/item?...>

 Read full article:

<https://www.utilitydive.com/news/department-interior-cancels-review-nevada-solar-project-trump/802704/>

## IRS Open Sources its Fact Graph

 ronbenton  2025-10-15  1 min  13 words

HACKER NEWS


**Summary:**

Article URL: <https://github.com/IRS-Public/fact-graph>





Comments URL: <https://news.ycombinator.com/item?id=45599567>

Points: 129

# Comments: 34

 Read full article:  
<https://github.com/IRS-Public/fact-graph>

## Writing an LLM from scratch, part 22 – training our LLM

 gpjt  2025-10-15  1 min  13 words

HACKER NEWS

**Summary:**

Article URL: <https://www.gilesthomas.com/2025/10/llm-from-scratch-22-finally-training-our-llm>

Comments URL: <https://news.ycombinator.com/item?id=45599727>

 Read full article:  
<https://www.gilesthomas.com/2025/10/llm-from-scratch-22-finally-training-our-llm>

## I'm recommending my customers switch to Linux rather than Upgrade to Windows 11



trinsic2



2025-10-16

1  
min13  
words

HACKER NEWS

**Summary:**

Article URL: <https://www.scottrlarson.com/publications/publication-windows-move-towards-surveillance/>

Comments URL: [https://news.yc...](https://news.ycombinator.com/item?id=45600338)



Read full article:

<https://www.scottrlarson.com/publications/publication-windows-move-towards-surveillance/>

## UHGAN: a dual-phase GAN with Hough-transform constraints for accurate farmland road extraction

Yuan  
Ma

2025-10-13

1  
min190  
words

FRONTIERS NEUROBOTICS

**Summary:** IntroductionTraditional methods for farmland road extraction, such as U-Net, often struggle with complex noise and geometric features, leading to discontinuous extraction and insufficient sensitivity. To address these limitations, this study proposes a novel dual-phase generative adversarial network...



Read full article:

<https://www.frontiersin.org/articles/10.3389/fnbot.2025.1691300>

## UAV-based intelligent traffic surveillance using recurrent neural networks and Swin transformer for dynamic environments

Hui  
Liu



2025-10-13



1  
min



258  
words

FRONTIERS NEUROBOTICS

**Summary:** IntroductionUrban traffic congestion, environmental degradation, and road safety challenges necessitate intelligent aerial robotic systems capable of real-time adaptive decision-making. Unmanned Aerial Vehicles (UAVs), with their flexible deployment and high vantage point, offer a promising solution...



Read full article:

<https://www.frontiersin.org/articles/10.3389/fnbot.2025.1681341>

## Ask HN: Can't get hired – what's next?



silvercymbals



2025-10-15



1  
min



296  
words

HACKER NEWS


**Summary:** <p>Hey HN,<p>I feel like I've wasted the better part of my twenties trying to be a professional software engineer and founding two companies. Fortunately I have some money to show for it and I learned a lot, but at this point it seems I'm functionally unemployable / have skills that just don't make...






Read full article:

<https://news.ycombinator.com/item?id=45599308>

## Electrical synapses mediate visual approach behavior

 Frighetto, G., Dombrowski, M., Castillo, L. M. P., Meera, P., Mirshahidi, P. S., Sanfilippo, P., Vaccari, A., Kandimalla, P., Hartenstein, V., Kurmangaliyev, Y. Z., Zipursky, S. L., Frye, M. A.

 2025-10-15  1 min  204 words


BIORXIV NEUROSCIENCE

**Summary:** Detecting salient visual objects and orienting toward them are commonplace tasks for animals, yet the underlying neural circuit mechanisms remain poorly understood. The fruit fly is an ideal model for a comprehensive analysis of feature detection mechanisms given its complete synaptic wiring diagram...

 Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.14.682373v1?rss=1>


## Region-specific human brain organoids reveal synaptic and cell state drivers of glioblastoma invasion

 Bhatia, T. N., Ganta, S., Meselhe, M., Sojka, C., Martija, A., Nieland, L., Rufen-Blanchette, U., Sing, A., King, A., Hub, B. O., Bhaduri, A., Hoang, K., Nduom, E., Read, R. D., Olson, J., Sloan, S. A.

 2025-10-15  1 min  253 words

BIORXIV NEUROSCIENCE

**Summary:** Glioblastoma (GBM) is a highly heterogenous and malignant brain tumor, in part because it disrupts normal brain circuits to fuel its own growth and invasion. Thus, there is a need to identify the molecular features of invasive GBM cells and their regulators in the neural microenvironment. To address...

 Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.15.682580v1?rss=1>

# Functional and Structural Plasticity in Cocaine-Seeking Ensembles of the Nucleus Accumbens Core



Flom, L. T., Hodgins, S. L., Erives, G. G., Russelavage, J. M., Hyken, S. M., Zhang, Z., Vaaga, C. E., Bobadilla, A.-C.



2025-10-15



1  
min



247  
words

BIORXIV NEUROSCIENCE

**Summary:** Relapse vulnerability in substance use disorder (SUD) is primarily driven by cue-induced activation of neurons within the nucleus accumbens core (NAcore), among other contributing factors. Neuronal ensembles within the NAcore, defined here as selectively co-activated neurons during specific behavior...







Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.15.682633v1?rss=1>



# Iron Deficiency Impairs Mitochondrial Energetics and Early Axonal Growth and Branching in Developing Hippocampal Neurons

 Mendez, D. C., Devgun, K., Monko, T. R., Carlson, L. H., Mickelson, D. J., Lanier, L. M., Georgieff, M. K., Bastian, T. W.

 2025-10-15  1 min  207 words


BIORXIV NEUROSCIENCE

**Summary:** Each stage of neuronal development (i.e., proliferation, differentiation, migration, neurite outgrowth and synapse formation) requires functional and highly coordinated metabolic activity to ultimately ensure proper sculpting of complex neural networks. Energy deficits underlie many neurodevelopment...

 **Read full article:**

<https://www.biorxiv.org/content/10.1101/2025.10.15.682603v1?rss=1>

## The taste of trigeminal sensations: relation between taste, lingual tactile acuity, and spicy perception in patients with taste dysfunction

 Thomas Hummel

 2025-05-28  1 min  70 words


TACTILE ACUITY

**Summary:** In the oral cavity, oral stereognosis and chemesthesis refer to the abilities to recognize shapes and detect noxious substances, respectively, through various receptors distributed on the tongue. The absence of standardized methods to assess oral somatosensory perception has led to a lack of consens...

 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/40434896/?utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251015191857&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40434896/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251015191857&v=2.18.0.post9+e462414)

## Measuring the Distribution of Tactile Acuity at the Index Finger and Thumb Fingertips

 Hiroyuki Kajimoto

 2025-06-17  1 min  75 words

TACTILE ACUITY


**Summary:** In our day-to-day activities, we utilize not only the pads of our fingers but also the sides and hemispherical tips when manipulating objects. For teleoperation systems to replicate these real-life interactions, tactile sensation must be presented and distributed across the entire fingertip. Thus, u...

 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/40526544/?utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251015191857&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40526544/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251015191857&v=2.18.0.post9+e462414)

## Optimizing Vibrotactile Feedback for Sensory Substitution in the Thigh: Spatial Acuity and Frequency Characteristics

 Leah R  
Bent

 2025-06-27

 1  
min

 69  
words

TACTILE ACUITY


**Summary:** Amputation of a lower limb not only affects mobility but also interferes with sensory feedback, leading to an elevated risk of falls among individuals living with amputation. Sensory substitution, achieved through tactile displays embedded in transfemoral prosthetic sockets, presents a promising non...


 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/40577301/?](https://pubmed.ncbi.nlm.nih.gov/40577301/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251015191857&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251015191857&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40577301/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251015191857&v=2.18.0.post9+e462414)

## Directional vibro-tactile hazard warnings for drivers with vision impairments

 Alex R  
Bowers

 2025-07-02

 1  
min

 80  
words

TACTILE ACUITY


**Summary:** Vision impairment may delay responses to hazards when driving. In a proof-of-concept driving simulator study, we evaluated a hazard warning device designed for vision impaired drivers. Three groups participated: 11 persons with central vision loss (CVL; median age 60 years), 12 with homonymous field...



 Read full article:


[https://pubmed.ncbi.nlm.nih.gov/40601880/?](https://pubmed.ncbi.nlm.nih.gov/40601880/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251015191857&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251015191857&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40601880/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251015191857&v=2.18.0.post9+e462414)

## Sensitivity and vagal reactivity to C-tactile-mediated affective touch in mild cognitive impairment due to Alzheimer's disease

 Cecilia  
Guariglia

 2025-08-01  1  
min

 64  
words

TACTILE ACUITY

**Summary:** BackgroundC-tactile (CT) afferents preferentially activate in response to slow caress-like touch, evoking a diffuse pleasant sensation and promoting autonomic regulation. According to Braak's classic model, the neurodegenerative process in Alzheimer's disease (AD) only affects somatosensory cortices...



 Read full article:


<https://pubmed.ncbi.nlm.nih.gov/40746091/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251015191857&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40746091/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251015191857&v=2.18.0.post9+e462414)

## Differences in tactile grid localization accuracy between people with back pain compared to individuals without pain

 Eric  
Fjeldheim

 2025-08-24  1  
min

 22  
words

TACTILE ACUITY

**Summary:** OBJECTIVES: The study aimed to investigate the grid localization test (GLT) between patients with lower back pain and those without back pain.

 Read full article:

<https://pubmed.ncbi.nlm.nih.gov/40850311/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251015191857&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40850311/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251015191857&v=2.18.0.post9+e462414)

## Eye Drop Instillation Success and Hand Function in Adults with Glaucoma: A Pilot Study



Paula Anne Newman-  
Casey



2025-09-09



1  
min



74  
words

TACTILE ACUITY

**Summary:** CONCLUSIONS: Despite hand function deficits, in this exploratory pilot study, adults with glaucoma demonstrated eye drop instillation success comparable to those without glaucoma, though with higher rates of bottle tip contact with the eye, skin, or eyelashes, suggesting an increased risk of potenti...



Read full article:

<https://pubmed.ncbi.nlm.nih.gov/40924900/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251015191857&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40924900/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251015191857&v=2.18.0.post9+e462414)

## Functional evidence for early origin of tactile acuity in the vertebrate somatosensory system



Sviatoslav N  
Bagriantsev



2025-09-13



1  
min



58  
words

TACTILE ACUITY

**Summary:** Mammals and reptiles possess a sophisticated somatosensory system for precise tactile discrimination via mechanosensory end-organs, such as Meissner and Pacinian corpuscles and others. These structures detect sustained pressure, velocity, and vibrations, thereby facilitating nuanced environmental in...






Read full article:


<https://pubmed.ncbi.nlm.nih.gov/40945511/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251015191857&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40945511/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251015191857&v=2.18.0.post9+e462414)

## The coarse mental map of the breast is anchored on the nipple

 Charles M  
Greenspon

 2025-09-18  1  
min

 86  
words

TACTILE ACUITY

**Summary:** Touch plays a key role in our perception of our body and shapes our interactions with the world, from the objects we manipulate to the people we touch. While the tactile sensibility of the hand has been extensively characterized, much less is known about touch on other parts of the body. Despite the...



 Read full article:


<https://pubmed.ncbi.nlm.nih.gov/40964349/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251015191857&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40964349/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251015191857&v=2.18.0.post9+e462414)

## Haptic Feedback Systems for Lower-Limb Prosthetic Applications: A Review of System Design, User Experience, and Clinical Insights

 Runar  
Unnthorsson

 2025-09-27  1  
min

 65  
words

TACTILE ACUITY

**Summary:** Systems presenting haptic information have emerged as an important technological advance in assisting individuals with sensory impairments or amputations, where the aim is to enhance sensory perception or provide sensory substitution through tactile feedback. These systems provide information on lim...

 Read full article:

<https://pubmed.ncbi.nlm.nih.gov/41007234/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251015191857&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41007234/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251015191857&v=2.18.0.post9+e462414)

## Gradient Porous Flexible Pressure Sensors with the Relay Effect for High-Accuracy Braille-to-Speech Recognition

Jianming  
Xu



2025-08-25



1  
min



62  
words

BRAILLE

**Summary:** The development of highly sensitive, wide linear-range flexible pressure sensors is crucial for practical applications in human-computer interaction, physiological signal detection, and motion monitoring. However, traditional flexible pressure sensors often suffer from limited compressibility in the...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/40854103/?](https://pubmed.ncbi.nlm.nih.gov/40854103/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015191829&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015191829&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40854103/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015191829&v=2.18.0.post9+e462414)

## Individual and community level factors influencing modern contraceptive use among women of reproductive age in South Africa: a multilevel analysis

Million  
Phiri



2025-08-26



1  
min



46  
words

BRAILLE

**Summary:** CONCLUSION: Sensory disability status influenced women's contraceptive behaviour in South Africa. Current family planning interventions should target women with sensory disabilities by prioritising accessible communication methods (e.g., braille, sign language), disability awareness training for hea...






Read full article:


[https://pubmed.ncbi.nlm.nih.gov/40855574/?](https://pubmed.ncbi.nlm.nih.gov/40855574/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015191829&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015191829&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40855574/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015191829&v=2.18.0.post9+e462414)

## Explosion-powered eversible tactile displays

 Robert F  
Shepherd

 2025-08-27  1  
min

 64  
words

**BRAILLE**


**Summary:** High-resolution electronic tactile displays stand to transform haptics for remote machine operation, virtual reality, and digital information access for people who are blind or visually impaired. Yet, increasing the resolution of these displays requires increasing the number of individually addressa...



 **Read full article:**


<https://pubmed.ncbi.nlm.nih.gov/40864730/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015191829&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40864730/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015191829&v=2.18.0.post9+e462414)

## A Biomimetic Fiber-Entangled Permeable Electronic Skin for Strain-Insensitive and High-Resolution Tactile Sensing

 Zhijun  
Ma

 2025-08-28  1  
min

 57  
words

**BRAILLE**

**Summary:** Electronic skins (e-skins) incorporating island architectures represent a promising platform for strain-insensitive tactile sensing by mechanically decoupling sensing units from deformations. However, conventional island designs encounter stress concentration issues caused by inherent modulus mismat...


 **Read full article:**


<https://pubmed.ncbi.nlm.nih.gov/40874468/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015191829&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40874468/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015191829&v=2.18.0.post9+e462414)




## High-Density Tactile Sensor Array for Sub-Millimeter Texture Recognition

 Min  
Zhang


 2025-08-28

 1  
min

 64  
words

**BRAILLE**

**Summary:** High-density tactile sensor arrays that replicate human touch could restore texture perception in paralyzed individuals. However, conventional tactile sensor arrays face inherent trade-offs between spatial resolution, sensitivity, and crosstalk suppression due to microstructure size limitations and ...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/40871941/?](https://pubmed.ncbi.nlm.nih.gov/40871941/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015191829&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015191829&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40871941/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015191829&v=2.18.0.post9+e462414)

## A Diachronic Investigation of the Change in Form and Formational-Semantic Systematicity of the Chinese Sign Language Lexicon

 Hao  
Lin

 2025-09-01

 1  
min

 72  
words

**BRAILLE**

**Summary:** It has been argued in previous research that several competing pressures guide the directions of language evolution (economy vs. redundancy; arbitrariness vs. systematicity). For sign languages, however, the effects of competing pressures on their change of lexical systems remain largely unclear. In...

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/40889233/?](https://pubmed.ncbi.nlm.nih.gov/40889233/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015191829&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015191829&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40889233/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015191829&v=2.18.0.post9+e462414)

## Wireless Electrotactile System with Hydrogel-Based Electrodes for Conformal Tactile Interaction

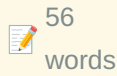


Ji  
Liu

2025-09-02



1  
min



56  
words

BRAILLE

**Summary:** A wireless epidermal electrotactile interface is demonstrated through integration of skin-conformal electrodes and flexible circuitry, addressing existing limitations in haptic technology caused by mechanical mismatch and system-level integration challenges. This electrotactile system achieves low s...

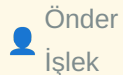


Read full article:

[https://pubmed.ncbi.nlm.nih.gov/40891563/?](https://pubmed.ncbi.nlm.nih.gov/40891563/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8IvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015191829&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8IvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015191829&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40891563/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8IvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015191829&v=2.18.0.post9+e462414)

## Beyond access: rethinking assistive technology for individuals with visual impairments in Türkiye

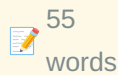


Önder  
İşlek

2025-09-12



1  
min



55  
words

BRAILLE

**Summary:** CONCLUSION: Despite demonstrating adaptability, individuals with VI in Türkiye face significant structural barriers to equitable AT access. Informal learning limited public support, and a lack of locally adapted tools contribute to digital exclusion. A rights-based approach-emphasizing inclusive fun...






Read full article:


[https://pubmed.ncbi.nlm.nih.gov/40937808/?](https://pubmed.ncbi.nlm.nih.gov/40937808/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8IvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015191829&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8IvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015191829&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40937808/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8IvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015191829&v=2.18.0.post9+e462414)

## High prevalence of bacterial STI, anal HPV, cytological abnormalities and anal lesions among MSM in Togo, 2021: a baseline analysis of the ANRS I MIE 12,400/DepIST-H cohort

 Didier K  
Ekouevi

 2025-09-27  1  
min

 42  
words


**BRAILLE**


**Summary:** CONCLUSIONS: These findings emphasize the high prevalence of STIs among MSM and confirm the unusual distribution of HPV types in West Africa, with HPV35 being highly prevalent. A national strategy regarding STI screening and HPV vaccination in this key population is needed.

 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/41013315/?utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015191829&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41013315/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015191829&v=2.18.0.post9+e462414)

## Development and Assessment of a Novel Audiosensory Performance Method for Improving the Oral Health of Visually Impaired Children

 Divya Singh

 2025-10-03

 1 min

 73 words

**BRaille**


**Summary:** This study evaluated the effectiveness of an audiosensory performance method in enhancing oral health knowledge and status among visually impaired children aged 6-12 years in the National Capital Region (NCR), Delhi. An interventional study design was used, involving 251 participants equally divided...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41041413/?](https://pubmed.ncbi.nlm.nih.gov/41041413/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015191829&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015191829&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41041413/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015191829&v=2.18.0.post9+e462414)

## Transcranial direct current stimulation (tDCS): A new, (still) legal form of "neurodoping" in sports?

 James Chmiel

 2025-10-13

 1 min

 64 words

**TDCS TACS TRNS**

**Summary:** Transcranial direct current stimulation (tDCS) has emerged as a widely accessible, noninvasive technique capable of modulating cortical excitability. A rapidly expanding body of sports-science literature suggests that it can produce modest but measurable gains in endurance, strength, skill acquisiti...

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41078301/?](https://pubmed.ncbi.nlm.nih.gov/41078301/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015191759&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015191759&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41078301/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015191759&v=2.18.0.post9+e462414)

## Effects of transcranial direct current stimulation on neuro electrical activity in mice with migraine



Jianliang  
Wu



2025-10-13



1  
min



47  
words

TDCS TACS TRNS

**Summary:** CONCLUSION: These results establish that low-intensity tDCS ameliorates migraine pathophysiology through dual mechanisms:  $\theta$ -band synchronization mediating behavioral normalization and  $\gamma$ -band desynchronization reducing neural noise. The  $\delta/\theta$  power reconfiguration implicates thalamocortical rhythm stab...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41079350/?](https://pubmed.ncbi.nlm.nih.gov/41079350/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015191759&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015191759&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41079350/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015191759&v=2.18.0.post9+e462414)

## Transcranial direct current stimulation modulates primate brain dynamics across states of consciousness



Béchir  
Jarraya



2025-10-13



1  
min



63  
words

TDCS TACS TRNS

**Summary:** The resting primate brain is traversed by spontaneous functional connectivity patterns that show striking differences between conscious and unconscious states. Transcranial direct current stimulation (tDCS), a non-invasive neuromodulatory technique, can improve signs of consciousness in disorders of...






Read full article:


[https://pubmed.ncbi.nlm.nih.gov/41081761/?](https://pubmed.ncbi.nlm.nih.gov/41081761/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015191759&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015191759&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41081761/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015191759&v=2.18.0.post9+e462414)

## High-definition Transcranial Direct Current Stimulation over Right Dorsolateral Prefrontal Cortex to Enhance Metacognitive Sensitivity


 Jialu  
Qin

 17 2025-10-13  1  
min

 69  
words

TDCS TACS TRNS


**Summary:** In human-AI collaboration, task delegation is a critical component. Ideally, if a person believes they are capable of completing a task, they should do so themselves; otherwise, the task should be delegated to the other party. Such delegation decisions are influenced by individuals' assessments of t...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41082455/?](https://pubmed.ncbi.nlm.nih.gov/41082455/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015191759&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015191759&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41082455/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015191759&v=2.18.0.post9+e462414)

## Dose-Dependent Enhancement of Coordination through Multibrain Transcranial Stimulation: A fNIRS Hyperscanning Study

 Shengjun Wu

 17 2025-10-13

 1 min

 67 words

TDCS TACS TRNS

**Summary:** Coordination serves as a fundamental driving force in the evolution of human society, and transcranial electrical stimulation (tES) is increasingly recognized for its ability to modulate human coordination. However, the neural mechanisms underlying coordination and whether tES positively influences ...


 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41083052/?](https://pubmed.ncbi.nlm.nih.gov/41083052/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015191759&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015191759&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41083052/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015191759&v=2.18.0.post9+e462414)

## Advances on transcranial electromagnetic stimulation in improving non-motor symptoms of Parkinson's disease

 C F Liu

 17 2025-10-13

 1 min

 1 words

TDCS TACS TRNS

**Summary:** tDCS rTMS  
tDCS rTMS .

 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41083398/?](https://pubmed.ncbi.nlm.nih.gov/41083398/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015191759&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015191759&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41083398/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015191759&v=2.18.0.post9+e462414)

## Modification of inhibitory control and craving through transcranial direct current stimulation as an add-on treatment for substance use disorder: protocol for a randomized controlled study



Sarah  
Gerhardt



2025-10-14



1  
min



68  
words

TDCS TACS TRNS

**Summary:** BACKGROUND: Substance use disorders (SUDs) remain a prevalent public health issue characterized by a substantial disease burden and high relapse rates. The aim of this planned project is to investigate the optimal electrode placement and polarity of transcranial direct current stimulation (tDCS) to ...




Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41084082/?](https://pubmed.ncbi.nlm.nih.gov/41084082/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015191759&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015191759&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41084082/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015191759&v=2.18.0.post9+e462414)




## Heartbeat perception is causally linked to frontal delta oscillations

 Surjo R  
Soekadar

 2025-10-14

 1  
min

 71  
words

TDCS TACS TRNS


**Summary:** The ability to accurately perceive one's own bodily signals, such as the heartbeat, plays a vital role in physical and mental health. However, the neurophysiological mechanisms underlying this ability, termed interoception, are not fully understood. Converging evidence suggests that cardiac rhythms ...

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41087675/?](https://pubmed.ncbi.nlm.nih.gov/41087675/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015191759&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015191759&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41087675/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015191759&v=2.18.0.post9+e462414)

## High-Definition Transcranial Direct Current Stimulation Improves Pain Empathy: A Randomized, Double-Blind, and Sham-Controlled Study Based on Event-Related Potentials (ERPs)

 Yuling  
Wang

 17

2025-10-15



1  
min



69  
words

TDCS TACS TRNS

**Summary:** The impact of transcranial direct current stimulation (tDCS) on pain empathy is a subject of debate and controversy. The variations in the results could be attributed to differences in the stimulus parameters. This study aimed to examine the impact of high-definition transcranial direct current stim...

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41089305/?](https://pubmed.ncbi.nlm.nih.gov/41089305/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015191759&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015191759&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089305/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015191759&v=2.18.0.post9+e462414)

## Effectiveness of Transcranial Direct Current Stimulation on Cognitive Function: A Pilot Study



Alireza Akbarzade  
Baghban



2025-10-15



1  
min



68  
words

TDCS TACS TRNS

**Summary:** CONCLUSION: The findings suggest that employing tDCS techniques plays a pivotal role in enhancing specific executive functions, such as working memory, problem-solving, and planning, in patients with traumatic brain injuries. tDCS can be considered a complementary treatment option in the rehabilitat...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41089630/?](https://pubmed.ncbi.nlm.nih.gov/41089630/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015191759&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015191759&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089630/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015191759&v=2.18.0.post9+e462414)

## Electroceuticals for Paralympic Athletes: A Fair Play and Classification Concern?



Tom E  
Nightingale



2025-10-13



1  
min



66  
words

BRAIN COMPUTER INTERFACE

**Summary:** Electroceuticals such as brain computer interfaces and spinal cord stimulation (SCS) represent transformative strategies for neuromodulation. Research has demonstrated that SCS can ameliorate motor and autonomic cardiovascular dysfunctions, particularly in individuals with spinal cord injury (SCI). ...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41082173/?](https://pubmed.ncbi.nlm.nih.gov/41082173/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015191749&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015191749&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41082173/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015191749&v=2.18.0.post9+e462414)

## Cell-to-cell communication: from physical calling to remote emotional touching



Azadeh Imani  
Rad



2025-10-14



1  
min



55  
words

BRAIN COMPUTER INTERFACE

**Summary:** The emerging paradigm of cell-to-cell communication represents a transformative shift from device-mediated contact to bio-integrated, emotion-driven interactions. This article introduces a novel, multi-layered framework for enabling biologically integrated communication between cells, devices, and c...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41083759/?](https://pubmed.ncbi.nlm.nih.gov/41083759/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015191749&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015191749&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41083759/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015191749&v=2.18.0.post9+e462414)

## Virtual Reality Experience as Reflected in EEG Microstates



Ke  
Ma



2025-10-14



1  
min



73  
words

BRAIN COMPUTER INTERFACE

**Summary:** The development of virtual reality technology has provided psychological research with powerful tools by presenting stimuli and constructing scenarios, and the combination of VR and neuroimaging techniques begins to provide particularly interesting insights into the experience of virtual events and ...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41085777/?](https://pubmed.ncbi.nlm.nih.gov/41085777/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015191749&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015191749&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41085777/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015191749&v=2.18.0.post9+e462414)

## An incremental adversarial training method enables timeliness and rapid new knowledge acquisition



Chengli  
Wang



2025-10-14



1  
min



69  
words

BRAIN COMPUTER INTERFACE

**Summary:** Adversarial training is an effective defense method for deep models against adversarial attacks. However, current adversarial training methods require retraining the entire neural network, which consumes a significant amount of computational resources, thereby affecting the timeliness of deep models...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41087533/?](https://pubmed.ncbi.nlm.nih.gov/41087533/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015191749&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015191749&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41087533/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015191749&v=2.18.0.post9+e462414)

## Gut microbiota remodeling and sensory-emotional functional disruption in adolescents with bipolar depression



Jianbo  
Lai



2025-10-15



1  
min



57  
words

BRAIN COMPUTER INTERFACE

**Summary:** CONCLUSION: This study first characterized the gut microbiota architecture in adolescent BD. Combining gut microbiota and brain function biomarkers may benefit disease diagnosis and predict treatment outcome. Nonetheless, these findings should be carefully interpreted considering the limitations of ...





Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41088296/?](https://pubmed.ncbi.nlm.nih.gov/41088296/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015191749&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015191749&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41088296/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015191749&v=2.18.0.post9+e462414)

## Does brain-computer interface-based mind reading threaten mental privacy? ethical reflections from interviews with Chinese experts

 Haidan  
Chen


 2025-10-15

 1  
min

 64  
words

BRAIN COMPUTER INTERFACE

**Summary:** CONCLUSION: We summarize the interpretations, feasibility, and limitations of BMR and introduce a distinction between "strong BMR" and "weak BMR" to clarify their technical and ethical implications. Based on our analysis, we argue that current BMR does not pose unique ethical challenges compared wit...


 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/41088329/?](https://pubmed.ncbi.nlm.nih.gov/41088329/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015191749&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41088329/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015191749&v=2.18.0.post9+e462414)


[tbw4049Wgf\\_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015191749&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41088329/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015191749&v=2.18.0.post9+e462414)

## Precision TMS through the integration of neuroimaging and machine learning: optimizing stimulation targets for personalized treatment

 Panxiao  
Bao


 17 2025-10-15

 1  
min

 60  
words

BRAIN COMPUTER INTERFACE

**Summary:** Transcranial Magnetic Stimulation (TMS), a non-invasive neuromodulation technique based on electromagnetic induction, modulates cortical excitability by inducing currents with a magnetic field. TMS has demonstrated significant clinical potential in the treatment of various neuropsychiatric disorders...

 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/41089381/?](https://pubmed.ncbi.nlm.nih.gov/41089381/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015191749&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41089381/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015191749&v=2.18.0.post9+e462414)


[tbw4049Wgf\\_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015191749&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089381/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015191749&v=2.18.0.post9+e462414)

## A time-frequency feature fusion-based deep learning network for SSVEP frequency recognition

 Jijun  
Tong

 2025-10-15

 1  
min

 62  
words

BRAIN COMPUTER INTERFACE

**Summary:** INTRODUCTION: Steady-state visual evoked potential (SSVEP) has emerged as a pivotal branch in brain-computer interfaces (BCIs) due to its high signal-to-noise ratio (SNR) and elevated information transfer rate (ITR). However, substantial inter-subject variability in electroencephalographic (EEG) sig...


 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41089660/?](https://pubmed.ncbi.nlm.nih.gov/41089660/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015191749&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015191749&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089660/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015191749&v=2.18.0.post9+e462414)

## Participant Engagement, Epistemic Injustice, and Early-Phase Implanted Neural Device Research

 Ashley  
Feinsinger

 2025-10-15

 1  
min

 66  
words

BRAIN COMPUTER INTERFACE

**Summary:** In recent years, participant engagement initiatives in research on implanted neural devices have significantly increased. However, there remains little consensus on the motivations, goals, and best practices for engagement efforts. Drawing on the concept of participatory epistemic injustice, we argu...

 Read full article:



[https://pubmed.ncbi.nlm.nih.gov/41091050/?](https://pubmed.ncbi.nlm.nih.gov/41091050/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015191749&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015191749&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41091050/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015191749&v=2.18.0.post9+e462414)



## Recommendations for Combining Brain-Computer Interface, Motor Imagery, and Virtual Reality in Upper Limb Stroke Rehabilitation: Qualitative Participatory Design Study

 Carla Mendes  
Pereira

 2025-10-15  1 min

 60 words


BRAIN COMPUTER INTERFACE

**Summary:** CONCLUSIONS: Current results contribute to establishing clear guidelines on patient selection, task design, intervention structuring, motivation factors, and tailoring of sensory feedback. This framework presents a foundation for optimal implementation of VR-BCI-based interventions that associate ML...


 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41092418/?utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015191749&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41092418/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015191749&v=2.18.0.post9+e462414)

## Built a Tool to Sync GitHub Issues to Linear – Feedback Welcome!

 /u/  
Virtual\_Initiative67

 2025-10-15  1 min

 196 words



REDDIT PYTHON

**Summary:** <!-- SC\_OFF --><div class="md"><p>Hey everyone,</p> <p><strong>Target Audience</strong>: Useful for technical support engineers, dev leads, or anyone managing projects via GitHub and Linear.</p> <p><strong>What my project does</strong><br /> I've built a tool that automatically syncs GitHub issues i...

 Read full article:

[https://www.reddit.com/r/Python/comments/1o77t5h/built\\_a\\_tool\\_to\\_sync\\_github\\_issues\\_to\\_linear/](https://www.reddit.com/r/Python/comments/1o77t5h/built_a_tool_to_sync_github_issues_to_linear/)

# How First Wap Tracks Phones Around the World





 2025-10-15  1 min  2 words

HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45599075)

 **Read full article:**  
<https://www.lighthousereports.com/methodology/surveillance-secrets-explainer/>

# How First Wap Tracks Phones Around the World

 mattboulos  2025-10-15  1 min  13 words

HACKER NEWS





**Summary:**

Article URL: <https://www.lighthousereports.com/methodology/surveillance-secrets-explainer/>

Comments URL: [https://news.ycombinator.com/item?id=...](https://news.ycombinator.com/item?id=45599075)

 **Read full article:**  
<https://www.lighthousereports.com/methodology/surveillance-secrets-explainer/>

## ImapGoose

 xarvatium  2025-10-15  1 min  13 words

HACKER NEWS

**Summary:**

Article URL: <https://whynothugo.nl/journal/2025/10/15/introducing-imapgoose/>

Comments URL: <https://news.ycombinator.com/item?id=45599084>

Points: ...

 Read full article:

<https://whynothugo.nl/journal/2025/10/15/introducing-imapgoose/>

## I Hate Acrobat

 2025-10-15  1 min  2 words

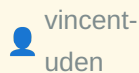
HACKER NEWS

**Summary:** <https://news.ycombinator.com/item?id=45598776>>Comments</a>

 Read full article:

<https://www.vincentuden.xyz/blog/pdf-reader>

## I Hate Acrobat



vincent-  
uden



2025-10-15



1  
min



13  
words

HACKER NEWS

**Summary:**

Article URL: <https://www.vincentuden.xyz/blog/pdf-reader>

Comments URL: <https://news.ycombinator.com/item?id=45598776>

Points: 10

# Comments: 4



Read full article:

<https://www.vincentuden.xyz/blog/pdf-reader>

## Ptf1a robustly drives the gliogenic switch in the rodent embryonic cortex in a dosage-dependent manner by activating pro-glial gene expression programs



Li, H., Lu, K., Wang, X., Jiao, C., Huang, K., Xu, S., Liu, Y., Chen, S., He, S.



2025-10-15



1  
min



179  
words

BIORXIV NEUROSCIENCE


**Summary:** It is widely believed that the gliogenic switch during rodent embryonic development is governed by the orchestrated crosstalk between a cohort of genes and extracellular cues. Here we report that ectopic expression of the single bHLH factor, pancreas transcription factor 1 (PTF1A), is sufficient to ...






Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.14.682493v1?rss=1>

## Parallel circadian-like oscillations in LTP and excitation inhibition balance in mouse CA1 reverse direction after puberty

 valdivia, g., moreno, c., He, K., contreras, d., tran, T., Ramnaugh, A. D., Xu, W., Contreras, A., Fernandez, D. C., Severin, D., Hattar, S., Gallagher, M., kirkwood, a.

 2025-10-15  1 min  224 words

BIORXIV NEUROSCIENCE

**Summary:** Long-term potentiation (LTP), the best characterized form of Hebbian synaptic plasticity, is well known to be under strong circadian regulation. In mice and rats, both nocturnal species, most studies indicate that LTP in the hippocampal CA1 region is more robust when induced during the dark phase. O...

 Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.15.682451v1?rss=1>

## Bringing NumPy's type-completeness score to nearly 90% – Pyrefly

 2025-10-07  1 min  2 words


HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45501088)

 Read full article:


<https://pyrefly.org/blog/numpy-type-completeness/>

## Princeton Engineering Anomalies Research





 2025-10-07  1 min  2 words

HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45509713)

 **Read full article:**  
<https://pearlab.icrl.org/>

## Zed is now available on Windows

 meetpateltech  2025-10-15  1 min  13 words

HACKER NEWS

**Summary:**

Article URL: <https://zed.dev/blog/zed-for-windows-is-here>





Comments URL: <https://news.ycombinator.com/item?id=45594920>

Points: 53

# Comments: 4

 **Read full article:**  
<https://zed.dev/blog/zed-for-windows-is-here>

## Next Steps for the Caddy Project Maintainership

 francislavoie  2025-10-15  1 min  13 words

HACKER NEWS

**Summary:**


Article URL: <https://caddy.community/t/next-steps-for-the-caddy-project-maintainership/33076>

Comments URL: <https://news.ycombinator.com/item?id=45598590>

 Read full article:

<https://caddy.community/t/next-steps-for-the-caddy-project-maintainership/33076>

## Auditory Stimulus Information Entropy Modulates Inter-Brain Synchronization: Evidence from Wireless EEG Hyperscanning

 Liao, J., Huang, G., Zhao, W., Li, C. X., Cheng, P. W. C., Sun, R., Yuan, H.-Y., Gao, J., Ho, R. T. H.

 2025-10-15  1 min  204 words


BIORXIV NEUROSCIENCE



**Summary:** Inter-brain synchronization (IBS) -- reflecting inter-individual correlated neural activity during interaction -- marks shared experiences like music listening. The ability of complex auditory stimuli (e.g., music) to induce IBS links to their information dynamics, notably the uncertainty they evoke...


 Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.14.681560v1?rss=1>

## AAV-mediated overexpression of Prdm12 in knee-innervating afferents reduces inflammatory joint pain and neuronal hyperexcitability in mice


 Dannawi, M., Pattison, L. A., Cloake, A., Bellefroid, E., Smith, E. S. J.

 2025-10-15  1 min

 247 words


BIORXIV NEUROSCIENCE

**Summary:** Inflammatory joint pain features in numerous musculoskeletal disorders that affect millions globally. The Prdm12 gene encodes a conserved zinc finger transcriptional regulator expressed selectively in the nervous system. In humans, PRDM12 mutations can cause congenital insensitivity to pain (CIP) or...

 Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.14.680517v1?rss=1>

## The impact of the serotonergic psychedelic DOI on active vision in freely moving mice

 Skyberg, R. J., Fields, C. W., Martins, D. M., Niell, C. M.

 2025-10-15  1 min  240 words

BIORXIV NEUROSCIENCE


**Summary:** Psychedelic compounds have the ability to generate altered states of consciousness and profoundly distort perception, often resulting in visual hallucinations. While psychedelics have recently regained attention for their potential cognitive and therapeutic effects, how these drugs affect visual pro...

 Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.14.682230v1?rss=1>



# Adolescent Alcohol Exposure Disrupts Astrocyte-Synaptic Structural And Functional Coupling In The Male Dorsal Hippocampus

 Coulter, O. R., Walker, C. D., Muck, T., Sexton, H. G., Denvir, J., Risher, C., Henderson, B. J., Risher, M.-L.

 2025-10-15  1 min  233 words

BIORXIV NEUROSCIENCE


**Summary:** Adolescence is a window of heightened vulnerability to the neurotoxic effects of binge ethanol exposure. Adolescent intermittent ethanol (AIE) exposure has been shown to induce long lasting cognitive and behavioral impairments in patients and rodent models that increase the risk of developing alcoho...





Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.14.682478v1?rss=1>

## ARHGEF17 Deficiency Induces Endothelial Dysfunction and Intracranial Aneurysm Formation via RhoA/ROCK2/MLC Signaling Pathway


 Li, J., Zhang, H., Peng, C., Wang, B., Zhao, Y., Yang, X.

 2025-10-15  1 min

 204 words


BIORXIV NEUROSCIENCE



**Summary:** BACKGROUND: Genetic susceptibility critically contributes to intracranial aneurysm (IA) formation and rupture, but the mechanisms linking genetic variants to vascular dysfunction remain unclear. ARHGEF17, a Rho guanine nucleotide exchange factor regulating RhoA activation and cytoskeletal dynamics, ...


 Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.14.682476v1?rss=1>

## Effects of color-enhancing filters on color salience in normal trichromats

 Webster, M., Knoblauch, K., Simoncelli, C., McPherson, D.

 2025-10-15  1 min

 244 words

BIORXIV NEUROSCIENCE

**Summary:** Notch filters can alter color contrasts by selectively filtering different spectral bands of the stimulus and have been developed to enhance reddish-greenish contrasts for color-deficient observers with anomalous trichromacy. We examined the effects of such filters on color salience for normal trich...

 Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.14.682093v1?rss=1>

## Artificial microRNAs targeting Tau enable post-symptomatic functional recovery in aged tauopathy mice



Facal, C. L., Paez-Paz, I., Pereyra, A. E., Gaguine, C., Clerici-Delville, R., Foltran, R., Soiza-Reilly, M., Avale, M. E.



2025-10-15



1  
min



198  
words

BIORXIV NEUROSCIENCE

**Summary:** Tauopathies are a group of neurodegenerative disorders, including Alzheimer's disease, frontotemporal dementia, and progressive supranuclear palsy, characterized by the pathological accumulation of tau protein. While tau reduction has emerged as a promising disease-modifying strategy, most preclinic...



Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.14.680333v1?rss=1>

## Heterogeneity of ictal firing during generalized seizures in the awake cortex



Sere, P., Zsigri, N., Crunelli, V., Lorincz, M. L.



2025-10-15



1  
min



162  
words

BIORXIV NEUROSCIENCE

**Summary:** Cortico-thalamo-cortical oscillations are central to both normal and pathological brain activities and emerge from complex cortical and thalamic interactions. However, the specific activity of identified cortical neurons during the paroxysmal oscillations associated with absence seizures (ASs) in aw...



Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.14.682021v1?rss=1>

## Distinct cortical profiles underlie the common reportability of thought-free experiences



Boulakis, P. A., Kusztor, A., Tsuchiya, N., Andrillon, T., Demertzi, A.



2025-10-15



1 min



211 words

BIORXIV NEUROSCIENCE

**Summary:** Mind blanking (MB) is a mental state of seemingly no reportable thought content. The question of how we can entertain no thoughts while awake is challenging for the study of spontaneous thinking. By combining EEG-fMRI with experience sampling during task performance, we categorised changes in mental...



Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.14.681984v1?rss=1>

## Repeat associated non-AUG translation as a common mechanism for the polyGln ataxias

Banez-Coronel, M., Zu, T., Aldridge, M., Guo, S., Ajredini, R., Morrison, D., Tays, A. B., Pletnikova, O.,



Yachnis, A. T., Troncoso, J., Paulson, H. L., McLoughlin, H. S., Ashizawa, T., Subramony, S. H., Ranum, L.



2025-10-15



1 min



150 words

BIORXIV NEUROSCIENCE

**Summary:** Determining if repeat associated non-AUG (RAN) proteins contribute to the CAG polyGln-encoding spinocerebellar ataxias (CAG-SCAs) is critical for understanding mechanisms and developing therapies for these diseases. Immunohistochemistry using antibodies against polySer and polyLeu repeats and locus ...



Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.14.682372v1?rss=1>

## Are hard drives getting better?



HieronymusBosch



2025-10-15

1  
min13  
words

HACKER NEWS

**Summary:**

Article URL: <https://www.backblaze.com/blog/are-hard-drives-getting-better-lets-revisit-the-bathtub-curve/>

Comments URL: <https://news.ycombinator.com/item?id=45595724>



Read full article:

<https://www.backblaze.com/blog/are-hard-drives-getting-better-lets-revisit-the-bathtub-curve/>

## Important Changes to the 2024 ERP Boot Camp

Steve  
Luck

2024-03-05

2  
min444  
words

ERP BOOT CAMP

**Summary:**

We are disappointed to announce that we will not be holding a regular 10-day ERP Boot Camp this summer.


We have held Boot Camps nearly every summer since 2007, supported by a series of generous grants from NIMH that allowed us to provide scholarships for all attendees. Unf...




Read full article:


<https://erpinfo.org/blog/2024/3/5/changes-to-the-2024-erp-boot-camp>

## Registration is now full for the 2024 ERP Boot Camp

 Steve  
Luck

 2024-03-16

 1  
min

 106  
words

ERP BOOT CAMP


**Summary:**


The demand for the 2024 ERP Boot Camp was far beyond our expectations, and we reached our maximum registration of 30 people within one day. We already have a waiting list of over 30 people, so we have closed the registration site.

 Read full article:


<https://erpinfo.org/blog/2024/3/15/registration-full>

## New Paper: Using Multivariate Pattern Analysis to Increase Effect Sizes for ERP Amplitude Comparisons

 Steve  
Luck

 2024-06-10

 2  
min

 525  
words

ERP BOOT CAMP


**Summary:**

Carrasco, C. D., Bahle, B., Simmons, A. M., & Luck, S. J. (2024). Using multivariate pattern analysis to increase effect sizes for event-related potential analyses. *Psychophysiology*, 61, e14570. <https://doi.org/10.1111/psyp.14570>

 Read full article:


<https://erpinfo.org/blog/2024/6/10/erp-core-decoding-paper>

## New software package: ERPLAB Studio

 Steve  
Luck

 2024-06-12

 2  
min

 444  
words


ERP BOOT CAMP


**Summary:** We are excited to announce the release of a new EEG/ERP analysis package, [ERPLAB Studio](https://github.com/ucdavis/erplab/releases). We think it's a huge improvement over the classic EEGLAB user interface. See our cheesy [video](https://www.youtube.com/watch?v=llaKVQ9DD6E)...

 Read full article:


<https://erpinfo.org/blog/2024/6/11/erplab-studio>

## Recording and slides now available for ERPLAB Studio webinar

 Steve  
Luck

 2024-06-28

 1  
min

 30  
words


ERP BOOT CAMP


**Summary:** We held a webinar to demonstrate ERPLAB Studio on 28 June 2024. [Click here](https://youtu.be/k-nGv00rTP8) to access a recording. [Click here](https://ucdavis.box.com/s/4fseqz6327dtuouauj12rgvivy1d1nmo) to access a PDF of the slides....

 Read full article:


<https://erpinfo.org/blog/2024/6/28/recording-and-slides-now-available-for-erplab-studio-webinar>

## New Paper: Does the P3b component reflect working memory updating?

 Steve  
Luck

 2025-03-21

 7  
min

 1547  
words


ERP BOOT CAMP

**Summary:** Carrasco, C. D., Simmons, A. M., Kiat, J. E., & Luck, S. J. (in press). Enhanced working memory representations for rare events. *Psychophysiology*. <https://doi.org/10.1111/psyp.70038> [<https://doi.org/10.1101/2024.03.20...>]


 Read full article:

<https://erpinfo.org/blog/2025/3/20/new-paper-oddball>

## Monads are too powerful: The expressiveness spectrum


 2025-10-12

 1  
min

 2  
words

HACKER NEWS


**Summary:** <https://news.ycombinator.com/item?id=45555426> Comments


 Read full article:

<https://chrispenner.ca/posts/expressiveness-spectrum>



## 10-Day ERP Boot Camp to be held in Davis in Summer 2026

 Steve  
Luck

 2025-08-20

 1  
min

 138  
words


ERP BOOT CAMP


**Summary:** We have received another 5 years of funding from the National Institute of Mental Health, so we plan to hold ERP Boot Camps in each of the next 5 summers. The next one will be in Davis, California in the Summer of 2026. The specific dates will be announced around January 1, 2026, and the...

 Read full article:


<https://erpinfo.org/blog/2025/8/20/boot-camp-summer-2026>

## Education: Additional Resources

 Adriel  
Carridice

 2025-02-13

 1  
min

 61  
words

BRAIN

**Summary:** Buckingham Shum, S. (2022). The UTS “EdTech Ethics” Deliberative Democracy Consultation: Rationale, Process and Outcomes. Connected Intelligence Centre, University of Technology Sydney, AUS. <https://cic.uts.edu.au/projects/edtech-ethics>  
León Declaration on European neurotechnology (2023): a human-fo...

 Read full article:

<https://brain.ieee.org/publications/neuroethics-framework/education/educational-and-training-resources-education/education-additional-resources/>

## Education: References



Adriel  
Carridice



2025-02-13



1  
min



61  
words

BRAIN

**Summary:** [1] OECD "Neurotechnology Toolkit To support policymakers in implementing the OECD Recommendation on Responsible Innovation in Neurotechnology," 2024.: <https://www.oecd.org/content/dam/oecd/en/topics/policy-sub-issues/emerging-technologies/neurotech-toolkit.pdf>. [2] van Kesteren and Meeter, 2020 htt...



Read full article:

<https://brain.ieee.org/publications/neuroethics-framework/education/references/education-references/>

## Estimation of brain activity sources of sympathovagal dynamics



1  
min



14  
words

NEUROIMAGE

**Summary:** <p>Publication date: 1 November 2025</p><p><b>Source:</b> NeuroImage, Volume 321</p><p>Author(s): Dario Milea, Vincenzo Catrambone, Gaetano Valenza</p>




Read full article:

[https://www.sciencedirect.com/science/article/pii/S105381192500504X?dgcid=rss\\_sd\\_all](https://www.sciencedirect.com/science/article/pii/S105381192500504X?dgcid=rss_sd_all)

## White matter hyperintensity-associated iron overload links glymphatic system dysfunction to cognitive impairment in cerebral small vessel disease

 1  
min

 28  
words

NEUROIMAGE

**Summary:**

Publication date: 1 November 2025

Source: NeuroImage, Volume 321

Author(s): Yage Qiu, Ying Hu, Weina Ding, Qingyang Fu, Wentao Hu, Yuanzheng Wang, Qun Xu, Yongming Dai, Yawen Sun, Yan Zhou




Read full article:

[https://www.sciencedirect.com/science/article/pii/S105381192500518X?dgcid=rss\\_sd\\_all](https://www.sciencedirect.com/science/article/pii/S105381192500518X?dgcid=rss_sd_all)

## As apparent as real: alpha and beta bands desynchronization unveils apparent motion perception dynamics

 1  
min

 27  
words

NEUROIMAGE

**Summary:**

Publication date: 1 November 2025

Source: NeuroImage, Volume 321

Author(s): Marcella Romeo, Francesca Genovese, Monica Betta, Alice Rossi Sebastiano, Lorenzo Teresi, Nicoletta Scanferlato, Corrado Sinigaglia, Emiliano Ricciardi, Francesca Garbarini




Read full article:

[https://www.sciencedirect.com/science/article/pii/S1053811925005075?dgcid=rss\\_sd\\_all](https://www.sciencedirect.com/science/article/pii/S1053811925005075?dgcid=rss_sd_all)

## The intrinsic connectivity between the default mode and dorsal attention networks is an independent fMRI biomarker of Alzheimer's disease pathology burden

 1  
min

 17  
words

NEUROIMAGE

**Summary:**

Publication date: 1 November 2025

Source: NeuroImage, Volume 321

Author(s): Diego-Martin Lombardo, Christian F Beckmann, Alzheimer's Disease Neuroimaging Initiative




Read full article:

[https://www.sciencedirect.com/science/article/pii/S1053811925005129?dgcid=rss\\_sd\\_all](https://www.sciencedirect.com/science/article/pii/S1053811925005129?dgcid=rss_sd_all)

## Brain-wide patterns of oscillatory amplitudes represent naturalistic behavior

 1  
min

 12  
words

NEUROIMAGE

**Summary:**

Publication date: 1 November 2025

Source: NeuroImage, Volume 321


Author(s): Duho Sihn, Sung-Phil Kim




Read full article:


[https://www.sciencedirect.com/science/article/pii/S1053811925005245?dgcid=rss\\_sd\\_all](https://www.sciencedirect.com/science/article/pii/S1053811925005245?dgcid=rss_sd_all)

## BDNF-induced axonal mTOR activation promotes Rab5 translation, axonal transport, and CREB phosphorylation in cortical neurons.

 Tiburcio-Felix, R., Tapia- Peralta, C., Arriagada, G., Perlson, E., Bronfman, F. C.


 2025-10-15

 1 min

 204 words


BIORXIV NEUROSCIENCE



**Summary:** Neuronal plasticity, essential for learning and memory, involves structural changes triggered by neurotrophic factors such as brain-derived neurotrophic factor (BDNF). BDNF activates its receptor, TrkB, to induce local and long-distance signaling, promoting dendritic branching. While BDNF activation...


 Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.14.682461v1?rss=1>

## Hunger Recruits a Parallel Circuit Encoding Alcohol Reward

 Nunez, K. M., Sherer, L. M., Walley, A., Salamon, S., Chan, V. M., Talay, M., Barnea, G., Kaun, K. R.

 2025-10-15  1 min

 177 words


BIORXIV NEUROSCIENCE

**Summary:** Internal states like hunger, pain, thirst and arousal can bias behavior by affecting sensory and memory processing. Internal states are critical to understand in the context of alcohol addiction because they influence cravings, reinstatement, and relapse. Norepinephrine plays a key role in both hung...

 Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.14.682140v1?rss=1>

## Psilocybin exerts differential effects on social behaviour and inflammation in mice in contexts of activity-based anorexia (ABA)

 Shadani, S., Greaves, E., Andrews, Z. B., Foldi, C. J.

 17

2025-10-15




1 min



246 words


BIORXIV NEUROSCIENCE

**Summary:** Psychedelics, particularly psilocybin, have shown therapeutic potential across several psychiatric conditions, including depression, anxiety, obsessive-compulsive disorder, and anorexia nervosa (AN). These disorders often share social deficits that may be effectively alleviated by psychedelics consi...

 Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.14.682467v1?rss=1>

## Generalisation between motor and declarative memory sequences: A conceptual replication of Mosha & Robertson (2016)

 Thong, S., Hendrikse, J., Chong, T. T.- J., Coxon, J.

 17

2025-10-15



1 min



142 words


BIORXIV NEUROSCIENCE

**Summary:** Motor and declarative memory systems have been traditionally considered distinct. However, a study by Mosha and Robertson (2016) reported striking evidence of generalisation between motor and declarative learning. Specifically, learning improved if the current task (e.g. motor sequence) shared the s...

 Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.15.682521v1?rss=1>

## Drift-diffusion dynamics of the hippocampal replay

 Wu, Z., Wei, X.-  
X.

 17

2025-10-15



1  
min



221  
words


BIORXIV NEUROSCIENCE

**Summary:** Replay activities in the hippocampus and other brain regions during sharp-wave ripples (SWRs) are thought to play important roles in learning, memory, and planning. Surprisingly, the question of how to characterize the dynamical structure of replay remains controversial. Standard methods rely on res...

 Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.14.682470v1?rss=1>

## Generation of synthetic TSPO PET maps from structural MRI images

 Marco L.  
Loggia

 17

2025-09-08



1  
min



250  
words




FRONTIERS NEUROINFORMATICS

**Summary:** IntroductionNeuroinflammation, a pathophysiological process involved in numerous disorders, is typically imaged using [11C]PBR28 (or TSPO) PET. However, this technique is limited by high costs and ionizing radiation, restricting its widespread clinical use. MRI, a more accessible alternative, is com...

 Read full article:

<https://www.frontiersin.org/articles/10.3389/fninf.2025.1633273>

## I am sorry, but everyone is getting syntax highlighting wrong

 2025-10-15  1 min  2 words

HACKER NEWS


**Summary:** [Comments](https://news.ycombinator.com/item?id=45596960)



Read full article:

<https://tonsky.me/blog/syntax-highlighting/>

## Recursive Language Models (RLMs)

 talhof8  2025-10-15  1 min  13 words

HACKER NEWS

**Summary:**

Article URL: <https://alexzhang13.github.io/blog/2025/r1m/>

Comments URL: <https://news.ycombinator.com/item?id=45596059>

Points: 13

# Comments: 2







Read full article:

<https://alexzhang13.github.io/blog/2025/r1m/>



## I am sorry, but everyone is getting syntax highlighting wrong

 robenkleene  2025-10-15  1 min  13 words

HACKER NEWS

**Summary:**

Article URL: <https://tonsky.me/blog/syntax-highlighting/>





Comments URL: <https://news.ycombinator.com/item?id=45596960>

Points: 54

# Comments: 27

 Read full article:  
<https://tonsky.me/blog/syntax-highlighting/>

## Transcranial direct current stimulation (tDCS): A new, (still) legal form of "neurodoping" in sports?

 James Chmiel  2025-10-13  1 min  64 words

TDCS TACS TRNS

**Summary:** Transcranial direct current stimulation (tDCS) has emerged as a widely accessible, noninvasive technique capable of modulating cortical excitability. A rapidly expanding body of sports-science literature suggests that it can produce modest but measurable gains in endurance, strength, skill acquisiti...

 Read full article:  
[https://pubmed.ncbi.nlm.nih.gov/41078301/?utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015153803&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41078301/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015153803&v=2.18.0.post9+e462414)

## Effects of transcranial direct current stimulation on neuro electrical activity in mice with migraine



Jianliang  
Wu



2025-10-13



1  
min



47  
words

TDCS TACS TRNS

**Summary:** CONCLUSION: These results establish that low-intensity tDCS ameliorates migraine pathophysiology through dual mechanisms:  $\theta$ -band synchronization mediating behavioral normalization and  $\gamma$ -band desynchronization reducing neural noise. The  $\delta/\theta$  power reconfiguration implicates thalamocortical rhythm stab...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41079350/?](https://pubmed.ncbi.nlm.nih.gov/41079350/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015153803&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015153803&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41079350/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015153803&v=2.18.0.post9+e462414)

## Transcranial direct current stimulation modulates primate brain dynamics across states of consciousness



Béchir  
Jarraya



2025-10-13



1  
min



63  
words

TDCS TACS TRNS

**Summary:** The resting primate brain is traversed by spontaneous functional connectivity patterns that show striking differences between conscious and unconscious states. Transcranial direct current stimulation (tDCS), a non-invasive neuromodulatory technique, can improve signs of consciousness in disorders of...






Read full article:


[https://pubmed.ncbi.nlm.nih.gov/41081761/?](https://pubmed.ncbi.nlm.nih.gov/41081761/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015153803&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015153803&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41081761/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015153803&v=2.18.0.post9+e462414)

## High-definition Transcranial Direct Current Stimulation over Right Dorsolateral Prefrontal Cortex to Enhance Metacognitive Sensitivity


 Jialu  
Qin

 17 2025-10-13  1  
min

 69  
words

TDCS TACS TRNS

**Summary:** In human-AI collaboration, task delegation is a critical component. Ideally, if a person believes they are capable of completing a task, they should do so themselves; otherwise, the task should be delegated to the other party. Such delegation decisions are influenced by individuals' assessments of t...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41082455/?](https://pubmed.ncbi.nlm.nih.gov/41082455/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015153803&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015153803&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41082455/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015153803&v=2.18.0.post9+e462414)

## Dose-Dependent Enhancement of Coordination through Multibrain Transcranial Stimulation: A fNIRS Hyperscanning Study

 Shengjun Wu

 17 2025-10-13

 1 min

 67 words

TDCS TACS TRNS

**Summary:** Coordination serves as a fundamental driving force in the evolution of human society, and transcranial electrical stimulation (tES) is increasingly recognized for its ability to modulate human coordination. However, the neural mechanisms underlying coordination and whether tES positively influences ...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41083052/?](https://pubmed.ncbi.nlm.nih.gov/41083052/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015153803&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015153803&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41083052/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015153803&v=2.18.0.post9+e462414)

## Advances on transcranial electromagnetic stimulation in improving non-motor symptoms of Parkinson's disease

 C F Liu

 17 2025-10-13

 1 min

 1 words

TDCS TACS TRNS

**Summary:** tDCS rTMS  
tDCS rTMS .

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41083398/?](https://pubmed.ncbi.nlm.nih.gov/41083398/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015153803&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015153803&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41083398/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015153803&v=2.18.0.post9+e462414)

## Modification of inhibitory control and craving through transcranial direct current stimulation as an add-on treatment for substance use disorder: protocol for a randomized controlled study



Sarah  
Gerhardt



2025-10-14



1  
min



68  
words

TDCS TACS TRNS

**Summary:** BACKGROUND: Substance use disorders (SUDs) remain a prevalent public health issue characterized by a substantial disease burden and high relapse rates. The aim of this planned project is to investigate the optimal electrode placement and polarity of transcranial direct current stimulation (tDCS) to ...





Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41084082/?](https://pubmed.ncbi.nlm.nih.gov/41084082/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015153803&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015153803&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41084082/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015153803&v=2.18.0.post9+e462414)

## Heartbeat perception is causally linked to frontal delta oscillations

 Surjo R  
Soekadar

 2025-10-14

 1  
min

 71  
words

TDCS TACS TRNS

**Summary:** The ability to accurately perceive one's own bodily signals, such as the heartbeat, plays a vital role in physical and mental health. However, the neurophysiological mechanisms underlying this ability, termed interoception, are not fully understood. Converging evidence suggests that cardiac rhythms ...

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41087675/?](https://pubmed.ncbi.nlm.nih.gov/41087675/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015153803&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015153803&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41087675/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015153803&v=2.18.0.post9+e462414)

# High-Definition Transcranial Direct Current Stimulation Improves Pain Empathy: A Randomized, Double-Blind, and Sham-Controlled Study Based on Event-Related Potentials (ERPs)

 Yuling  
Wang

 17

2025-10-15




1  
min



69  
words

TDCS TACS TRNS

**Summary:** The impact of transcranial direct current stimulation (tDCS) on pain empathy is a subject of debate and controversy. The variations in the results could be attributed to differences in the stimulus parameters. This study aimed to examine the impact of high-definition transcranial direct current stim...

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41089305/?](https://pubmed.ncbi.nlm.nih.gov/41089305/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015153803&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015153803&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089305/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015153803&v=2.18.0.post9+e462414)

## Effectiveness of Transcranial Direct Current Stimulation on Cognitive Function: A Pilot Study



Alireza Akbarzade  
Baghban



2025-10-15



1  
min



68  
words

TDCS TACS TRNS

**Summary:** CONCLUSION: The findings suggest that employing tDCS techniques plays a pivotal role in enhancing specific executive functions, such as working memory, problem-solving, and planning, in patients with traumatic brain injuries. tDCS can be considered a complementary treatment option in the rehabilitat...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41089630/?](https://pubmed.ncbi.nlm.nih.gov/41089630/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015153803&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015153803&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089630/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015153803&v=2.18.0.post9+e462414)

## Show HN: Specific (YC F25) – Build backends with specifications instead of code



fabianlindfors



2025-10-15



1  
min



280  
words

HACKER NEWS

**Summary:** <p>Hi folks! Iman and I (Fabian) have been building Specific for a while now and are finally opening up our public beta.<p>Specific is a platform for building backend APIs and services entirely through natural-language specifications and tests, without writing code. We then automatically turn your s...





Read full article:

<https://specific.dev/>



## A multimodal brain phantom for noninvasive neuromodulation

 Larocco,  
J.

 2025-10-15

 1  
min

 229  
words


BIORXIV NEUROSCIENCE

**Summary:** Noninvasive neuromodulation enables brain stimulation without surgery but requires precise optimization of stimulation parameters to ensure efficacy and safety. Direct testing on human or animal subjects is costly, time intensive, and constrained by ethical and safety considerations. To address thes...

 Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.13.682205v1?rss=1>

## Transcriptional impacts of substance use disorder and HIV on human ventral midbrain neurons and microglia

 2025-10-14

 1  
min

 0  
words

NATURE NEUROSCIENCE SUBJECTS

 Read full article:

<https://www.nature.com/articles/s41467-025-64193-5>

## The impact of CSF-filled cavities on scalp EEG and its implications



Maria Carla  
Piastra



2024-06-14



1  
min



64  
words

OOSTENVELD ROBERT

**Summary:** Previous studies have found electroencephalogram (EEG) amplitude and scalp topography differences between neurotypical and neurological/neurosurgical groups, being interpreted at the cognitive level. However, these comparisons are invariably accompanied by anatomical changes. Critical to EEG are the...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/38873838/?](https://pubmed.ncbi.nlm.nih.gov/38873838/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015151602&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015151602&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/38873838/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015151602&v=2.18.0.post9+e462414)

## Motion-BIDS: an extension to the brain imaging data structure to organize motion data for reproducible research



Julius  
Welzel



2024-07-02



1  
min



72  
words

OOSTENVELD ROBERT

**Summary:** We present an extension to the Brain Imaging Data Structure (BIDS) for motion data. Motion data is frequently recorded alongside human brain imaging and electrophysiological data. The goal of Motion-BIDS is to make motion data interoperable across different laboratories and with other data modalities...






Read full article:


[https://pubmed.ncbi.nlm.nih.gov/38956071/?](https://pubmed.ncbi.nlm.nih.gov/38956071/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015151602&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015151602&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/38956071/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015151602&v=2.18.0.post9+e462414)


## One hundred years of EEG for brain and behaviour research

 Pedro Valdes-Sosa

 2024-08-22  1 min

 2 words


OOSTENVELD ROBERT



 Read full article:


[https://pubmed.ncbi.nlm.nih.gov/39174725/?](https://pubmed.ncbi.nlm.nih.gov/39174725/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxObIm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015151602&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxObIm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015151602&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/39174725/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxObIm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015151602&v=2.18.0.post9+e462414)

## Freezing of gait in Parkinson's disease is related to imbalanced stopping-related cortical activity


 Richard J A van Wezel

 2024-09-04  1 min

 65 words

OOSTENVELD ROBERT

**Summary:** Freezing of gait, characterized by involuntary interruptions of walking, is a debilitating motor symptom of Parkinson's disease that restricts people's autonomy. Previous brain imaging studies investigating the mechanisms underlying freezing were restricted to scan people in supine positions and yie...


 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/39229492/?](https://pubmed.ncbi.nlm.nih.gov/39229492/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxObIm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015151602&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxObIm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015151602&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/39229492/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxObIm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015151602&v=2.18.0.post9+e462414)

## The past, present, and future of the brain imaging data structure (BIDS)

 Krzysztof J  
Gorgolewski

 2024-09-23

 1  
min

 82  
words

OOSTENVELD ROBERT

**Summary:** The Brain Imaging Data Structure (BIDS) is a community-driven standard for the organization of data and metadata from a growing range of neuroscience modalities. This paper is meant as a history of how the standard has developed and grown over time. We outline the principles behind the project, the ...


 Read full article:

<https://pubmed.ncbi.nlm.nih.gov/39308505/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015151602&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/39308505/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015151602&v=2.18.0.post9+e462414)

## Human cortical high-gamma power scales with movement rate in healthy participants and stroke survivors

 Fanny  
Quandt


 2025-01-09

 1  
min

 65  
words

OOSTENVELD ROBERT


**Summary:** Motor cortical high-gamma oscillations (60-90 Hz) occur at movement onset and are spatially focused over the contralateral primary motor cortex. Although high-gamma oscillations are widely recognized for their significance in human motor control, their precise function on a cortical level remains el...


 Read full article:

<https://pubmed.ncbi.nlm.nih.gov/39786979/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015151602&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/39786979/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015151602&v=2.18.0.post9+e462414)

## NIRS-BIDS: Brain Imaging Data Structure Extended to Near-Infrared Spectroscopy

 Luca  
Pollonini

 17 2025-01-27

 1  
min

 70  
words

OOSTENVELD ROBERT


**Summary:** Functional near-infrared spectroscopy (fNIRS) is an increasingly popular neuroimaging technique that measures cortical hemodynamic activity in a non-invasive and portable fashion. Although the fNIRS community has been successful in disseminating open-source processing tools and a standard file forma...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/39870674/?](https://pubmed.ncbi.nlm.nih.gov/39870674/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015151602&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015151602&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/39870674/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015151602&v=2.18.0.post9+e462414)

## Pseudonymisation of neuroimages and data protection: Increasing access to data while retaining scientific utility

 Lyuba  
Zehl

 17 2025-06-26

 1  
min

 67  
words

OOSTENVELD ROBERT


**Summary:** For a number of years, facial features removal techniques such as 'defacing', 'skull stripping' and 'face masking/blurring', were considered adequate privacy preserving tools to openly share brain images. Scientifically, these measures were already a compromise between data protection requirements a...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/40568426/?](https://pubmed.ncbi.nlm.nih.gov/40568426/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015151602&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015151602&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40568426/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015151602&v=2.18.0.post9+e462414)

## Cycling on the Freeway: The perilous state of open-source neuroscience software

 Tim M  
Tierney

 17 2025-08-13

 1  
min

 74  
words

OOSTENVELD ROBERT


**Summary:** Most scientists need software to perform their research (Barker et al., 2020;Carver et al., 2022;Hettrick, 2014;Hettrick et al., 2014;Switters & Osimo, 2019), and neuroscientists are no exception. Whether we work with reaction times, electrophysiological signals, or magnetic resonance imaging data, ...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/40800958/?](https://pubmed.ncbi.nlm.nih.gov/40800958/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015151602&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015151602&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40800958/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015151602&v=2.18.0.post9+e462414)

## Optimal configuration of on-scalp OPMs with fixed channel counts

 Robert  
Oostenveld

 17 2025-08-13

 1  
min

 69  
words

OOSTENVELD ROBERT




**Summary:** Recent technological developments have brought optically pumped magnetometers (OPMs) within reach of the larger neuroscientific community. The current state-of-the-art consists of whole-head systems that measure the magnetic field at >100 locations. OPM sensors can be constructed to measure the fiel...

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/40800964/?](https://pubmed.ncbi.nlm.nih.gov/40800964/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015151602&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015151602&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40800964/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015151602&v=2.18.0.post9+e462414)

## Things I've learned in my 7 Years Implementing AI

 2025-10-15  1 min  2 words

HACKER NEWS





**Summary:** [Comments](https://news.ycombinator.com/item?id=45596602)



Read full article:

<https://www.jampa.dev/p/lms-and-the-lessons-we-still-havent>

## US Passport Power Falls to Historic Low

 saubeidl  2025-10-15  1 min  13 words

HACKER NEWS

**Summary:**

Article URL: <https://www.henleyglobal.com/newsroom/press-releases/henley-global-mobility-report-oct-2025>


Comments URL: [https://n...](https://news.ycombinator.com/item?id=45595746)



Read full article:

<https://www.henleyglobal.com/newsroom/press-releases/henley-global-mobility-report-oct-2025>

## Things I've learned in my 7 Years Implementing AI

 jampa  2025-10-15  1 min  13 words

HACKER NEWS

**Summary:**

Article URL: <https://www.jampa.dev/p/lms-and-the-lessons-we-still-havent>

Comments URL: <https://news.ycombinator.com/item?id=45596602>





Points: 18

...

 Read full article:

<https://www.jampa.dev/p/lms-and-the-lessons-we-still-havent>

## IEEE Brain Annual Flagship Workshop a Success

 ieeebrain  2025-03-03  1 min  61 words

BRAIN





**Summary:** IEEE Brain once again hosted the IEEE Brain Discovery and Neurotechnology Workshop as a satellite event to the 2024 Society of Neuroscience Workshop (SfN). Approximately 180 attended the two-day event, which was held at the University of Illinois Chicago (UIC), October 3-4, 2024 (Figure 1). Groundbr...

 Read full article:

<https://brain.ieee.org/braininsight-articles/ieee-brain-annual-flagship-workshop-a-success/>



## IEEE Brain Workshop on AI for Neurotechnology






 ieeebrain  2025-03-03  1 min  61 words 

**Summary:** The IEEE Brain Workshop on AI for Neurotechnology was held on June 30, 2024, at the Pacifico Yokohama Conference Center in Japan. This event was part of the World Congress on Computational Intelligence (WCCI 2024) and was conducted in association with the International Joint Conference on Neural Net...

 Read full article:

<https://brain.ieee.org/braininsight-articles/ieee-brain-workshop-on-ai-for-neurotechnology/>

## Call for Papers: IEEE Brain Special Issue






 ieeebrain  2025-03-03  1 min  36 words 

**Summary:** In a unique interdisciplinary collaboration with the IEEE's Society on Social Implications of Technology (SSIT) and IEEE Brain, J-FLEX is joining forces to explore both the technology of the Internet-of-Medical-Things (IoMT) solutions and medical wearables/implantables. &#160;


 Read full article:

<https://brain.ieee.org/braininsight-articles/ieee-journal-on-flexible-electronics/>

## IEEE Brain Joins the American Brain Coalition





 ieeebrian  2025-03-03  1 min  61 words 

**Summary:** IEEE Brain is pleased to announce its acceptance as a nonprofit member of the American Brain Coalition (ABC), a prestigious alliance of over 150 organizations dedicated to advancing brain research, advocacy, and improving treatments for individuals affected by brain conditions. The ABC Board has ent...


 **Read full article:**

<https://brain.ieee.org/braininsight-articles/ieee-brain-joins-the-american-brain-coalition-as-a-nonprofit-member/>

## Call for Papers: IEEE Transactions on Human-Machine Systems




 Adriel Carridice  2025-06-18  1 min  61 words 

**Summary:** Special Issue on Brain Discovery and Neurotechnology: Featured Research from 2024 IEEE Brain Discovery & Neurotechnology Workshop & This special issue is motivated by the success of the IEEE Brain Discovery and Neurotechnology Workshop held in October 2024. This annual workshop is sponsore...

 **Read full article:**

<https://brain.ieee.org/braininsight-articles/call-for-papers-ieee-transactions-on-human-machine-systems/>

## Evaluation on Human Perception of Various Vibrotactile Encoding Methods Through a High Density Haptic Feedback Interface

 2025-05-09  1 min  197 words




TRANSACTIONS HAPTICS

**Summary:** High density (HD) haptic interfaces have become increasingly common for entertainment thanks to advancements in virtual reality technology, however their flexibility may make them a useful sensory substitution interface for motor rehabilitation. Yet little research has explored how users interpret d...

 Read full article:

<http://ieeexplore.ieee.org/document/10994678>

## Enhancing Video Experiences for DHH Individuals Through Sound-Inspired Motion Caption-Based Spatiotemporal Tacton

 2025-04-01  1 min  146 words


TRANSACTIONS HAPTICS


**Summary:** When deaf and hard of hearing (DHH) individuals watch videos, captions are essential for them to understand the linguistic content. Current captions, however, are not suitable for conveying non-verbal sound information, such as background music, sound effects, or speech nuances. In this paper, we de...

 Read full article:


<http://ieeexplore.ieee.org/document/10946856>

## Call for 2025 Society Awards Nominations

 Deidre  
Artis

 17 2025-02-03

 1  
min

 15  
words


EMBS


**Summary:** <p>The post <a href="https://www.embs.org/awards/society-awards/#new\_tab">Call for 2025 Society Awards Nominations</a> appeared first on <a href="https://www.embs.org">IEEE EMBS</a>.</p>

 Read full article:

[https://www.embs.org/awards/society-awards/#new\\_tab](https://www.embs.org/awards/society-awards/#new_tab)

## Bridging Biotech: Regional shifts and patterns

 dziura

 17 2025-02-05

 1  
min

 15  
words


EMBS



**Summary:** <p>The post <a href="https://www.embs.org/blog-post/regional-shifts-and-patterns/">Bridging Biotech: Regional shifts and patterns</a> appeared first on <a href="https://www.embs.org">IEEE EMBS</a>.</p>


 Read full article:

<https://www.embs.org/blog-post/regional-shifts-and-patterns/>

## Welcoming Dr. Ana Kyani as the New Women in Biomedical Engineering Chair for IEEE EMBS

 Nancy  
Zimmerman

 2025-03-27  1  
min

 24  
words

EMBS


**Summary:**



The post [Welcoming Dr. Ana Kyani as the New Women in Biomedical Engineering Chair for IEEE EMBS](https://www.embs.org/blog-post/welcoming-dr-ana-kyani-as-wibme-chair-ieee-embs/) appeared first on [IEEE EMBS](https://www.embs.org).


 Read full article:

<https://www.embs.org/blog-post/welcoming-dr-ana-kyani-as-wibme-chair-ieee-embs/>

## Ivan Lee, Appointed Editor-in-Chief of EMBC Proceedings

 Nancy  
Zimmerman

 2025-09-08  1  
min

 17  
words

EMBS

**Summary:**


The post [Ivan Lee, Appointed Editor-in-Chief of EMBC Proceedings](https://www.embs.org/press/embc-eic-sunghoon-ivan-lee/#new_tab) appeared first on [IEEE EMBS](https://www.embs.org).

 Read full article:

[https://www.embs.org/press/embc-eic-sunghoon-ivan-lee/#new\\_tab](https://www.embs.org/press/embc-eic-sunghoon-ivan-lee/#new_tab)

## LncRNA HOXA-AS3 drives glioma progression through miR-542-5p-Mediated regulation of HOXA1 and WNT5A signaling

 1  
min

 23  
words

BRAIN RESEARCH

**Summary:**

Publication date: 15 November 2025

Source: Brain Research, Volume 1867

Author(s): Lianxu Cui, Ruiyu He, Haomin Li, Siwei Peng, Meiru Zhang, Zhanchuan Ma, Zaiyu Li



Read full article:

[https://www.sciencedirect.com/science/article/pii/S0006899325005153?dgcid=rss\\_sd\\_all](https://www.sciencedirect.com/science/article/pii/S0006899325005153?dgcid=rss_sd_all)

## Photobiomodulation in stroke prevention and treatment: neuroprotective mechanisms and therapeutic challenges

 1  
min

 19  
words

BRAIN RESEARCH

**Summary:**

Publication date: 1 December 2025

Source: Brain Research, Volume 1868

Author(s): Yuecheng Li, Lei Zhang, Jiaqiang Lin, Luodan Yang, Rui Duan



Read full article:

[https://www.sciencedirect.com/science/article/pii/S000689932500544X?dgcid=rss\\_sd\\_all](https://www.sciencedirect.com/science/article/pii/S000689932500544X?dgcid=rss_sd_all)

## Temporal visual processing deficits in post concussion syndrome

 2025-10-15  1 min  0 words

NATURE NEUROSCIENCE SUBJECTS



Read full article:

<https://www.nature.com/articles/s41598-025-24029-0>

## How emotional memories are engraved on the brain, with surprising helper cells

 2025-10-15  1 min  0 words

NATURE NEUROSCIENCE SUBJECTS



Read full article:

<https://www.nature.com/articles/d41586-025-03366-0>

## Alterations of the amygdala in post-COVID olfactory dysfunction

 2025-10-15  1 min  0 words




NATURE NEUROSCIENCE SUBJECTS



Read full article:

<https://www.nature.com/articles/s41598-025-23015-w>

## Persistent open chromatin state in early-life stress-activated cells of the VTA


 2025-10-15  1 min  0 words

NATURE NEUROSCIENCE SUBJECTS

 Read full article:

<https://www.nature.com/articles/s41598-025-21157-5>

## The astrocytic ensemble acts as a multiday trace to stabilize memory

 2025-10-15  1 min  0 words


NATURE NEUROSCIENCE SUBJECTS


 Read full article:

<https://www.nature.com/articles/s41586-025-09619-2>




## Gradient Porous Flexible Pressure Sensors with the Relay Effect for High-Accuracy Braille-to-Speech Recognition

 Jianming  
Xu

 17 2025-08-25

 1  
min

 62  
words

**BRAILLE**


**Summary:** The development of highly sensitive, wide linear-range flexible pressure sensors is crucial for practical applications in human-computer interaction, physiological signal detection, and motion monitoring. However, traditional flexible pressure sensors often suffer from limited compressibility in the...


 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/40854103/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015145212&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40854103/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015145212&v=2.18.0.post9+e462414)

## Individual and community level factors influencing modern contraceptive use among women of reproductive age in South Africa: a multilevel analysis

 Million  
Phiri

 17 2025-08-26

 1  
min

 46  
words

**BRAILLE**


**Summary:** CONCLUSION: Sensory disability status influenced women's contraceptive behaviour in South Africa. Current family planning interventions should target women with sensory disabilities by prioritising accessible communication methods (e.g., braille, sign language), disability awareness training for hea...



 **Read full article:**


<https://pubmed.ncbi.nlm.nih.gov/40855574/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015145212&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40855574/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015145212&v=2.18.0.post9+e462414)

## Explosion-powered eversible tactile displays

 Robert F  
Shepherd

 2025-08-27  1  
min

 64  
words

**BRAILLE**


**Summary:** High-resolution electronic tactile displays stand to transform haptics for remote machine operation, virtual reality, and digital information access for people who are blind or visually impaired. Yet, increasing the resolution of these displays requires increasing the number of individually addressa...



 **Read full article:**


<https://pubmed.ncbi.nlm.nih.gov/40864730/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015145212&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40864730/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015145212&v=2.18.0.post9+e462414)

## A Biomimetic Fiber-Entangled Permeable Electronic Skin for Strain-Insensitive and High-Resolution Tactile Sensing

 Zhijun  
Ma

 2025-08-28  1  
min

 57  
words

**BRAILLE**


**Summary:** Electronic skins (e-skins) incorporating island architectures represent a promising platform for strain-insensitive tactile sensing by mechanically decoupling sensing units from deformations. However, conventional island designs encounter stress concentration issues caused by inherent modulus mismat...


 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/40874468/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015145212&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40874468/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015145212&v=2.18.0.post9+e462414)

## High-Density Tactile Sensor Array for Sub-Millimeter Texture Recognition

 Min  
Zhang

 17 2025-08-28

 1  
min

 64  
words

**BRAILLE**

**Summary:** High-density tactile sensor arrays that replicate human touch could restore texture perception in paralyzed individuals. However, conventional tactile sensor arrays face inherent trade-offs between spatial resolution, sensitivity, and crosstalk suppression due to microstructure size limitations and ...

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/40871941/?](https://pubmed.ncbi.nlm.nih.gov/40871941/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015145212&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015145212&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40871941/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015145212&v=2.18.0.post9+e462414)

## A Diachronic Investigation of the Change in Form and Formational-Semantic Systematicity of the Chinese Sign Language Lexicon

 Hao  
Lin

 17 2025-09-01

 1  
min

 72  
words

**BRAILLE**

**Summary:** It has been argued in previous research that several competing pressures guide the directions of language evolution (economy vs. redundancy; arbitrariness vs. systematicity). For sign languages, however, the effects of competing pressures on their change of lexical systems remain largely unclear. In...

 **Read full article:**

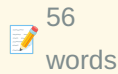
[https://pubmed.ncbi.nlm.nih.gov/40889233/?](https://pubmed.ncbi.nlm.nih.gov/40889233/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015145212&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015145212&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40889233/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015145212&v=2.18.0.post9+e462414)

## Wireless Electrotactile System with Hydrogel-Based Electrodes for Conformal Tactile Interaction

Ji  
Liu

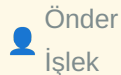
2025-09-02


[BRAILLE](#)

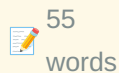
**Summary:** A wireless epidermal electrotactile interface is demonstrated through integration of skin-conformal electrodes and flexible circuitry, addressing existing limitations in haptic technology caused by mechanical mismatch and system-level integration challenges. This electrotactile system achieves low s...


[Read full article:](#)
<https://pubmed.ncbi.nlm.nih.gov/40891563/?>
[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8IvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015145212&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40891563/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8IvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015145212&v=2.18.0.post9+e462414)

## Beyond access: rethinking assistive technology for individuals with visual impairments in Türkiye

Önder  
İşlek


2025-09-12




[BRAILLE](#)


**Summary:** CONCLUSION: Despite demonstrating adaptability, individuals with VI in Türkiye face significant structural barriers to equitable AT access. Informal learning limited public support, and a lack of locally adapted tools contribute to digital exclusion. A rights-based approach-emphasizing inclusive fun...


[Read full article:](#)
<https://pubmed.ncbi.nlm.nih.gov/40937808/?>
[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8IvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015145212&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40937808/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8IvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015145212&v=2.18.0.post9+e462414)

## High prevalence of bacterial STI, anal HPV, cytological abnormalities and anal lesions among MSM in Togo, 2021: a baseline analysis of the ANRS I MIE 12,400/DepIST-H cohort


 Didier K  
Ekouevi

 2025-09-27  1  
min

 42  
words


**BRAILLE**


**Summary:** CONCLUSIONS: These findings emphasize the high prevalence of STIs among MSM and confirm the unusual distribution of HPV types in West Africa, with HPV35 being highly prevalent. A national strategy regarding STI screening and HPV vaccination in this key population is needed.

 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/41013315/?utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015145212&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41013315/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015145212&v=2.18.0.post9+e462414)

## Development and Assessment of a Novel Audiosensory Performance Method for Improving the Oral Health of Visually Impaired Children

 Divya Singh


 2025-10-03

 1 min

 73 words

**BRAILLE**

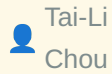
**Summary:** This study evaluated the effectiveness of an audiosensory performance method in enhancing oral health knowledge and status among visually impaired children aged 6-12 years in the National Capital Region (NCR), Delhi. An interventional study design was used, involving 251 participants equally divided...

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41041413/?](https://pubmed.ncbi.nlm.nih.gov/41041413/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015145212&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015145212&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41041413/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015145212&v=2.18.0.post9+e462414)

## Developmental changes in phonological awareness in Chinese-English bilingual children: An fNIRS longitudinal study



Tai-Li  
Chou



2025-10-11



1  
min



70  
words

**FNIRS**

**Summary:** Learning to read triggers a cascade of changes in children's minds and brains, changes that lead to the formation of the "reading brain". Importantly, the developmental trajectory of these changes differs across languages. The development of phonological literacy skills comes first for learners of a...



**Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41076038/?](https://pubmed.ncbi.nlm.nih.gov/41076038/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015145124&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015145124&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41076038/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015145124&v=2.18.0.post9+e462414)

## Sensitivity Analysis of the Balloon Model Parameters in Functional Near-Infrared Spectroscopy Simulation



Murad  
Althobaiti



2025-10-11



1  
min



43  
words

**FNIRS**

**Summary:** CONCLUSIONS: The fNIRS hemodynamic response is highly sensitive to the Balloon model's  $\alpha$  and  $\tau$  parameters. These findings highlight the importance of accounting for physiological variability in fNIRS analysis and provide a robust framework for generating synthetic data to test signal processing algo...





**Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41076093/?](https://pubmed.ncbi.nlm.nih.gov/41076093/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015145124&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015145124&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41076093/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015145124&v=2.18.0.post9+e462414)

## Machine learning assessment of cognitive reserve using functional near-infrared spectroscopy in older adults with cognitive frailty

 Zheng  
Li

 2025-10-11

 1  
min

 59  
words

**FNIRS**


**Summary:** Cognitive reserve mitigates aging-related cognitive decline and frailty, yet current assessments lack neurobiological specificity. We aimed to develop a noninvasive, functional near infrared spectroscopy (fNIRS)-based machine learning model to classify cognitive reserve levels in older adults with c...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41076505/?](https://pubmed.ncbi.nlm.nih.gov/41076505/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015145124&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015145124&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41076505/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015145124&v=2.18.0.post9+e462414)

## Exploring age and hemispheric differences in cortical plasticity after iTBS using fNIRS

 Melanie  
Burke

 2025-10-12

 1  
min

 67  
words

**FNIRS**

**Summary:** Non-invasive brain stimulation applied to the prefrontal cortex (PFC) has been shown to improve cognitive outcomes in older adults with cognitive impairments (Miller et al., 2023). However, the differential impact of left versus right dorsolateral prefrontal cortex (DLPFC) stimulation on prefrontal ...


 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/41077115/?](https://pubmed.ncbi.nlm.nih.gov/41077115/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015145124&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015145124&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41077115/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015145124&v=2.18.0.post9+e462414)




## Single video games improve cognitive functioning in college students: evidence from behavioral and fNIRS assessments

 Shen  
Wang

 17 2025-10-13

 1  
min

 43  
words

**fNIRS**


**Summary:** CONCLUSIONS: Cognitively engaging video games can effectively enhance the cognitive abilities of male college students. The underlying mechanism may be closely related to the promotion of prefrontal lobe activation by video games, which in turn improves reflective ability, processing speed, and deci...


 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/41080773/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015145124&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41080773/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015145124&v=2.18.0.post9+e462414)

## Prefrontal activation in bipolar and unipolar depression patients in the letter fluency tasks and category fluency tasks: a functional near-infrared spectroscopy study

 Zhaohui  
Zhang

 17 2025-10-13

 1  
min

 46  
words

**fNIRS**

**Summary:** CONCLUSION: Our findings indicate that the LFT elicits more extensive prefrontal activation, with differential engagement of the VLPFC in BD compared to UD. These results suggest potential neuroimaging biomarkers for distinguishing between UD and BD, while also providing insights into the neural sub...

 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/41080778/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015145124&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41080778/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015145124&v=2.18.0.post9+e462414)

## Neural predictors of hidden, persistent psychological states at work



Matthew D  
Lieberman



2025-10-13



1  
min



69  
words

FNIRS

**Summary:** Common workplace challenges such as feeling overwhelmed, burned out, or disengaged often remain hidden due to fear of judgment or social norms, contributing to rising mental health crises and organizational dysfunction. This study presents a brain-based framework for predicting these hidden and pers...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41082670/?](https://pubmed.ncbi.nlm.nih.gov/41082670/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015145124&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015145124&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41082670/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015145124&v=2.18.0.post9+e462414)

## Dose-Dependent Enhancement of Coordination through Multibrain Transcranial Stimulation: A fNIRS Hyperscanning Study



Shengjun  
Wu



2025-10-13



1  
min



67  
words

FNIRS

**Summary:** Coordination serves as a fundamental driving force in the evolution of human society, and transcranial electrical stimulation (tES) is increasingly recognized for its ability to modulate human coordination. However, the neural mechanisms underlying coordination and whether tES positively influences ...




Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41083052/?](https://pubmed.ncbi.nlm.nih.gov/41083052/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015145124&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015145124&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41083052/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015145124&v=2.18.0.post9+e462414)

## Functional connectivity in whole-brain and network analysis differentiates minimally conscious from unresponsive patients: a resting-state fNIRS study

 Liying  
Zhang



2025-10-15



1  
min



24  
words

**fNIRS**

**Summary:** CONCLUSION: fNIRS could effectively detect abnormal brain network functional connectivity in DOC patients and could provide valuable insights for differentiating MCS and VS/UWS patients.



**Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41088235/?](https://pubmed.ncbi.nlm.nih.gov/41088235/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015145124&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015145124&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41088235/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015145124&v=2.18.0.post9+e462414)

## Predicting Individual Response to Acupuncture in Sensorineural Tinnitus Using Integrated Functional Near-Infrared Spectroscopy and Machine Learning: Protocol for a Model Development and Validation Study



Hantong  
Hu



2025-10-15



1  
min



63  
words

FNIRS

**Summary:** CONCLUSION: This study represents the first attempt to integrate fNIRS detection with machine learning techniques for predicting acupuncture efficacy in SNT treatment. The methodology addresses several key challenges in acupuncture research through comprehensive data collection and advanced analytic...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41089742/?](https://pubmed.ncbi.nlm.nih.gov/41089742/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015145124&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015145124&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089742/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015145124&v=2.18.0.post9+e462414)

## Implicit learning of melodic structure: A role for pitch?



2024-01-22



1  
min



180  
words

PSYCHOMUSICOLOGY




**Summary:** Growing evidence suggests that pitch influences musical processing, with melodic processing being enhanced in higher pitch ranges (e.g., Fujioka et al., 2005) and rhythmic processing being enhanced in lower pitches, and these effects may have a basis in elementary properties of the auditory system (...)



Read full article:

<http://doi.org/10.1037/pmu0000303>

## The sound of manufactured music: Reviewing the role of artificial stimuli in music cognition research.

 2024-01-22  1 min  259 words

PSYCHOMUSICOLOGY

**Summary:** Having participants listen and react to musical stimuli is one of music cognition's foundational methods. Whereas most researchers have used stimuli adapted from existing musical traditions in such work, others have incorporated artificial stimuli (i.e., stimuli generated specifically for research t...

 **Read full article:**  
<http://doi.org/10.1037/pmu0000304>

## Music-evoked nostalgia and charitable giving: A cross-cultural study in the United States and Mexico.




 2024-01-22  1 min  192 words

PSYCHOMUSICOLOGY

**Summary:** Nostalgia, a past-oriented emotion characterized by complex affective responses, is a pervasive and fundamental human experience. Prior research has demonstrated that nostalgia serves various socioemotional functions, such as promoting a sense of belonging, enhancing one's perception of meaning in l...

 **Read full article:**  
<http://doi.org/10.1037/pmu0000302>

## Preferred music listening does not affect cognitive inhibition in young and older adults.




 2023-10-12  1 min  227 words

PSYCHOMUSICOLOGY

**Summary:** Previous literature has found links between music listening and cognitive performance. Specifically, background music may play a role in modulating cognitive inhibition. However, determining what type of background music affects cognitive inhibition throughout the lifespan has not been studied. The ...

 **Read full article:**  
<http://doi.org/10.1037/pmu0000300>

## Absolute pitch: A literature review of underlying factors, with special regard to music pedagogy.

 2023-07-10  1 min  202 words

PSYCHOMUSICOLOGY

**Summary:** Absolute pitch (AP) is a fairly rare and special phenomenon that has relevance for musicology, psychology, genetics, and neuroscience. AP possessors are able to identify the pitch of an isolated sound or to produce that sound without a reference point. The authors' aim is to review the literature on...

 **Read full article:**  
<http://doi.org/10.1037/pmu0000298>

## Capturing coordination and intentionality in joint musical improvisation.

17

2023-08-03

1  
min217  
words

PSYCHOMUSICOLOGY

**Summary:** Humans collaborate with each other on a wide variety of tasks that are often largely improvised and unscripted. In this study, we investigated the dynamics of coordination in a joint musical improvisation task, what the effect of intentions is on coordination, and how musicians propagate these inten...



Read full article:

<http://doi.org/10.1037/pmu0000299>

## Early contingency information enhances human punishment sensitivity when punishment is frequent but not rare.

17

2025-07-10

1  
min155  
words

BEHAVIORAL NEUROSCIENCE




**Summary:** Individuals differ in sensitivity to the adverse consequences of their actions. We have shown that these differences can be linked to differences in correctly learning causal relationships between actions and their negative consequences. To further assess this, here we used a conditioned punishment ...



Read full article:

<http://doi.org/10.1037/bne0000627>

## Deep brain stimulation of nucleus basalis of meynert: Effect of stimulation mode and duration on learning in rat model of dementia.




 2025-06-09  1 min  273 words

BEHAVIORAL NEUROSCIENCE

**Summary:** Deep brain stimulation (DBS) of the nucleus basalis of Meynert (NBM) has been preliminarily investigated as a potential treatment for dementia. The degeneration of NBM cholinergic neurons is a pathological feature of many forms of dementia. Although NBM stimulation has been demonstrated to improve l...

 Read full article:  
<http://doi.org/10.1037/bne0000625>

## Clone-Wars: 100 open-source clones of popular sites

 2025-10-15  1 min  2 words



HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45596359)

 Read full article:  
<https://github.com/GorvGoyl/Clone-Wars>



## Clone-Wars: 100 open-source clones of popular sites

 ulrischa  2025-10-15  1 min  13 words

HACKER NEWS

**Summary:**

Article URL: <https://github.com/GorvGoyl/Clone-Wars>

Comments URL: <https://news.ycombinator.com/item?id=45596359>

Points: 3

# Comments: 0

 Read full article:  
<https://github.com/GorvGoyl/Clone-Wars>

## Area MT carries acceleration information in a quickly and directly decodable representation

 Chen, P.-S., Huk, A. C.  2025-10-15  1 min  246 words

BIORXIV NEUROSCIENCE

**Summary:** We sought to better understand the neural representation of visual motion acceleration. A straightforward estimation of acceleration would involve calculating the rate of change of velocity, which itself would be calculated from change in position over time. As it is well-established that neurons in...

 Read full article:  
<https://www.biorxiv.org/content/10.1101/2025.10.14.682245v1?rss=1>

## Alpha-synuclein fibrils induce budding of mitochondrial-derived vesicles



Braun, T., Tiberi, C., Reber, V., Ghosh, D., Riek, R., Serdiuk, T.



2025-10-15



1 min



171 words

BIORXIV NEUROSCIENCE

**Summary:** Alpha-synuclein aggregation is a hallmark of synucleinopathies, a class of neurodegenerative disorders such as Parkinson's disease (PD). Several lines of evidence indicate the involvement of mitochondria in the disease pathology. Despite extensive study, the link between alpha-synuclein aggregation ...



Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.13.682220v1?rss=1>

## Optic nerve regeneration requires the intracellular domain of LIFRa/CD118



Jiang, Q., Wang, C., Ren, Y., Duan, P., Tian, K., Duan, X., Cai, B., Xu, C., Li, J., Benowitz, L., Wang, N., Jiang, B., Xie, L.



2025-10-15



1 min



168 words

BIORXIV NEUROSCIENCE


**Summary:** Identifying cell-autonomous and non-autonomous factors that govern retinal ganglion cells' (RGCs) ability to extend axons is an important step in developing therapies to achieve recovery after optic nerve injury. Here we report that the intracellular domain of the leukemia inhibitory factor receptor...






Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.14.682231v1?rss=1>

## Deep Learning of Brain-Behavior Dimensions Identifies Transdiagnostic Biotypes in Youth with ADHD and Anxiety Disorders

 Jiao, Y., Tong, X., Fonzo, G. A., Gotlib, I. H., Pohl, K. M., Satterthwaite, T. D., Jiang, J., Zhang, Y.

 2025-10-15  1 min  191 words

BIORXIV NEUROSCIENCE

**Summary:** Attention-deficit/hyperactivity disorder and anxiety disorders are highly prevalent in youth and are characterized by substantial heterogeneity and frequent co-occurrence. This transdiagnostic complexity challenges conventional diagnostic frameworks that rely on symptom-based categories, which often...

 **Read full article:**

<https://www.biorxiv.org/content/10.1101/2025.10.13.682243v1?rss=1>

## Individualized connectomic tACS immediately improves oscillatory network with language facilitation in post-stroke aphasia: a feasibility study of a dysfunction-based targeting approach



Mehdi  
Bakhtiar



2025-09-04



1  
min



289  
words

FRONTIERS COMPUTATIONAL NEUROSCIENCE

**Summary:** IntroductionPeople with post-stroke aphasia (PSA) exhibit significant interindividual variability attributed to distinctive network disruption patterns across individuals. This complexity limits the effectiveness of conventional one-size-fits-all brain stimulation approaches, but to date no individu...



Read full article:

<https://www.frontiersin.org/articles/10.3389/fncom.2025.1635497>

## Statistical characterization of cortical–thalamic dynamics evoked by cortical stimulation in mice



Diana Nigrisoli, Simone Russo, Ruggero Freddi, Nicolas Seseri, Stefania Corti, Linda Ottoboni and  
Riccardo Barbieri



2025-10-07



1  
min



227  
words

JOURNAL NEURAL ENGINEERING

**Summary:** Objective. Statistical models are powerful tools for describing biological phenomena such as neuronal spiking activity. Although these models have been widely used to study spontaneous and stimulated neuronal activity, they have not yet been applied to analyze responses to electrical cortical stimul...



Read full article:

<http://iopscience.iop.org/article/10.1088/1741-2552/ae0966>

## The impact of CSF-filled cavities on scalp EEG and its implications



Maria Carla  
Piastra



2024-06-14



1  
min



64  
words

OOSTENVELD ROBERT

**Summary:** Previous studies have found electroencephalogram (EEG) amplitude and scalp topography differences between neurotypical and neurological/neurosurgical groups, being interpreted at the cognitive level. However, these comparisons are invariably accompanied by anatomical changes. Critical to EEG are the...



Read full article:

<https://pubmed.ncbi.nlm.nih.gov/38873838/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015143031&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/38873838/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015143031&v=2.18.0.post9+e462414)

## Motion-BIDS: an extension to the brain imaging data structure to organize motion data for reproducible research

 Julius  
Welzel



2024-07-02


1  
min72  
words

OOSTENVELD ROBERT

**Summary:** We present an extension to the Brain Imaging Data Structure (BIDS) for motion data. Motion data is frequently recorded alongside human brain imaging and electrophysiological data. The goal of Motion-BIDS is to make motion data interoperable across different laboratories and with other data modalities...

**Read full article:**[https://pubmed.ncbi.nlm.nih.gov/38956071/?](https://pubmed.ncbi.nlm.nih.gov/38956071/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015143031&v=2.18.0.post9+e462414)[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015143031&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/38956071/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015143031&v=2.18.0.post9+e462414)

## One hundred years of EEG for brain and behaviour research

 Pedro Valdes-  
Sosa



2024-08-22

1  
min2  
words

OOSTENVELD ROBERT

**Read full article:**[https://pubmed.ncbi.nlm.nih.gov/39174725/?](https://pubmed.ncbi.nlm.nih.gov/39174725/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015143031&v=2.18.0.post9+e462414)[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015143031&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/39174725/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015143031&v=2.18.0.post9+e462414)

## Freezing of gait in Parkinson's disease is related to imbalanced stopping-related cortical activity



Richard J A van  
Wezel



2024-09-04



1  
min



65  
words

OOSTENVELD ROBERT

**Summary:** Freezing of gait, characterized by involuntary interruptions of walking, is a debilitating motor symptom of Parkinson's disease that restricts people's autonomy. Previous brain imaging studies investigating the mechanisms underlying freezing were restricted to scan people in supine positions and yie...



Read full article:

<https://pubmed.ncbi.nlm.nih.gov/39229492/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015143031&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/39229492/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015143031&v=2.18.0.post9+e462414)

## The past, present, and future of the brain imaging data structure (BIDS)



Krzysztof J  
Gorgolewski



2024-09-23



1  
min



82  
words

OOSTENVELD ROBERT

**Summary:** The Brain Imaging Data Structure (BIDS) is a community-driven standard for the organization of data and metadata from a growing range of neuroscience modalities. This paper is meant as a history of how the standard has developed and grown over time. We outline the principles behind the project, the ...



Read full article:

<https://pubmed.ncbi.nlm.nih.gov/39308505/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015143031&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/39308505/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015143031&v=2.18.0.post9+e462414)

## Human cortical high-gamma power scales with movement rate in healthy participants and stroke survivors

Fanny  
Quandt

17 2025-01-09

1  
min

65  
words

OOSTENVELD ROBERT

**Summary:** Motor cortical high-gamma oscillations (60-90 Hz) occur at movement onset and are spatially focused over the contralateral primary motor cortex. Although high-gamma oscillations are widely recognized for their significance in human motor control, their precise function on a cortical level remains el...

 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/39786979/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015143031&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/39786979/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015143031&v=2.18.0.post9+e462414)

## NIRS-BIDS: Brain Imaging Data Structure Extended to Near-Infrared Spectroscopy

Luca  
Pollonini

17 2025-01-27

1  
min

70  
words

OOSTENVELD ROBERT

**Summary:** Functional near-infrared spectroscopy (fNIRS) is an increasingly popular neuroimaging technique that measures cortical hemodynamic activity in a non-invasive and portable fashion. Although the fNIRS community has been successful in disseminating open-source processing tools and a standard file forma...


 **Read full article:**



<https://pubmed.ncbi.nlm.nih.gov/39870674/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015143031&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/39870674/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015143031&v=2.18.0.post9+e462414)



## Pseudonymisation of neuroimages and data protection: **Increasing access to data while retaining scientific utility**

 Lyuba  
Zehl

 2025-06-26  1  
min

 67  
words

OOSTENVELD ROBERT


**Summary:** For a number of years, facial features removal techniques such as 'defacing', 'skull stripping' and 'face masking/blurring', were considered adequate privacy preserving tools to openly share brain images. Scientifically, these measures were already a compromise between data protection requirements a...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/40568426/?](https://pubmed.ncbi.nlm.nih.gov/40568426/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015143031&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015143031&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40568426/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015143031&v=2.18.0.post9+e462414)

## Cycling on the Freeway: The perilous state of open-source neuroscience software

 Tim M  
Tierney

 2025-08-13  1  
min

 74  
words

OOSTENVELD ROBERT


**Summary:** Most scientists need software to perform their research (Barker et al., 2020;Carver et al., 2022;Hettrick, 2014;Hettrick et al., 2014;Switters & Osimo, 2019), and neuroscientists are no exception. Whether we work with reaction times, electrophysiological signals, or magnetic resonance imaging data, ...



 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/40800958/?](https://pubmed.ncbi.nlm.nih.gov/40800958/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015143031&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015143031&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40800958/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015143031&v=2.18.0.post9+e462414)

## Optimal configuration of on-scalp OPMs with fixed channel counts

 Robert  
Oostenveld

 2025-08-13  1  
min

 69  
words

OOSTENVELD ROBERT


**Summary:** Recent technological developments have brought optically pumped magnetometers (OPMs) within reach of the larger neuroscientific community. The current state-of-the-art consists of whole-head systems that measure the magnetic field at >100 locations. OPM sensors can be constructed to measure the fiel...



 **Read full article:**


<https://pubmed.ncbi.nlm.nih.gov/40800964/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015143031&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40800964/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1BUB2BG5RbxOblm-hBbiJWEhGG43qIVrvGNHOTqBKva9wWrltM&fc=None&ff=20251015143031&v=2.18.0.post9+e462414)

## Decision-Making for Endovascular Thrombectomy in Patients With Large Vessel Occlusions and Mild Neurological Deficit: A Consensus Statement

 Johanna M  
Ospel

 2025-10-14  1  
min

 69  
words

LOW VISION


**Summary:** Acute ischemic stroke patients with mild deficits (National Institutes of Health Stroke Scale [NIHSS] of 0-5) but confirmed large vessel occlusions (LVO) present a clinical challenge for endovascular thrombectomy (EVT) decisions due to limited evidence and the absence of clear guidelines. A Delphi c...


 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/41084289/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015143025&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41084289/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015143025&v=2.18.0.post9+e462414)

## Association of High-Altitude Polycythemia with JAK2V617F Mutation in Pakistani Population

 Uzma  
Zaidi

 2025-10-14

 1  
min

 74  
words

LOW VISION


**Summary:** To assessthe prevalence of the JAK2V617F mutation in polycythemia patients living at high altitude. This was a cross-sectional study, conducted at the National Institute of Blood Diseasesand Bone Marrow Transplantation (NIBD-BMT), KarachifromJuly 2022 to July 2023. A total of 132 patients with polyc...


 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41084570/?](https://pubmed.ncbi.nlm.nih.gov/41084570/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015143025&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015143025&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41084570/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015143025&v=2.18.0.post9+e462414)

## Neither exogenous, nor endogenous: Evidence for a distinct role of negative emotion during attentional control

 Gilles  
Pourtois

 2025-10-14

 1  
min

 69  
words

LOW VISION


**Summary:** Negative or threatening stimuli capture attention. However, it remains unclear whether this phenomenon is best conceived as bottom-up (i.e., salience-driven) or top-down (i.e., goal-directed) instead. To address this question, we conducted two experiments using a previously validated dot-probe task ...


 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41086156/?](https://pubmed.ncbi.nlm.nih.gov/41086156/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015143025&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015143025&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41086156/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015143025&v=2.18.0.post9+e462414)

## Improving object detection in challenging weather for autonomous driving via adversarial image translation

 Yaohua  
Zhao

 2025-10-14

 1  
min

 65  
words

LOW VISION


**Summary:** Vision-based environmental perception is fundamental to autonomous driving, as it enables reliable detection and recognition of diverse objects in complex traffic environments. However, adverse weather conditions (such as rain, fog, and low-light conditions) significantly degrade image quality, ther...


 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41086174/?](https://pubmed.ncbi.nlm.nih.gov/41086174/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015143025&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015143025&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41086174/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015143025&v=2.18.0.post9+e462414)

## Shared mechanisms of presaccadic and exogenous attention in modulating visual perception of contrast

 Yongchun  
Cai


 2025-10-14

 1  
min

 59  
words

LOW VISION


**Summary:** Different types of attention alter subjective visual perception in fundamentally distinct ways. Previous studies have focused on covert attention without concurrent eye movements, revealing that covert exogenous (involuntary) attention enhances contrast appearance of low-contrast stimuli while dimin...

 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41086688/?](https://pubmed.ncbi.nlm.nih.gov/41086688/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015143025&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015143025&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41086688/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015143025&v=2.18.0.post9+e462414)

## Halide Perovskites for Neuromorphic Sensing and Computing

 Ho Won  
Jang



2025-10-14



1  
min



56  
words

LOW VISION

**Summary:** The development of semiconductor-based electronic devices has significantly advanced sensor-based data acquisition and processor-driven data analysis. However, conventional complementary metal-oxide-semiconductor technologies are now facing fundamental limitations in scaling, speed, and power effici...

 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41087317/?](https://pubmed.ncbi.nlm.nih.gov/41087317/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015143025&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015143025&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41087317/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015143025&v=2.18.0.post9+e462414)

## HZO/HSO Superlattice ReFET Array Integrating Optical Sensing for Neuromorphic Vision Computing

 Jingsheng  
Chen



2025-10-15



1  
min



58  
words

LOW VISION


**Summary:** Neuromorphic vision systems require artificial synapses that integrate sensing, memory, and computation with high precision and stability. Conventional memristors face limitations including forming requirements, few multilevel states, low endurance, and poor integration density, while ferroelectric ...


 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41089064/?](https://pubmed.ncbi.nlm.nih.gov/41089064/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015143025&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015143025&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089064/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015143025&v=2.18.0.post9+e462414)

## Mapping political commitments: Analysing health priorities in Indian election manifestos

 Shilpi S  
Das

 17 2025-10-15

 1  
min

 35  
words

LOW VISION

**Summary:** CONCLUSION: India's political manifestos recognize health as important but fail to address systemic challenges. Greater political will and citizen engagement, is essential to elevate health as a governance priority, fostering universal health coverage and equity.


 Read full article:

<https://pubmed.ncbi.nlm.nih.gov/41089958/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnVslegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015143025&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089958/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnVslegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015143025&v=2.18.0.post9+e462414)

## Does cannulation site affect outcomes of antegrade cerebral perfusion in aortic arch surgery? A meta-analysis of axillary versus innominate access

 Tomasz  
Płonek

 17 2025-10-15

 1  
min

 67  
words

LOW VISION


**Summary:** BackgroundThe optimal arterial cannulation strategy for establishing antegrade cerebral perfusion during aortic arch surgery remains a subject of ongoing debate. Our meta-analysis compares outcomes between axillary artery (AxA) and innominate artery (InA) cannulation.MethodsA literature search was c...


 Read full article:

<https://pubmed.ncbi.nlm.nih.gov/41090996/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnVslegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015143025&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41090996/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnVslegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015143025&v=2.18.0.post9+e462414)

## A systematic review of ionizing radiation-induced glaucoma: clinical manifestations, pathogenesis, and current treatment approaches

 Heng  
Zhou

 2025-10-15

 1  
min

 51  
words

LOW VISION


**Summary:** CONCLUSIONS: IRG represents a dose-dependent entity with distinct phenotypes and mechanisms. Current therapies provide partial benefit but remain unsatisfactory in terms of durability and standardization. Advancing the field will require mechanistic studies to clarify radiation-induced optic neuropa...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41091454/?](https://pubmed.ncbi.nlm.nih.gov/41091454/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015143025&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015143025&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41091454/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015143025&v=2.18.0.post9+e462414)

# Synthesis and characterization of silver nanoparticle-loaded carboxymethylcellulose hydrogels: in vitro and in vivo evaluation of wound healing and antibacterial properties

 Morteza  
Alizadeh

 2025-10-13

 1  
min

 64  
words

BRAIN COMPUTER INTERFACE

**Summary:** The current research was conducted to assess wound healing activity and antibacterial properties of carboxymethyl cellulose (CMC) hydrogels loaded with silver nanoparticles (AgNPs) against excisional wounds (15 × 15 mm<sup>2</sup>) infected with *Pseudomonas aeruginosa* and *Staphylococcus aureus* in a rat model.C...

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41082005/?](https://pubmed.ncbi.nlm.nih.gov/41082005/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015143014&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41082005/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015143014&v=2.18.0.post9+e462414)

[tbw4049Wgf\\_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015143014&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41082005/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015143014&v=2.18.0.post9+e462414)



## Electroceuticals for Paralympic Athletes: A Fair Play and Classification Concern?



Tom E  
Nightingale



2025-10-13



1  
min



66  
words

BRAIN COMPUTER INTERFACE

**Summary:** Electroceuticals such as brain computer interfaces and spinal cord stimulation (SCS) represent transformative strategies for neuromodulation. Research has demonstrated that SCS can ameliorate motor and autonomic cardiovascular dysfunctions, particularly in individuals with spinal cord injury (SCI). ...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41082173/?](https://pubmed.ncbi.nlm.nih.gov/41082173/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015143014&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015143014&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41082173/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015143014&v=2.18.0.post9+e462414)

## Cell-to-cell communication: from physical calling to remote emotional touching



Azadeh Imani  
Rad



2025-10-14



1  
min



55  
words

BRAIN COMPUTER INTERFACE

**Summary:** The emerging paradigm of cell-to-cell communication represents a transformative shift from device-mediated contact to bio-integrated, emotion-driven interactions. This article introduces a novel, multi-layered framework for enabling biologically integrated communication between cells, devices, and c...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41083759/?](https://pubmed.ncbi.nlm.nih.gov/41083759/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015143014&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015143014&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41083759/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015143014&v=2.18.0.post9+e462414)

## Virtual Reality Experience as Reflected in EEG Microstates



Ke  
Ma



2025-10-14



1  
min



73  
words

BRAIN COMPUTER INTERFACE

**Summary:** The development of virtual reality technology has provided psychological research with powerful tools by presenting stimuli and constructing scenarios, and the combination of VR and neuroimaging techniques begins to provide particularly interesting insights into the experience of virtual events and ...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41085777/?](https://pubmed.ncbi.nlm.nih.gov/41085777/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015143014&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41085777/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015143014&v=2.18.0.post9+e462414)

[tbw4049Wgf\\_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015143014&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41085777/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015143014&v=2.18.0.post9+e462414)

## An incremental adversarial training method enables timeliness and rapid new knowledge acquisition



Chengli  
Wang



2025-10-14



1  
min



69  
words

BRAIN COMPUTER INTERFACE

**Summary:** Adversarial training is an effective defense method for deep models against adversarial attacks. However, current adversarial training methods require retraining the entire neural network, which consumes a significant amount of computational resources, thereby affecting the timeliness of deep models...




Read full article:


[https://pubmed.ncbi.nlm.nih.gov/41087533/?](https://pubmed.ncbi.nlm.nih.gov/41087533/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015143014&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41087533/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015143014&v=2.18.0.post9+e462414)


[tbw4049Wgf\\_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015143014&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41087533/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015143014&v=2.18.0.post9+e462414)

## Gut microbiota remodeling and sensory-emotional functional disruption in adolescents with bipolar depression

 Jianbo  
Lai

 2025-10-15

 1  
min

 57  
words

BRAIN COMPUTER INTERFACE

**Summary:** CONCLUSION: This study first characterized the gut microbiota architecture in adolescent BD. Combining gut microbiota and brain function biomarkers may benefit disease diagnosis and predict treatment outcome. Nonetheless, these findings should be carefully interpreted considering the limitations of ...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41088296/?](https://pubmed.ncbi.nlm.nih.gov/41088296/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015143014&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41088296/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015143014&v=2.18.0.post9+e462414)

[tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015143014&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41088296/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015143014&v=2.18.0.post9+e462414)

## Does brain-computer interface-based mind reading threaten mental privacy? ethical reflections from interviews with Chinese experts

 Haidan  
Chen



2025-10-15



1  
min



64  
words

BRAIN COMPUTER INTERFACE

**Summary:** CONCLUSION: We summarize the interpretations, feasibility, and limitations of BMR and introduce a distinction between "strong BMR" and "weak BMR" to clarify their technical and ethical implications. Based on our analysis, we argue that current BMR does not pose unique ethical challenges compared wit...




**Read full article:**



[https://pubmed.ncbi.nlm.nih.gov/41088329/?](https://pubmed.ncbi.nlm.nih.gov/41088329/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015143014&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41088329/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015143014&v=2.18.0.post9+e462414)

[tbw4049Wgf\\_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015143014&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41088329/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015143014&v=2.18.0.post9+e462414)

## Precision TMS through the integration of neuroimaging and machine learning: optimizing stimulation targets for personalized treatment


 Panxiao  
Bao

 2025-10-15  1  
min

 60  
words

BRAIN COMPUTER INTERFACE


**Summary:** Transcranial Magnetic Stimulation (TMS), a non-invasive neuromodulation technique based on electromagnetic induction, modulates cortical excitability by inducing currents with a magnetic field. TMS has demonstrated significant clinical potential in the treatment of various neuropsychiatric disorders...

 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/41089381/?utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015143014&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089381/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015143014&v=2.18.0.post9+e462414)

## A time-frequency feature fusion-based deep learning network for SSVEP frequency recognition

 Jijun  
Tong

 17 2025-10-15

 1  
min

 62  
words

BRAIN COMPUTER INTERFACE

**Summary:** INTRODUCTION: Steady-state visual evoked potential (SSVEP) has emerged as a pivotal branch in brain-computer interfaces (BCIs) due to its high signal-to-noise ratio (SNR) and elevated information transfer rate (ITR). However, substantial inter-subject variability in electroencephalographic (EEG) sig...


 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41089660/?](https://pubmed.ncbi.nlm.nih.gov/41089660/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015143014&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015143014&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089660/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015143014&v=2.18.0.post9+e462414)

## Participant Engagement, Epistemic Injustice, and Early-Phase Implanted Neural Device Research

 Ashley  
Feinsinger

 17 2025-10-15

 1  
min

 66  
words

BRAIN COMPUTER INTERFACE

**Summary:** In recent years, participant engagement initiatives in research on implanted neural devices have significantly increased. However, there remains little consensus on the motivations, goals, and best practices for engagement efforts. Drawing on the concept of participatory epistemic injustice, we argu...

 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41091050/?](https://pubmed.ncbi.nlm.nih.gov/41091050/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015143014&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015143014&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41091050/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015143014&v=2.18.0.post9+e462414)

# Claude Haiku 4.5 System Card [pdf]

17

2025-10-15

1

min

2

words

HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45596168)

 **Read full article:**  
<https://assets.anthropic.com/m/99128ddd009bdcb/original/Claude-Haiku-4-5-System-Card.pdf>

# Claude Haiku 4.5 System Card [pdf]

vinhnx

17

2025-10-15

1

min

13

words

HACKER NEWS


**Summary:**


Article URL: <https://assets.anthropic.com/m/99128ddd009bdcb/original/Claude-Haiku-4-5-System-Card.pdf>

Comments URL: [https://news.yc...](https://news.ycombinator.com/item?id=45596168)


 **Read full article:**  
<https://assets.anthropic.com/m/99128ddd009bdcb/original/Claude-Haiku-4-5-System-Card.pdf>

# Synthesis and characterization of silver nanoparticle-loaded carboxymethylcellulose hydrogels: in vitro and in vivo evaluation of wound healing and antibacterial properties

 Morteza  
Alizadeh

 2025-10-13

 1  
min

 64  
words

BRAIN COMPUTER INTERFACE

**Summary:** The current research was conducted to assess wound healing activity and antibacterial properties of carboxymethyl cellulose (CMC) hydrogels loaded with silver nanoparticles (AgNPs) against excisional wounds (15 × 15 mm<sup>2</sup>) infected with *Pseudomonas aeruginosa* and *Staphylococcus aureus* in a rat model.C...

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41082005/?](https://pubmed.ncbi.nlm.nih.gov/41082005/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015134032&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41082005/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015134032&v=2.18.0.post9+e462414)

[tbw4049Wgf\\_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015134032&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41082005/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015134032&v=2.18.0.post9+e462414)



## Electroceuticals for Paralympic Athletes: A Fair Play and Classification Concern?



Tom E  
Nightingale



2025-10-13



1  
min



66  
words

BRAIN COMPUTER INTERFACE

**Summary:** Electroceuticals such as brain computer interfaces and spinal cord stimulation (SCS) represent transformative strategies for neuromodulation. Research has demonstrated that SCS can ameliorate motor and autonomic cardiovascular dysfunctions, particularly in individuals with spinal cord injury (SCI). ...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41082173/?](https://pubmed.ncbi.nlm.nih.gov/41082173/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015134032&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015134032&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41082173/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015134032&v=2.18.0.post9+e462414)

## Cell-to-cell communication: from physical calling to remote emotional touching



Azadeh Imani  
Rad



2025-10-14



1  
min



55  
words

BRAIN COMPUTER INTERFACE

**Summary:** The emerging paradigm of cell-to-cell communication represents a transformative shift from device-mediated contact to bio-integrated, emotion-driven interactions. This article introduces a novel, multi-layered framework for enabling biologically integrated communication between cells, devices, and c...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41083759/?](https://pubmed.ncbi.nlm.nih.gov/41083759/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015134032&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015134032&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41083759/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015134032&v=2.18.0.post9+e462414)

## Virtual Reality Experience as Reflected in EEG Microstates



2025-10-14



1 min



73 words

BRAIN COMPUTER INTERFACE

**Summary:** The development of virtual reality technology has provided psychological research with powerful tools by presenting stimuli and constructing scenarios, and the combination of VR and neuroimaging techniques begins to provide particularly interesting insights into the experience of virtual events and ...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41085777/?](https://pubmed.ncbi.nlm.nih.gov/41085777/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015134032&v=2.18.0.post9+e462414)
[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41085777/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015134032&v=2.18.0.post9+e462414)
[tbw4049Wgf\\_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015134032&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41085777/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015134032&v=2.18.0.post9+e462414)

## An incremental adversarial training method enables timeliness and rapid new knowledge acquisition



Chengli Wang



2025-10-14



1 min



69 words

BRAIN COMPUTER INTERFACE


**Summary:** Adversarial training is an effective defense method for deep models against adversarial attacks. However, current adversarial training methods require retraining the entire neural network, which consumes a significant amount of computational resources, thereby affecting the timeliness of deep models...




Read full article:


[https://pubmed.ncbi.nlm.nih.gov/41087533/?](https://pubmed.ncbi.nlm.nih.gov/41087533/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015134032&v=2.18.0.post9+e462414)
[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41087533/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015134032&v=2.18.0.post9+e462414)
[tbw4049Wgf\\_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015134032&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41087533/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015134032&v=2.18.0.post9+e462414)

## Gut microbiota remodeling and sensory-emotional functional disruption in adolescents with bipolar depression

 Jianbo  
Lai

 2025-10-15

 1  
min

 57  
words

BRAIN COMPUTER INTERFACE

**Summary:** CONCLUSION: This study first characterized the gut microbiota architecture in adolescent BD. Combining gut microbiota and brain function biomarkers may benefit disease diagnosis and predict treatment outcome. Nonetheless, these findings should be carefully interpreted considering the limitations of ...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41088296/?](https://pubmed.ncbi.nlm.nih.gov/41088296/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015134032&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41088296/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015134032&v=2.18.0.post9+e462414)

[tbw4049Wgf\\_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015134032&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41088296/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015134032&v=2.18.0.post9+e462414)

## Does brain-computer interface-based mind reading threaten mental privacy? ethical reflections from interviews with Chinese experts

 Haidan  
Chen



2025-10-15



1  
min



64  
words

BRAIN COMPUTER INTERFACE

**Summary:** CONCLUSION: We summarize the interpretations, feasibility, and limitations of BMR and introduce a distinction between "strong BMR" and "weak BMR" to clarify their technical and ethical implications. Based on our analysis, we argue that current BMR does not pose unique ethical challenges compared wit...




**Read full article:**



[https://pubmed.ncbi.nlm.nih.gov/41088329/?](https://pubmed.ncbi.nlm.nih.gov/41088329/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015134032&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41088329/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015134032&v=2.18.0.post9+e462414)

[tbw4049Wgf\\_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015134032&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41088329/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015134032&v=2.18.0.post9+e462414)

## Precision TMS through the integration of neuroimaging and machine learning: optimizing stimulation targets for personalized treatment


 Panxiao  
Bao

 2025-10-15  1  
min

 60  
words


BRAIN COMPUTER INTERFACE


**Summary:** Transcranial Magnetic Stimulation (TMS), a non-invasive neuromodulation technique based on electromagnetic induction, modulates cortical excitability by inducing currents with a magnetic field. TMS has demonstrated significant clinical potential in the treatment of various neuropsychiatric disorders...

 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/41089381/?utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015134032&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089381/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015134032&v=2.18.0.post9+e462414)

## A time-frequency feature fusion-based deep learning network for SSVEP frequency recognition

 Jijun  
Tong

 17 2025-10-15

 1  
min

 62  
words

BRAIN COMPUTER INTERFACE

**Summary:** INTRODUCTION: Steady-state visual evoked potential (SSVEP) has emerged as a pivotal branch in brain-computer interfaces (BCIs) due to its high signal-to-noise ratio (SNR) and elevated information transfer rate (ITR). However, substantial inter-subject variability in electroencephalographic (EEG) sig...


 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41089660/?](https://pubmed.ncbi.nlm.nih.gov/41089660/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015134032&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015134032&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089660/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015134032&v=2.18.0.post9+e462414)

## Participant Engagement, Epistemic Injustice, and Early-Phase Implanted Neural Device Research

 Ashley  
Feinsinger

 17 2025-10-15

 1  
min

 66  
words

BRAIN COMPUTER INTERFACE




**Summary:** In recent years, participant engagement initiatives in research on implanted neural devices have significantly increased. However, there remains little consensus on the motivations, goals, and best practices for engagement efforts. Drawing on the concept of participatory epistemic injustice, we argu...

 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41091050/?](https://pubmed.ncbi.nlm.nih.gov/41091050/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015134032&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015134032&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41091050/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015134032&v=2.18.0.post9+e462414)

## C++26: range support for std:optional

 2025-10-10  1 min  2 words




HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45536373)

 Read full article:

<https://www.sandordargo.com/blog/2025/10/08/cpp26-range-support-for-std-optional>

## Breaking "provably correct" Leftpad

 2025-10-06  1 min  2 words





HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45492274)

 Read full article:

<https://lukeplant.me.uk/blog/posts/breaking-provably-correct-leftpad/>

## F5 says hackers stole undisclosed BIG-IP flaws, source code

 WalterSobchak  2025-10-15  1 min  14 words

HACKER NEWS

**Summary:** <https://www.sec.gov/ix?doc=/Archives/edgar/data/1048695/000104869525000149/ffiv-20251015.htm> <https://www.sec.gov/ix?doc=/Archives/edgar/data/1048695/0001...> 

---


 **Comments URL:** <https://news.ycombinator.com/item?id=45592271> <https://news.ycombinator.co...>

 **Read full article:**

<https://www.bleepingcomputer.com/news/security/f5-says-hackers-stole-undisclosed-big-ip-flaws-source-code/>

## Optimized reference region and the effect on test-retest reliability and detection of Parkinson's disease with UCB-J.

Khattar, N., Matuskey, D., Gallezot, J.-D., Naganawa, M., Holmes, S. E., Sadabad, F. E., Esterlis, I.,

 van Dyck, C. H., Mecca, A. P., D'Souza, D. C., Nabulsi, N. B., Finnema, S. J., Huang, Y., Carson, R. E., Toyonaga, T.

 2025-10-15  1 min  201 words

BIORXIV NEUROSCIENCE

**Summary:** [11C]UCB-J is a radioligand targeting synaptic vesicle glycoprotein 2A, used to image synaptic density. For quantification, a small-volume centrum semiovale area was previously optimized as a [11C]UCB-J reference region (CS2mL); however, its high variability resulted in reduced reliability. Herin, w...

 **Read full article:**

<https://www.biorxiv.org/content/10.1101/2025.10.15.682460v1?rss=1>



## Ascending propriospinal modulation of thoracic sympathetic preganglionic neurons during lumbar locomotor activity



Dominguez-Rodriguez, L. E., Nwachukwu, C. V., Shahsavani, N., Garcia, J., Chopek, J. W., Cowley, K. C.



2025-10-15



1  
min



288  
words

BIORXIV NEUROSCIENCE

**Summary:** Although the autonomic sympathetic system is activated in parallel with locomotion, the underlying neural mechanisms mediating this coordination are not completely understood. Descending exercise or central command signals from hypothalamic and brainstem regions are thought to activate thoracic spin...



Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.14.681171v1?rss=1>

## Longitudinal intergenerational hyperscanning reveals indices of relationship formation and loneliness



Moffat, R., Dumas, G., Cross, E. S.



2025-10-15



1  
min



160  
words

BIORXIV NEUROSCIENCE

**Summary:** Loneliness is globally acknowledged as a severe and burgeoning health risk, fuelling interest in helping people of all ages form meaningful social connections. One promising approach consists of intergenerational social programs. While behavioural and qualitative evidence derived from such programs ...



Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.14.682029v1?rss=1>

## This Week in The Journal



McKeon,  
P.



2025-10-15



1  
min



0  
words

JOURNAL NEUROSCIENCE THIS WEEK



Read full article:

<http://www.jneurosci.org/cgi/content/short/45/42/etwij45422025?rss=1>

## Network Activity Shapes Inhibitory Synaptic Development in the Mouse Hippocampus



Johnson-Venkatesh, E. M., Umemori,  
H.



2025-10-15



1  
min



249  
words

JOURNAL NEUROSCIENCE CURRENT


**Summary:** <p>The proper development of excitatory/inhibitory (E/I) balance is critical for brain function, as any imbalance has been associated with myriad neuropsychiatric disorders. How this balance evolves during synaptic development remains unclear. To address this question, we examine how manipulations o...






Read full article:

<http://www.jneurosci.org/cgi/content/short/45/42/e1182242025?rss=1>

## Stereoencephalography Reveals Neural Signatures of Multisensory Integration in the Human Superior Temporal Sulcus during Audiovisual Speech Perception

 Zhang, Y., Magnotti, J. F., Zhang, X., Wang, Z., Yu, Y., Davis, K. A., Sheth, S. A., Isaac Chen, H., Yoshor, D., Beauchamp, M. S.

 2025-10-15  1 min  244 words


JOURNAL NEUROSCIENCE CURRENT

**Summary:** <p>Human speech perception is multisensory, integrating auditory information from the talker's voice with visual information from the talker's face. BOLD fMRI studies have implicated the superior temporal gyrus (STG) in processing auditory speech and the superior temporal sulcus (STS) in integrating...

 Read full article:

<http://www.jneurosci.org/cgi/content/short/45/42/e1037252025?rss=1>

## Competition between Tool and Hand Motion Impairs Movement Planning in Limb Apraxia

 Thibault, S., Yates, J. B., Buxbaum, L. J., Wong, A. L.

 2025-10-15  1 min  249 words


JOURNAL NEUROSCIENCE CURRENT


**Summary:** <p>Tool use is a complex motor planning problem. Prior research suggests that planning to use tools involves resolving competition between different tool-related action representations. We therefore reasoned that competition may also be exacerbated with tools for which the motions of the tool and th...

 Read full article:

<http://www.jneurosci.org/cgi/content/short/45/42/e0692252025?rss=1>

## Largely Intact But Less Reliable and Distributed Neural Representations of Subjective Value in Human Opioid Addiction

 LoFaro, F. M., Gueguen, M. C. M., Kapoor, A., Alvarez, E. E., Bonagura, D., Konova, A. B.

 2025-10-15  1 min  232 words

JOURNAL NEUROSCIENCE CURRENT

**Summary:** <p>Addiction, particularly opioid use disorder (OUD), is often characterized by heightened propensity for risk-taking. While tolerance for risk and uncertainty varies across individuals, the elevated risk-taking in people with OUD is assumed to stem from altered cognitive decision-making processes b...

 Read full article:

<http://www.jneurosci.org/cgi/content/short/45/42/e0679252025?rss=1>

## Metallothionein III Mediates Ca<sup>2+</sup>-Dependent Zn<sup>2+</sup> Spikes to Inhibit Dendritic Arborization



Salvagio, L., Zhang, C., Rue, B. E., Doris, N., Koehring, C., Tyler, I., Vargas, R. S., Oh, W. C., Qin, Y.



2025-10-15



1  
min



244  
words

JOURNAL NEUROSCIENCE CURRENT

**Summary:** Zinc is crucial for neuron function, but whether and how labile zinc ion (Zn<sup>2+</sup>) acts as an intracellular signaling molecule remains unclear. In this work, we investigate the relationship between Ca<sup>2+</sup> and Zn<sup>2+</sup> dynamics using fluorescence imaging. Our findings reveal...



Read full article:

<http://www.jneurosci.org/cgi/content/short/45/42/e0627252025?rss=1>

## Marmoset Anterior Cingulate Area 32 Neurons Exhibit Responses to Presented and Produced Calls during Naturalistic Vocal Communication



Johnston, K. D., Gilliland, R. E., Wong, R. K., Everling, S.



2025-10-15



1  
min



154  
words

JOURNAL NEUROSCIENCE CURRENT


**Summary:** Vocal communication is a complex social behavior that entails the integration of auditory perception and vocal production. Both anatomical and functional evidence have implicated the anterior cingulate cortex (ACC), including area 32, in these processes, but the dynamics of neural responses in ar...




Read full article:


<http://www.jneurosci.org/cgi/content/short/45/42/e0405252025?rss=1>

## How the Ventromedial Prefrontal Cortex (VMPFC) Facilitates Welfare Maximization in Social Contexts

 Zhang,  
M.

 2025-10-15

 1  
min


 0  
words


JOURNAL NEUROSCIENCE CURRENT

 Read full article:


<http://www.jneurosci.org/cgi/content/short/45/42/e0221252025?rss=1>

## Prenatal Downregulation of CB1 Cannabinoid Receptors in the Mouse Prefrontal Cortex Disrupts Cortical Lamination and Induces a Transcriptional Signature Associated with Social Interaction Deficits

 Simon-Sanchez, S., den Boon, F., Garcia-Rincon, D., Skrempou, G., Paraiso-Luna, J., Aguilera, A., Nieto, M., Werkman, T. R., Guzman, M., Chameau, P., Galve-Roperh, I.

 2025-10-15

 1  
min

 248  
words

JOURNAL NEUROSCIENCE CURRENT


**Summary:**

Endocannabinoid signaling exerts a neurodevelopmental regulatory role via CB<sub>1</sub> cannabinoid receptors (CB<sub>1</sub>Rs), which control pyramidal neuron differentiation, migration, and axonal guidance. Here, we investigated the long-lasting consequences of transient prenatal CB<sub>1</sub>

 Read full article:

<http://www.jneurosci.org/cgi/content/short/45/42/e0120252025?rss=1>

## Layer 6 Corticothalamic Neurons Induce High Gamma Oscillations Through Cortico-cortical and Cortico-thalamo-cortical Pathways

 Russo, S., Dimwamwa, E. D., Stanley, G. B.

 17

2025-10-15



1  
min



249  
words

JOURNAL NEUROSCIENCE CURRENT

**Summary:** <p>Layer 6 corticothalamic (L6CT) neurons project to both cortex and thalamus, inducing multiple effects including the modulation of cortical and thalamic firing, and the emergence of high gamma oscillations in the cortical local field potential (LFP). We hypothesize that the high gamma oscillations...



Read full article:

<http://www.jneurosci.org/cgi/content/short/45/42/e0094252025?rss=1>

## This Week in The Journal



McKeon,  
P.

 17

2025-10-15



1  
min



0  
words





JOURNAL NEUROSCIENCE CURRENT



Read full article:

<http://www.jneurosci.org/cgi/content/short/45/42/etwij45422025?rss=1>

## Claude Haiku 4.5

 adocomplete  17 2025-10-15  1 min  13 words

HACKER NEWS

**Summary:**

Article URL: <https://www.anthropic.com/news/claude-haiku-4-5>

Comments URL: <https://news.ycombinator.com/item?id=45595403>



Points: 17

# Comments: 1

 Read full article:

<https://www.anthropic.com/news/claude-haiku-4-5>

## A Bright HDR Image

 walz  17 2025-10-15  1 min  13 words

HACKER NEWS

**Summary:**

Article URL: <https://walzr.com/HDR2.jpg>

Comments URL: <https://news.ycombinator.com/item?id=45595569>

Points: 3


# Comments: 0




 Read full article:

<https://walzr.com/HDR2.jpg>



# ATAD1 Overexpression Enhances Mitochondrial and Peroxisomal Function in Zellweger Syndrome Disorder Models

 Baronio, D., Stevenson, T. J., Demmitt-Rice, C. E., Nuebel, E. C., Blackwell, A. M., Bonkowsky, J. L.

 2025-10-15  1 min  271 words

BIORXIV NEUROSCIENCE


**Summary:** Zellweger Spectrum Disorders (ZSDs) are caused by mutations in any of the different peroxin (PEX) genes, which are essential for peroxisome biogenesis and function. Clinical features of ZSDs include seizures, leukodystrophy, renal and liver dysfunction, skeletal abnormalities, and they usually resul...




Read full article:


<https://www.biorxiv.org/content/10.1101/2025.10.14.682039v1?rss=1>

## Brain-computer interface training for multimodal functional recovery in patients with brain injury: a case series

 Rui  
Cheng

 17 2025-10-13

 1  
min

 48  
words

BRAIN COMPUTER INTERFACE

**Summary:** CONCLUSIONS: Motor imagery-based BCI training may facilitate recovery across motor, language, and cognitive domains in patients with subacute brain injury. Functional gains were supported by neurophysiological and connectomics evidence of cross-network reorganization. These preliminary findings sugg...


 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/41081225/?](https://pubmed.ncbi.nlm.nih.gov/41081225/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015122107&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41081225/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015122107&v=2.18.0.post9+e462414)


[tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015122107&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41081225/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015122107&v=2.18.0.post9+e462414)

# Synthesis and characterization of silver nanoparticle-loaded carboxymethylcellulose hydrogels: in vitro and in vivo evaluation of wound healing and antibacterial properties

 Morteza  
Alizadeh

 2025-10-13

 1  
min

 64  
words

BRAIN COMPUTER INTERFACE

**Summary:** The current research was conducted to assess wound healing activity and antibacterial properties of carboxymethyl cellulose (CMC) hydrogels loaded with silver nanoparticles (AgNPs) against excisional wounds (15 × 15 mm<sup>2</sup>) infected with *Pseudomonas aeruginosa* and *Staphylococcus aureus* in a rat model.C...

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41082005/?](https://pubmed.ncbi.nlm.nih.gov/41082005/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015122107&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41082005/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015122107&v=2.18.0.post9+e462414)

[tbw4049Wgf\\_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015122107&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41082005/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015122107&v=2.18.0.post9+e462414)

## Electroceuticals for Paralympic Athletes: A Fair Play and Classification Concern?



Tom E  
Nightingale



2025-10-13



1  
min



66  
words

BRAIN COMPUTER INTERFACE

**Summary:** Electroceuticals such as brain computer interfaces and spinal cord stimulation (SCS) represent transformative strategies for neuromodulation. Research has demonstrated that SCS can ameliorate motor and autonomic cardiovascular dysfunctions, particularly in individuals with spinal cord injury (SCI). ...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41082173/?](https://pubmed.ncbi.nlm.nih.gov/41082173/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015122107&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015122107&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41082173/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015122107&v=2.18.0.post9+e462414)

## Cell-to-cell communication: from physical calling to remote emotional touching



Azadeh Imani  
Rad



2025-10-14



1  
min



55  
words

BRAIN COMPUTER INTERFACE

**Summary:** The emerging paradigm of cell-to-cell communication represents a transformative shift from device-mediated contact to bio-integrated, emotion-driven interactions. This article introduces a novel, multi-layered framework for enabling biologically integrated communication between cells, devices, and c...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41083759/?](https://pubmed.ncbi.nlm.nih.gov/41083759/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015122107&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015122107&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41083759/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015122107&v=2.18.0.post9+e462414)

## Virtual Reality Experience as Reflected in EEG Microstates



2025-10-14



1 min



73 words

BRAIN COMPUTER INTERFACE

**Summary:** The development of virtual reality technology has provided psychological research with powerful tools by presenting stimuli and constructing scenarios, and the combination of VR and neuroimaging techniques begins to provide particularly interesting insights into the experience of virtual events and ...

**Read full article:**[https://pubmed.ncbi.nlm.nih.gov/41085777/?](https://pubmed.ncbi.nlm.nih.gov/41085777/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015122107&v=2.18.0.post9+e462414)[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41085777/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015122107&v=2.18.0.post9+e462414)[tbw4049Wgf\\_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015122107&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41085777/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015122107&v=2.18.0.post9+e462414)

## An incremental adversarial training method enables timeliness and rapid new knowledge acquisition

Chengli  
Wang

2025-10-14



1 min




69 words


BRAIN COMPUTER INTERFACE

**Summary:** Adversarial training is an effective defense method for deep models against adversarial attacks. However, current adversarial training methods require retraining the entire neural network, which consumes a significant amount of computational resources, thereby affecting the timeliness of deep models...


**Read full article:**[https://pubmed.ncbi.nlm.nih.gov/41087533/?](https://pubmed.ncbi.nlm.nih.gov/41087533/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015122107&v=2.18.0.post9+e462414)[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41087533/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015122107&v=2.18.0.post9+e462414)[tbw4049Wgf\\_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015122107&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41087533/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015122107&v=2.18.0.post9+e462414)

## Gut microbiota remodeling and sensory-emotional functional disruption in adolescents with bipolar depression

 Jianbo  
Lai

 2025-10-15

 1  
min

 57  
words

BRAIN COMPUTER INTERFACE

**Summary:** CONCLUSION: This study first characterized the gut microbiota architecture in adolescent BD. Combining gut microbiota and brain function biomarkers may benefit disease diagnosis and predict treatment outcome. Nonetheless, these findings should be carefully interpreted considering the limitations of ...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41088296/?](https://pubmed.ncbi.nlm.nih.gov/41088296/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015122107&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41088296/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015122107&v=2.18.0.post9+e462414)

[tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015122107&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41088296/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015122107&v=2.18.0.post9+e462414)

## Does brain-computer interface-based mind reading threaten mental privacy? ethical reflections from interviews with Chinese experts

 Haidan  
Chen



2025-10-15



1  
min



64  
words

BRAIN COMPUTER INTERFACE

**Summary:** CONCLUSION: We summarize the interpretations, feasibility, and limitations of BMR and introduce a distinction between "strong BMR" and "weak BMR" to clarify their technical and ethical implications. Based on our analysis, we argue that current BMR does not pose unique ethical challenges compared wit...




**Read full article:**



[https://pubmed.ncbi.nlm.nih.gov/41088329/?](https://pubmed.ncbi.nlm.nih.gov/41088329/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015122107&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41088329/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015122107&v=2.18.0.post9+e462414)

[tbw4049Wgf\\_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015122107&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41088329/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015122107&v=2.18.0.post9+e462414)

## Precision TMS through the integration of neuroimaging and machine learning: optimizing stimulation targets for personalized treatment

 Panxiao  
Bao

 2025-10-15  1  
min

 60  
words

BRAIN COMPUTER INTERFACE

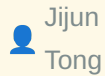
**Summary:** Transcranial Magnetic Stimulation (TMS), a non-invasive neuromodulation technique based on electromagnetic induction, modulates cortical excitability by inducing currents with a magnetic field. TMS has demonstrated significant clinical potential in the treatment of various neuropsychiatric disorders...

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41089381/?utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015122107&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089381/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015122107&v=2.18.0.post9+e462414)



## A time-frequency feature fusion-based deep learning network for SSVEP frequency recognition



Jijun  
Tong



2025-10-15



1  
min



62  
words

BRAIN COMPUTER INTERFACE

**Summary:** INTRODUCTION: Steady-state visual evoked potential (SSVEP) has emerged as a pivotal branch in brain-computer interfaces (BCIs) due to its high signal-to-noise ratio (SNR) and elevated information transfer rate (ITR). However, substantial inter-subject variability in electroencephalographic (EEG) sig...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41089660/?](https://pubmed.ncbi.nlm.nih.gov/41089660/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015122107&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015122107&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089660/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015122107&v=2.18.0.post9+e462414)

## Zuban - A Python Language Server / Typechecker - Beta Release



/u/  
zubanls



2025-10-15



1  
min



186  
words

REDDIT PYTHON






**Summary:** <!-- SC\_OFF --><div class="md"><p>I have just created a Beta Release for Zuban.</p> <p>Zuban now supports all key features of a Python Language Server — including completions, rename,<br /> and type checking — with auto-imports coming soon.</p> <p>Zuban is a high-performance Python Language Server a...



Read full article:

[https://www.reddit.com/r/Python/comments/1o7bat4/zuban\\_a\\_python\\_language\\_server\\_typechecker\\_beta/](https://www.reddit.com/r/Python/comments/1o7bat4/zuban_a_python_language_server_typechecker_beta/)

## Recreating the Canon Cat document interface

 tonyg  17 2025-10-15  1 min  13 words 

**Summary:**






Article URL: <https://lab.alexanderobenauer.com/updates/the-jasper-report>

Comments URL: <https://news.ycombinator.com/item?id=45593390>

Points: 4

 **Read full article:**  
<https://lab.alexanderobenauer.com/updates/the-jasper-report>

## David Byrne Radio

 bookofjoe  17 2025-10-15  1 min  13 words 

**Summary:**



Article URL: <https://www.davidbyrne.com/radio#filter=all&sortby=date:desc>

Comments URL: <https://news.ycombinator.com/item?id=45593665>

Points...


 **Read full article:**  
<https://www.davidbyrne.com/radio#filter=all&sortby=date:desc>

## VibTac: A High-Resolution High-Bandwidth Tactile Sensing Finger for Multi-Modal Perception in Robotic Manipulation

 2025-04-15  1 min  169 words

TRANSACTIONS HAPTICS

**Summary:** Tactile sensing is pivotal for enhancing robot manipulation abilities by providing crucial feedback for localized information. However, existing sensors often lack the necessary resolution and bandwidth required for intricate tasks. To address this gap, we introduce VibTac, a novel multi-modal tacti...

 Read full article:

<http://ieeexplore.ieee.org/document/10965524>

## Age-Related Impact in Illusory Torque Cues Induced by Asymmetric Vibrations

 2025-04-07  1 min  197 words




TRANSACTIONS HAPTICS

**Summary:** Illusory pulling sensations in the translational or rotational direction are induced by asymmetric vibrations applied to the fingertips. Although previous studies have discussed the involvement of mechanoreceptors associated with skin deformation and spatial processing in the parietal association co...


 Read full article:

<http://ieeexplore.ieee.org/document/10955171>

## Optimizing cognitive control through the interaction between stimulation intensity and duration in single-site and dual-site tDCS




 2025-10-15  1 min  0 words

NATURE NEUROSCIENCE SUBJECTS

 Read full article:

<https://www.nature.com/articles/s41598-025-14509-8>

## Rapid adaptive optics enabling near noninvasive high-resolution brain imaging in awake behaving mice

 2025-10-15  1 min  0 words

NATURE NEUROSCIENCE SUBJECTS

 Read full article:

<https://www.nature.com/articles/s41467-025-64251-y>

## Co-Conservation of synaptic gene expression and circuitry in collicular neurons


 2025-10-15  1 min  0 words

NATURE NEUROSCIENCE SUBJECTS

 Read full article:

<https://www.nature.com/articles/s41467-025-64204-5>

## Spatially global effects of feature-based attention in functional subdivisions of human subcortical nuclei

 2025-10-15  1 min  0 words

NATURE NEUROSCIENCE SUBJECTS

 Read full article:

<https://www.nature.com/articles/s42003-025-08871-6>

## A preliminary study of the physiological and perceptual effects of GLP-1 receptor agonists during alcohol consumption in people with obesity

 2025-10-15  1 min  0 words

NATURE NEUROSCIENCE SUBJECTS


 Read full article:

<https://www.nature.com/articles/s41598-025-17927-w>

## Microglia-specific regulation of lipid metabolism in Alzheimer's disease revealed by microglial depletion in 5xFAD Mice




 2025-10-15  1 min  0 words

NATURE NEUROSCIENCE SUBJECTS

 Read full article:

<https://www.nature.com/articles/s41467-025-64161-z>

## Standardization of postmortem human brainstem along the rostrocaudal axis to accommodate for inter-specimen structural heterogeneity




 2025-10-15  1 min  0 words

NATURE NEUROSCIENCE SUBJECTS

 Read full article:

<https://www.nature.com/articles/s41598-025-20016-7>

## A brain cancer microtissue model for studying tumor cell and neural cell interactions


 2025-10-15  1 min  0 words

NATURE NEUROSCIENCE SUBJECTS

 Read full article:

<https://www.nature.com/articles/s41598-025-19982-9>

## Cognitive arbitration between candidate dimensions of psychopathology




 2025-10-15  1 min  0 words

NATURE NEUROSCIENCE SUBJECTS

 Read full article:

<https://www.nature.com/articles/s41380-025-03297-2>

## Gut dysbiosis in multiple sclerosis patients: a comparative analysis in fecal samples




 2025-10-15  1 min  0 words

NATURE NEUROSCIENCE SUBJECTS

 Read full article:


<https://www.nature.com/articles/s41598-025-19998-1>

## A pipelined, resource-efficient convolutional neural network architecture for detecting and diagnosing Alzheimer's disease using brain sMRI

 V. Sumathi  2025-10-15  1 min  265 words

FRONTIERS NEUROSCIENCE

**Summary:** IntroductionAlzheimer's disease (AD) is a progressive neurological disorder that impairs memory and cognitive function in elderly individuals. Early detection is vital to slow disease progression and enable timely therapeutic intervention. Traditional diagnostic approaches for AD, however, often inv...

 Read full article:

<https://www.frontiersin.org/articles/10.3389/fnins.2025.1653565>

## Influence of context on extinguished appetitive conditioning in male and female rats.



2025-05-15



1

min



230

words

BEHAVIORAL NEUROSCIENCE

**Summary:** Extinction is fundamental to adaptive behavior in that it allows organisms to alter previously conditioned behaviors based on the prevailing environmental contingencies. Extinguished responses, however, will renew when the conditioned stimulus is presented outside the extinction context. There has b...



Read full article:

<http://doi.org/10.1037/bne0000626>

## Gonadectomy maintains goal-directed responding in female rats and accelerates habit formation in male rats.



2025-04-07



1

min



271

words

BEHAVIORAL NEUROSCIENCE

**Summary:** We have previously demonstrated that gonadally intact female rats become habitual following around 120 response–outcome (R-Os) exposures during operant training. This rapid development of habit does not occur in gonadally intact male rats, which remain goal-directed up to at least 320 R-Os. The pres...



Read full article:

<http://doi.org/10.1037/bne0000622>



## Monthly Updates [April]

17

2025-04-01

2

min

555

words

FMHY

**Summary:**

INFO

These update threads only contains major updates. If you're interested in seeing all minor changes you can follow our [Commits Page](https://github.com/fmhy/FMHYedit/commits/main) on ...

 **Read full article:**  
<https://fmhy.net/posts/april-2025>

## The Internet Archive needs your help.

17

2025-04-21

1

min

181

words

FMHY

**Summary:**

A coalition of major record labels has filed a lawsuit against the Internet Archive—demanding **\$700 million** for our work preserving and providing access to historical 78rpm records. These fragile, obsolete discs hold some of the earliest recordings of a vanishing American culture....

 **Read full article:**  
<https://fmhy.net/posts/support-ia>

## Monthly Updates [May]

17

2025-05-01

3

min

704

words

FMHY

**Summary:**

INFO

These update threads only contains major updates. If you're interested in seeing all minor changes you can follow our [Commits Page](https://github.com/fmhy/FMHYedit/commits/main) on ...

 **Read full article:**  
<https://fmhy.net/posts/may-2025>

## Monthly Updates [June]

17

2025-06-01

3

min

761

words

FMHY

**Summary:**

INFO

These update threads only contains major updates. If you're interested in seeing all minor changes you can follow our [Commits Page](https://github.com/fmhy/FMHYedit/commits/main) on ...

 **Read full article:**  
<https://fmhy.net/posts/june-2025>

## Monthly Updates [July]

17

2025-07-01

3

min

749

words

FMHY

**Summary:**

INFO

These update threads only contains major updates. If you're interested in seeing all minor changes you can follow our [Commits Page](https://github.com/fmhy/FMHYedit/commits/main) on ...

 **Read full article:**  
<https://fmhy.net/posts/july-2025>

## Monthly Updates [August]

17

2025-08-01

4

min

858

words

FMHY




**Summary:**

INFO

These update threads only contains major updates. If you're interested in seeing all minor changes you can follow our [Commits Page](https://github.com/fmhy/FMHYedit/commits/main) on ...

 **Read full article:**  
<https://fmhy.net/posts/aug-2025>

## Monthly Updates [Sept]




 2025-08-31  2 min  569 words

[FMHY](#)

**Summary:** `<div class="info custom-block"><p class="custom-block-title">INFO</p><p>These update threads only contains major updates. If you're interested in seeing all minor changes you can follow our <a href="https://github.com/fmhy/FMHYedit/commits/main" rel="noreferrer" target="_blank">Commits Page</a> on ...`


 **Read full article:**  
<https://fmhy.net/posts/sept-2025>

## Fight Chat Control

 2025-09-04  1 min  153 words

[FMHY](#)

**Summary:** `<h3 id="the-eu-still-wants-to-scan-your-private-messages-and-photos" tabindex="-1">The EU (still) wants to scan your private messages and photos. <a class="header-anchor" href="#the-eu-still-wants-to-scan-your-private-messages-and-photos"></a></h3> <p>The &quot;Chat Control&quot; proposal would mand...`

 **Read full article:**  
<https://fmhy.net/posts/FCC>

## Oops It's a kernel stack use-after-free: Exploiting Nvidia's GPU Linux drivers



mustache\_kimono



2025-10-15



1

min



13

words

HACKER NEWS

**Summary:**

Article URL: [https://blog.quarkslab.com/./nvidia\\_gpu\\_kernel\\_vmalloc\\_exploit.html](https://blog.quarkslab.com/./nvidia_gpu_kernel_vmalloc_exploit.html)

Comments URL: <https://news.ycombinator.com/item?id=45592585>

...



Read full article:

[https://blog.quarkslab.com/./nvidia\\_gpu\\_kernel\\_vmalloc\\_exploit.html](https://blog.quarkslab.com/./nvidia_gpu_kernel_vmalloc_exploit.html)

## Reverse Engineering a 27MHz RC Toy Communication Using RTL SDR



austinallegro



2025-10-15



1

min



13

words

HACKER NEWS

**Summary:**

Article URL: <https://nitrojacob.wordpress.com/2025/09/03/reverse-engineering-a-27mhz-rc-toy-communication-using-rtl-sdr/>

Comments URL: <https://news.ycombinator.com/item?id=45592585>

...



Read full article:

<https://nitrojacob.wordpress.com/2025/09/03/reverse-engineering-a-27mhz-rc-toy-communication-using-rtl-sdr/>

## Editorial: Emerging practices in therapeutic targeting of neurodegenerative diseases by modulating protein kinases

 1  
min

 13  
words

BRAIN RESEARCH


**Summary:** <p>Publication date: 15 November 2025</p><p><b>Source:</b> Brain Research, Volume 1867</p><p>Author(s): Md.Imtaiyaz Hassan, Belgin Sever</p>

 Read full article:

[https://www.sciencedirect.com/science/article/pii/S0006899325005190?dgcid=rss\\_sd\\_all](https://www.sciencedirect.com/science/article/pii/S0006899325005190?dgcid=rss_sd_all)

## Altered social proximity in adult mice following prenatal stress Exposure: An exploratory link to cortical neurogenesis

 1  
min

 19  
words


BRAIN RESEARCH

**Summary:** <p>Publication date: 1 December 2025</p><p><b>Source:</b> Brain Research, Volume 1868</p><p>Author(s): Tsukasa Tomoe, Rei Sugiyama, Niina Kiriyaama, Airi Otsuka, Munekazu Komada</p>

 Read full article:

[https://www.sciencedirect.com/science/article/pii/S0006899325005463?dgcid=rss\\_sd\\_all](https://www.sciencedirect.com/science/article/pii/S0006899325005463?dgcid=rss_sd_all)

## Psychedelic 5-HT<sub>2A</sub> receptor agonism alters neurovascular coupling and differentially affects neuronal and hemodynamic measures of brain function

 Adam Q.  
Bauer



2025-10-13



1  
min



35  
words

NATURE NEUROSCIENCE

**Summary:** <p>Nature Neuroscience, Published online: 13 October 2025; <a href="https://www.nature.com/articles/s41593-025-02069-z">doi:10.1038/s41593-025-02069-z</a></p>Padawer-Curry et al. show that the hallucinogenic 5-HT<sub>2A</sub> receptor agonist DOI alters neurovascular coupling in mice, with implications for the...



Read full article:

<https://www.nature.com/articles/s41593-025-02069-z>

## A multilayered gap junction network is essential for social decision-making

Airi Nakayama Hiroo Kuroyanagi Hironori J. Matsuyama Kue Mori Naoki Hisamoto Shunji



Nakano Department of Biological Science, Division of Natural Science, Graduate School of Science, Nagoya University, Nagoya 464-8602, Japan Neuroscience Institute, Division of Natural Science, Graduate School of Science, Nagoya University, Nagoya 464-8602, Japan



2025-10-08



1  
min



48  
words

PNAS NEUROSCIENCE

**Summary:** Proceedings of the National Academy of Sciences, Volume 122, Issue 41, October 2025. <br />Significance Early social experiences strongly influence emotions and behaviors, but the underlying neural mechanisms are unclear. This study shows that early experience of crowding exerts lasting effects on fo...



Read full article:

<https://www.pnas.org/doi/abs/10.1073/pnas.2510579122?af=R>

## Statistical physics of large-scale neural activity with loops

David P. Carcamo Christopher W. Lynna Department of Physics, Yale University, New Haven, CT

 06511b Quantitative Biology Institute, Yale University, New Haven, CT 06511c Wu Tsai Institute, Yale University, New Haven, CT 06510

 2025-10-08  1 min  48 words

PNAS NEUROSCIENCE

**Summary:** Proceedings of the National Academy of Sciences, Volume 122, Issue 41, October 2025.   
Significance Experimental advances provide recordings of neural activity at unprecedented scales. But to understand how this activity emerges from the correlations between neurons, we need models that can simul...

 Read full article:

<https://www.pnas.org/doi/abs/10.1073/pnas.2426926122?af=R>



## Transpupillary in vivo two-photon imaging reveals enhanced surveillance of retinal microglia in diabetic mice

Noriyuki SotaniSentaro KusuhabaRyuto NishishoHiroto KunoHidenori ShimaKoichiro HaruwakaYuka MoriMaya KishiTomoyuki FuruyashikiKenta KobayashiHiroaki WakeToru TakumiMakoto NakamuraYoshihisa TachibanaaDepartment of Physiology and Cell Biology, Kobe University Graduate School of Medicine, Kobe 650-0017, JapanbDivision of Ophthalmology, Department of Surgery, Kobe University Graduate School of Medicine, Kobe 650-0017, JapancCenter for Neuroimmunology and Glial Biology, Institute of Molecular Medicine, University of Texas Health Science Center, Houston, TX 77030dDivision of Pharmacology, Kobe University Graduate School of Medicine, Kobe 650-0017, JapaneSection of Viral Vector Development, National Institute for Physiological Sciences, Okazaki 444-8585, JapanfDepartment of Anatomy and Molecular Cell Biology, Nagoya University Graduate School of Medicine, Nagoya 466-8550, Japan



2025-10-08



1

min



49

words

PNAS NEUROSCIENCE

**Summary:** Proceedings of the National Academy of Sciences, Volume 122, Issue 41, October 2025. <br />SignificanceNumerous studies have developed imaging techniques for visualizing diverse cell types in the retina. However, these techniques often face challenges such as low resolution and the need for technical...



Read full article:

<https://www.pnas.org/doi/abs/10.1073/pnas.2426241122?af=R>

## Editorial: Advancements in smart diagnostics for understanding neurological behaviors and biosensing applications



Zohaib

Mushtaq



2025-09-16



1

min



0

words

FRONTIERS COMPUTATIONAL NEUROSCIENCE



Read full article:

<https://www.frontiersin.org/articles/10.3389/fncom.2025.1693327>

## RSA-TransUNet: a robust structure-adaptive TransUNet for enhanced road crack segmentation



Ruoli  
Yang



2025-09-16



1  
min



234  
words

FRONTIERS NEUROBOTICS

**Summary:** With the advancement of deep learning, road crack segmentation has become increasingly crucial for intelligent transportation safety. Despite notable progress, existing methods still face challenges in capturing fine-grained textures in small crack regions, handling blurred edges and significant wid...



Read full article:

<https://www.frontiersin.org/articles/10.3389/fnbot.2025.1633697>

## Approaches for retraining sEMG classifiers for upper-limb prostheses



Benjamin  
Metcalfe



2025-10-01



1  
min



178  
words

FRONTIERS NEUROBOTICS

**Summary:** Introduction Abandonment rates for myoelectric upper limb prostheses can reach 44%, negatively affecting quality of life and increasing the risk of injury due to compensatory movements. Traditional myoelectric prostheses rely on conventional signal processing for the detection and classification of m...




Read full article:

<https://www.frontiersin.org/articles/10.3389/fnbot.2025.1627872>

## DWMamba: a structure-aware adaptive state space network for image quality improvement

 Zhixiong  
Huang

 2025-10-02

 1  
min

 176  
words


FRONTIERS NEUROBOTICS


**Summary:** Overcoming visual degradation in challenging imaging scenarios is essential for accurate scene understanding. Although deep learning methods have integrated various perceptual capabilities and achieved remarkable progress, their high computational cost limits practical deployment under resource-cons...

 Read full article:


<https://www.frontiersin.org/articles/10.3389/fnbot.2025.1676787>

## Anodal transcranial direct current stimulation does not alter GABA concentration or functional connectivity in the normal visual cortex

 Benjamin  
Thompson

 2025-10-15

 1  
min

 244  
words


FRONTIERS NEUROSCIENCE



**Summary:** IntroductionAnodal direct current stimulation (a-tDCS) of the visual cortex is a potential rehabilitation tool for vision disorders such as amblyopia and macular degeneration. However, the underlying neural mechanisms are currently unknown. When applied to the human motor cortex, a-tDCS reduces the ...


 Read full article:

<https://www.frontiersin.org/articles/10.3389/fnins.2025.1639838>

## Balancing accuracy and efficiency: co-design of hybrid quantization and unified computing architecture for spiking neural networks


 Liang  
Chen

 2025-10-15  1  
min

 257  
words


FRONTIERS NEUROSCIENCE



**Summary:** The deployment of Spiking Neural Networks (SNNs) on resource-constrained edge devices is hindered by a critical algorithm-hardware mismatch: a fundamental trade-off between the accuracy degradation caused by aggressive quantization and the resource redundancy stemming from traditional decoupled hard...


 Read full article:

<https://www.frontiersin.org/articles/10.3389/fnins.2025.1665778>

## From image to report: automating lung cancer screening interpretation and reporting with vision-language models


 Aokun  
Chen

 2025-10-13  1  
min

 53  
words

LOW VISION

**Summary:** CONCLUSION: LUMEN demonstrates the feasibility of generating clinically accurate lung nodule reports from LDCT images through a nodule-centric VQA approach, highlighting the potential of integrating VLMs and LLMs to support radiologists in lung cancer screening workflows. Our findings also underscor...



 Read full article:


<https://pubmed.ncbi.nlm.nih.gov/41083099/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015104610&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41083099/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015104610&v=2.18.0.post9+e462414)

## Interventional Vitamin Mix Glaucoma Study (IVMGS): study protocol for a prospective, randomized, two-arm, single-center trial in existing glaucoma patients


 Pete A  
Williams

 2025-10-14  1  
min

 64  
words

LOW VISION

**Summary:** BACKGROUND: Glaucoma is a leading cause of irreversible blindness, characterized by progressive degeneration of retinal ganglion cells. Current treatments primarily lower intraocular pressure but do not directly provide neuroprotection. Preclinical studies from our group have identified dysfunction ...



 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/41084053/?](https://pubmed.ncbi.nlm.nih.gov/41084053/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015104610&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015104610&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41084053/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015104610&v=2.18.0.post9+e462414)

## Decision-Making for Endovascular Thrombectomy in Patients With Large Vessel Occlusions and Mild Neurological Deficit: A Consensus Statement

 Johanna M  
Ospel

 2025-10-14  1  
min

 69  
words

LOW VISION


**Summary:** Acute ischemic stroke patients with mild deficits (National Institutes of Health Stroke Scale [NIHSS] of 0-5) but confirmed large vessel occlusions (LVO) present a clinical challenge for endovascular thrombectomy (EVT) decisions due to limited evidence and the absence of clear guidelines. A Delphi c...



 Read full article:


[https://pubmed.ncbi.nlm.nih.gov/41084289/?](https://pubmed.ncbi.nlm.nih.gov/41084289/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015104610&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015104610&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41084289/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015104610&v=2.18.0.post9+e462414)

## Association of High-Altitude Polycythemia with JAK2V617F Mutation in Pakistani Population

 Uzma  
Zaidi

 2025-10-14  1  
min

 74  
words

LOW VISION

**Summary:** To assessthe prevalence of the JAK2V617F mutation in polycythemia patients living at high altitude. This was a cross-sectional study, conducted at the National Institute of Blood Diseasesand Bone Marrow Transplantation (NIBD-BMT), KarachifromJuly 2022 to July 2023. A total of 132 patients with polyc...


 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41084570/?](https://pubmed.ncbi.nlm.nih.gov/41084570/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015104610&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015104610&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41084570/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015104610&v=2.18.0.post9+e462414)

## Neither exogenous, nor endogenous: Evidence for a distinct role of negative emotion during attentional control

 Gilles  
Pourtois

 2025-10-14

 1  
min

 69  
words

LOW VISION

**Summary:** Negative or threatening stimuli capture attention. However, it remains unclear whether this phenomenon is best conceived as bottom-up (i.e., salience-driven) or top-down (i.e., goal-directed) instead. To address this question, we conducted two experiments using a previously validated dot-probe task ...


 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/41086156/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015104610&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41086156/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015104610&v=2.18.0.post9+e462414)

## Improving object detection in challenging weather for autonomous driving via adversarial image translation

 Yaohua  
Zhao

 2025-10-14

 1  
min

 65  
words

LOW VISION


**Summary:** Vision-based environmental perception is fundamental to autonomous driving, as it enables reliable detection and recognition of diverse objects in complex traffic environments. However, adverse weather conditions (such as rain, fog, and low-light conditions) significantly degrade image quality, ther...


 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/41086174/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015104610&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41086174/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015104610&v=2.18.0.post9+e462414)

## Shared mechanisms of presaccadic and exogenous attention in modulating visual perception of contrast

 Yongchun  
Cai

 2025-10-14

 1  
min

 59  
words

LOW VISION


**Summary:** Different types of attention alter subjective visual perception in fundamentally distinct ways. Previous studies have focused on covert attention without concurrent eye movements, revealing that covert exogenous (involuntary) attention enhances contrast appearance of low-contrast stimuli while dimin...


 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/41086688/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnVslegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015104610&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41086688/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnVslegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015104610&v=2.18.0.post9+e462414)

## Halide Perovskites for Neuromorphic Sensing and Computing

 Ho Won  
Jang

 2025-10-14

 1  
min

 56  
words

LOW VISION

**Summary:** The development of semiconductor-based electronic devices has significantly advanced sensor-based data acquisition and processor-driven data analysis. However, conventional complementary metal-oxide-semiconductor technologies are now facing fundamental limitations in scaling, speed, and power effici...

 **Read full article:**


<https://pubmed.ncbi.nlm.nih.gov/41087317/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnVslegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015104610&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41087317/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnVslegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015104610&v=2.18.0.post9+e462414)




## HZO/HSO Superlattice ReFET Array Integrating Optical Sensing for Neuromorphic Vision Computing

 Jingsheng  
Chen


 2025-10-15

 1  
min

 58  
words

LOW VISION

**Summary:** Neuromorphic vision systems require artificial synapses that integrate sensing, memory, and computation with high precision and stability. Conventional memristors face limitations including forming requirements, few multilevel states, low endurance, and poor integration density, while ferroelectric ...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41089064/?](https://pubmed.ncbi.nlm.nih.gov/41089064/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015104610&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015104610&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089064/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015104610&v=2.18.0.post9+e462414)

## Mapping political commitments: Analysing health priorities in Indian election manifestos

 Shilpi S  
Das

 2025-10-15

 1  
min

 35  
words

LOW VISION




**Summary:** CONCLUSION: India's political manifestos recognize health as important but fail to address systemic challenges. Greater political will and citizen engagement, is essential to elevate health as a governance priority, fostering universal health coverage and equity.

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41089958/?](https://pubmed.ncbi.nlm.nih.gov/41089958/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015104610&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015104610&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089958/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015104610&v=2.18.0.post9+e462414)

## You are the scariest monster in the woods

 2025-10-15  1 min  2 words





HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45592766)

 Read full article:

<https://jamie.ideasylum.com/2025/10/15/you-are-the-scariest-monster-in-the-woods>

## They Clean the Balls in a Ball Pit

 surprisetalk  2025-10-15  1 min  13 words

HACKER NEWS

**Summary:**






Article URL: <https://www.core77.com/posts/138608/Heres-How-They-Clean-the-Balls-in-a-Ball-Pit>

Comments URL: <https://news.ycombinator.com/item?id=45591264>

 Read full article:

<https://www.core77.com/posts/138608/Heres-How-They-Clean-the-Balls-in-a-Ball-Pit>

## I Almost Got Hacked by a 'Job Interview'

 DavidDodda  2025-10-15  1 min  13 words 






**Summary:**

Article URL: <https://blog.daviddodda.com/how-i-almost-got-hacked-by-a-job-interview>

Comments URL: <https://news.ycombinator.com/item?id=45591707>

 Read full article:  
<https://blog.daviddodda.com/how-i-almost-got-hacked-by-a-job-interview>

## You are the scariest monster in the woods

 mohi-  
kalantari  2025-10-15  1 min  13 words 

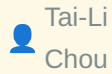
**Summary:**

Article URL: <https://jamie.ideasylum.com/2025/10/15/you-are-the-scariest-monster-in-the-woods>

Comments URL: <https://news.ycombinator.com/item?id=45592766>

 Read full article:  
<https://jamie.ideasylum.com/2025/10/15/you-are-the-scariest-monster-in-the-woods>

## Developmental changes in phonological awareness in Chinese-English bilingual children: An fNIRS longitudinal study



Tai-Li  
Chou



2025-10-11



1

min



70

words

FNIRS

**Summary:** Learning to read triggers a cascade of changes in children's minds and brains, changes that lead to the formation of the "reading brain". Importantly, the developmental trajectory of these changes differs across languages. The development of phonological literacy skills comes first for learners of a...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41076038/?](https://pubmed.ncbi.nlm.nih.gov/41076038/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015102110&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015102110&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41076038/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015102110&v=2.18.0.post9+e462414)

## Sensitivity Analysis of the Balloon Model Parameters in Functional Near-Infrared Spectroscopy Simulation



Murad  
Althobaiti



2025-10-11



1

min



43

words

FNIRS

**Summary:** CONCLUSIONS: The fNIRS hemodynamic response is highly sensitive to the Balloon model's  $\alpha$  and  $\tau$  parameters. These findings highlight the importance of accounting for physiological variability in fNIRS analysis and provide a robust framework for generating synthetic data to test signal processing algo...






Read full article:


[https://pubmed.ncbi.nlm.nih.gov/41076093/?](https://pubmed.ncbi.nlm.nih.gov/41076093/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015102110&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015102110&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41076093/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015102110&v=2.18.0.post9+e462414)

## Machine learning assessment of cognitive reserve using functional near-infrared spectroscopy in older adults with cognitive frailty

 Zheng  
Li

 2025-10-11  1  
min

 59  
words

**FNIRS**


**Summary:** Cognitive reserve mitigates aging-related cognitive decline and frailty, yet current assessments lack neurobiological specificity. We aimed to develop a noninvasive, functional near infrared spectroscopy (fNIRS)-based machine learning model to classify cognitive reserve levels in older adults with c...

 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/41076505/?](https://pubmed.ncbi.nlm.nih.gov/41076505/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015102110&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015102110&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41076505/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015102110&v=2.18.0.post9+e462414)

## Exploring age and hemispheric differences in cortical plasticity after iTBS using fNIRS

 Melanie  
Burke

 2025-10-12  1  
min

 67  
words

**FNIRS**

**Summary:** Non-invasive brain stimulation applied to the prefrontal cortex (PFC) has been shown to improve cognitive outcomes in older adults with cognitive impairments (Miller et al., 2023). However, the differential impact of left versus right dorsolateral prefrontal cortex (DLPFC) stimulation on prefrontal ...

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41077115/?](https://pubmed.ncbi.nlm.nih.gov/41077115/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015102110&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015102110&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41077115/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015102110&v=2.18.0.post9+e462414)

## Single video games improve cognitive functioning in college students: evidence from behavioral and fNIRS assessments

Shen  
Wang

2025-10-13

1  
min

43  
words

FNIRS

**Summary:** CONCLUSIONS: Cognitively engaging video games can effectively enhance the cognitive abilities of male college students. The underlying mechanism may be closely related to the promotion of prefrontal lobe activation by video games, which in turn improves reflective ability, processing speed, and deci...

 Read full article:

<https://pubmed.ncbi.nlm.nih.gov/41080773/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015102110&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41080773/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015102110&v=2.18.0.post9+e462414)

## Prefrontal activation in bipolar and unipolar depression patients in the letter fluency tasks and category fluency tasks: a functional near-infrared spectroscopy study

Zhaohui  
Zhang

2025-10-13

1  
min

46  
words

FNIRS

**Summary:** CONCLUSION: Our findings indicate that the LFT elicits more extensive prefrontal activation, with differential engagement of the VLPFC in BD compared to UD. These results suggest potential neuroimaging biomarkers for distinguishing between UD and BD, while also providing insights into the neural sub...

 Read full article:

<https://pubmed.ncbi.nlm.nih.gov/41080778/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015102110&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41080778/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015102110&v=2.18.0.post9+e462414)

## Neural predictors of hidden, persistent psychological states at work



Matthew D  
Lieberman



2025-10-13



1  
min



69  
words

FNIRS

**Summary:** Common workplace challenges such as feeling overwhelmed, burned out, or disengaged often remain hidden due to fear of judgment or social norms, contributing to rising mental health crises and organizational dysfunction. This study presents a brain-based framework for predicting these hidden and pers...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41082670/?](https://pubmed.ncbi.nlm.nih.gov/41082670/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015102110&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015102110&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41082670/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015102110&v=2.18.0.post9+e462414)

## Dose-Dependent Enhancement of Coordination through Multibrain Transcranial Stimulation: A fNIRS Hyperscanning Study



Shengjun  
Wu



2025-10-13



1  
min



67  
words

FNIRS

**Summary:** Coordination serves as a fundamental driving force in the evolution of human society, and transcranial electrical stimulation (tES) is increasingly recognized for its ability to modulate human coordination. However, the neural mechanisms underlying coordination and whether tES positively influences ...





Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41083052/?](https://pubmed.ncbi.nlm.nih.gov/41083052/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015102110&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015102110&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41083052/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015102110&v=2.18.0.post9+e462414)

## Functional connectivity in whole-brain and network analysis differentiates minimally conscious from unresponsive patients: a resting-state fNIRS study

 Liying  
Zhang

 2025-10-15

 1  
min

 24  
words

**fNIRS**

**Summary:** CONCLUSION: fNIRS could effectively detect abnormal brain network functional connectivity in DOC patients and could provide valuable insights for differentiating MCS and VS/UWS patients.

 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/41088235/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015102110&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41088235/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015102110&v=2.18.0.post9+e462414)



## Predicting Individual Response to Acupuncture in Sensorineural Tinnitus Using Integrated Functional Near-Infrared Spectroscopy and Machine Learning: Protocol for a Model Development and Validation Study



Hantong  
Hu

17

2025-10-15



1  
min



63  
words

FNIRS

**Summary:** CONCLUSION: This study represents the first attempt to integrate fNIRS detection with machine learning techniques for predicting acupuncture efficacy in SNT treatment. The methodology addresses several key challenges in acupuncture research through comprehensive data collection and advanced analytic...




Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41089742/?](https://pubmed.ncbi.nlm.nih.gov/41089742/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015102110&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015102110&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089742/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015102110&v=2.18.0.post9+e462414)

## Brain-computer interface training for multimodal functional recovery in patients with brain injury: a case series

 Rui  
Cheng

 2025-10-13

 1  
min

 48  
words

BRAIN COMPUTER INTERFACE


**Summary:** CONCLUSIONS: Motor imagery-based BCI training may facilitate recovery across motor, language, and cognitive domains in patients with subacute brain injury. Functional gains were supported by neurophysiological and connectomics evidence of cross-network reorganization. These preliminary findings sugg...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41081225/?](https://pubmed.ncbi.nlm.nih.gov/41081225/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015102102&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015102102&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41081225/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015102102&v=2.18.0.post9+e462414)

# Synthesis and characterization of silver nanoparticle-loaded carboxymethylcellulose hydrogels: in vitro and in vivo evaluation of wound healing and antibacterial properties

 Morteza  
Alizadeh

 2025-10-13

 1  
min

 64  
words

BRAIN COMPUTER INTERFACE

**Summary:** The current research was conducted to assess wound healing activity and antibacterial properties of carboxymethyl cellulose (CMC) hydrogels loaded with silver nanoparticles (AgNPs) against excisional wounds (15 × 15 mm<sup>2</sup>) infected with *Pseudomonas aeruginosa* and *Staphylococcus aureus* in a rat model.C...

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41082005/?utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015102102&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41082005/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015102102&v=2.18.0.post9+e462414)

## Electroceuticals for Paralympic Athletes: A Fair Play and Classification Concern?



Tom E  
Nightingale



2025-10-13



1  
min



66  
words

BRAIN COMPUTER INTERFACE

**Summary:** Electroceuticals such as brain computer interfaces and spinal cord stimulation (SCS) represent transformative strategies for neuromodulation. Research has demonstrated that SCS can ameliorate motor and autonomic cardiovascular dysfunctions, particularly in individuals with spinal cord injury (SCI). ...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41082173/?](https://pubmed.ncbi.nlm.nih.gov/41082173/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015102102&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015102102&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41082173/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015102102&v=2.18.0.post9+e462414)

## Cell-to-cell communication: from physical calling to remote emotional touching



Azadeh Imani  
Rad



2025-10-14



1  
min



55  
words

BRAIN COMPUTER INTERFACE

**Summary:** The emerging paradigm of cell-to-cell communication represents a transformative shift from device-mediated contact to bio-integrated, emotion-driven interactions. This article introduces a novel, multi-layered framework for enabling biologically integrated communication between cells, devices, and c...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41083759/?](https://pubmed.ncbi.nlm.nih.gov/41083759/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015102102&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015102102&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41083759/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015102102&v=2.18.0.post9+e462414)

## Virtual Reality Experience as Reflected in EEG Microstates



Ke  
Ma



2025-10-14



1  
min



73  
words

BRAIN COMPUTER INTERFACE

**Summary:** The development of virtual reality technology has provided psychological research with powerful tools by presenting stimuli and constructing scenarios, and the combination of VR and neuroimaging techniques begins to provide particularly interesting insights into the experience of virtual events and ...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41085777/?](https://pubmed.ncbi.nlm.nih.gov/41085777/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015102102&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41085777/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015102102&v=2.18.0.post9+e462414)

[tbw4049Wgf\\_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015102102&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41085777/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015102102&v=2.18.0.post9+e462414)

## An incremental adversarial training method enables timeliness and rapid new knowledge acquisition



Chengli  
Wang



2025-10-14



1  
min



69  
words

BRAIN COMPUTER INTERFACE

**Summary:** Adversarial training is an effective defense method for deep models against adversarial attacks. However, current adversarial training methods require retraining the entire neural network, which consumes a significant amount of computational resources, thereby affecting the timeliness of deep models...




Read full article:


[https://pubmed.ncbi.nlm.nih.gov/41087533/?](https://pubmed.ncbi.nlm.nih.gov/41087533/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015102102&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41087533/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015102102&v=2.18.0.post9+e462414)


[tbw4049Wgf\\_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015102102&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41087533/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015102102&v=2.18.0.post9+e462414)

## Gut microbiota remodeling and sensory-emotional functional disruption in adolescents with bipolar depression

 Jianbo  
Lai

 2025-10-15

 1  
min

 57  
words

BRAIN COMPUTER INTERFACE

**Summary:** CONCLUSION: This study first characterized the gut microbiota architecture in adolescent BD. Combining gut microbiota and brain function biomarkers may benefit disease diagnosis and predict treatment outcome. Nonetheless, these findings should be carefully interpreted considering the limitations of ...


 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/41088296/?](https://pubmed.ncbi.nlm.nih.gov/41088296/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015102102&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41088296/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015102102&v=2.18.0.post9+e462414)


[tbw4049Wgf\\_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015102102&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41088296/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015102102&v=2.18.0.post9+e462414)

## Does brain-computer interface-based mind reading threaten mental privacy? ethical reflections from interviews with Chinese experts

 Haidan  
Chen


 2025-10-15

 1  
min

 64  
words

BRAIN COMPUTER INTERFACE

**Summary:** CONCLUSION: We summarize the interpretations, feasibility, and limitations of BMR and introduce a distinction between "strong BMR" and "weak BMR" to clarify their technical and ethical implications. Based on our analysis, we argue that current BMR does not pose unique ethical challenges compared wit...


 **Read full article:**



[https://pubmed.ncbi.nlm.nih.gov/41088329/?](https://pubmed.ncbi.nlm.nih.gov/41088329/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015102102&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41088329/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015102102&v=2.18.0.post9+e462414)

[tbw4049Wgf\\_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015102102&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41088329/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015102102&v=2.18.0.post9+e462414)

## Precision TMS through the integration of neuroimaging and machine learning: optimizing stimulation targets for personalized treatment

 Panxiao  
Bao

 2025-10-15  1  
min

 60  
words

BRAIN COMPUTER INTERFACE


**Summary:** Transcranial Magnetic Stimulation (TMS), a non-invasive neuromodulation technique based on electromagnetic induction, modulates cortical excitability by inducing currents with a magnetic field. TMS has demonstrated significant clinical potential in the treatment of various neuropsychiatric disorders...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41089381/?utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015102102&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089381/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015102102&v=2.18.0.post9+e462414)




## A time-frequency feature fusion-based deep learning network for SSVEP frequency recognition

 Jijun  
Tong

 2025-10-15

 1  
min

 62  
words

BRAIN COMPUTER INTERFACE


**Summary:** INTRODUCTION: Steady-state visual evoked potential (SSVEP) has emerged as a pivotal branch in brain-computer interfaces (BCIs) due to its high signal-to-noise ratio (SNR) and elevated information transfer rate (ITR). However, substantial inter-subject variability in electroencephalographic (EEG) sig...

 Read full article:


[https://pubmed.ncbi.nlm.nih.gov/41089660/?](https://pubmed.ncbi.nlm.nih.gov/41089660/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015102102&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015102102&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089660/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015102102&v=2.18.0.post9+e462414)

## Mac Source Ports – Run old games on new Macs

 2025-10-15

 1  
min

 2  
words




HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45591865)

 Read full article:

<https://www.macsourceports.com/>

## iPad Pro with M5 chip

 2025-10-15  1 min  2 words

HACKER NEWS


**Summary:** [Comments](https://news.ycombinator.com/item?id=45591905)



Read full article:

<https://www.apple.com/newsroom/2025/10/apple-introduces-the-powerful-new-ipad-pro-with-the-m5-chip/>

## Pwning the Entire Nix Ecosystem

 2025-10-15  1 min  2 words

HACKER NEWS


**Summary:** [Comments](https://news.ycombinator.com/item?id=45592401)



Read full article:

<https://ptrpa.ws/nixpkgs-actions-abuse>

## Mac Source Ports – run old games on new Macs

 stared  17 2025-10-15  1 min  13 words

HACKER NEWS

**Summary:**

Article URL: <https://www.macsourceports.com/>

Comments URL: <https://news.ycombinator.com/item?id=45591865>

Points: 5

# Comments: 0

 Read full article:  
<https://www.macsourceports.com/>

## M5 MacBook Pro

 tambourine\_man  17 2025-10-15  1 min  13 words

HACKER NEWS

**Summary:**

Article URL: <https://www.apple.com/macbook-pro/>

Comments URL: <https://news.ycombinator.com/item?id=45591902>

Points: 7

# Comments: 2

 Read full article:  
<https://www.apple.com/macbook-pro/>

## iPad Pro with M5 chip

 chasingbrains  17 2025-10-15  1 min  13 words

HACKER NEWS

**Summary:**




Article URL: <https://www.apple.com/newsroom/2025/10/apple-introduces-the-powerful-new-ipad-pro-with-the-m5-chip/>

Comments URL: <https://news.ycombinator.com/item?id=455...>

 Read full article:

<https://www.apple.com/newsroom/2025/10/apple-introduces-the-powerful-new-ipad-pro-with-the-m5-chip/>

## Pwning the Entire Nix Ecosystem

 SuperShibe  17 2025-10-15  1 min  13 words

HACKER NEWS

**Summary:**

Article URL: <https://ptrpa.ws/nixpkgs-actions-abuse>

Comments URL: <https://news.ycombinator.com/item?id=45592401>

Points: 16

# Comments: 0

 Read full article:

<https://ptrpa.ws/nixpkgs-actions-abuse>

## The effect of development on cortical auditory evoked potentials in normal hearing listeners and cochlear implant users

 Bruce  
Gantz



2025-10-15



1  
min



257  
words

FRONTIERS HUMAN NEUROSCIENCE

**Summary:** IntroductionCortical auditory evoked potentials (CAEPs), such as the P1-N1-P2 complex (onset response) and the acoustic change complex (ACC), provide insight into sound detection and discrimination. While their developmental trajectories are well documented in normal-hearing (NH) listeners, less is ...



Read full article:

<https://www.frontiersin.org/articles/10.3389/fnhum.2025.1473365>

## Flapping-wing robot achieves self-takeoff by adopting reconfigurable mechanisms



2025-10-08



1  
min



2  
words

HACKER NEWS




**Summary:** [Comments](https://news.ycombinator.com/item?id=45520263)



Read full article:


<https://www.science.org/doi/10.1126/sciadv.adx0465>

# Show HN: Scriber Pro – Transcribe 4.5hr video in 3.5min, 100% offline on Mac




 2025-10-15  1 min  2 words

HACKER NEWS

Summary: [Comments](https://news.ycombinator.com/item?id=45591222)


 Read full article:  
<https://scriberpro.cc/hn/>

# Show HN: Scriber Pro – Transcribe 4.5hr video in 3.5min, 100% offline on Mac




 2025-10-15  1 min  2 words

HACKER NEWS

Summary: [Comments](https://news.ycombinator.com/item?id=45591222)

 Read full article:  
<https://scriberpro.cc/hn/>

# Apple Vision Pro upgraded with the powerful M5 chip

 2025-10-15  1 min  2 words



HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45591801)

 **Read full article:**

<https://www.apple.com/newsroom/2025/10/apple-vision-pro-upgraded-with-the-m5-chip-and-dual-knit-band/>

# Apple Vision Pro upgraded with the powerful M5 chip

 2025-10-15  1 min  2 words




HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45591801)

 **Read full article:**

<https://www.apple.com/newsroom/2025/10/apple-vision-pro-upgraded-with-the-m5-chip-and-dual-knit-band/>

# Apple unleashes M5, the next big leap in AI performance for Apple Silicon

 2025-10-15  1 min  2 words




HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45591799)

 Read full article:

<https://www.apple.com/newsroom/2025/10/apple-unleashes-m5-the-next-big-leap-in-ai-performance-for-apple-silicon/>

# Apple unleashes M5, the next big leap in AI performance for Apple Silicon

 2025-10-15  1 min  2 words

HACKER NEWS


**Summary:** [Comments](https://news.ycombinator.com/item?id=45591799)

 Read full article:

<https://www.apple.com/newsroom/2025/10/apple-unleashes-m5-the-next-big-leap-in-ai-performance-for-apple-silicon/>



## Garbage Collection for Rust: The Finalizer Frontier

 ltratt 
  2025-10-15 
  1 min 
  13 words

HACKER NEWS

**Summary:**

Article URL: [https://soft-dev.org/pubs/html/hughes\\_tratt\\_\\_garbage\\_collection\\_for\\_rust\\_the\\_finalizer\\_frontier/](https://soft-dev.org/pubs/html/hughes_tratt__garbage_collection_for_rust_the_finalizer_frontier/)

Comments URL: <https://news.ycombinator.com/item?id=45591149>...

 Read full article:

[https://soft-dev.org/pubs/html/hughes\\_tratt\\_\\_garbage\\_collection\\_for\\_rust\\_the\\_finalizer\\_frontier/](https://soft-dev.org/pubs/html/hughes_tratt__garbage_collection_for_rust_the_finalizer_frontier/)

## Neuroanatomical correlates of auditory and visual statistical learning: Cortical and subcortical volume predictors

 1 min 
  21 words


NEUROSCIENCE JOURNAL

**Summary:**

Publication date: 10 November 2025

Source: Neuroscience, Volume 587

Author(s): Praveen Prem, Sukhmani Kaur Saggu, Adwoa Boadu, Sarah Saju, Kelly Nisbet, Jacqueline Cummine

 Read full article:

[https://www.sciencedirect.com/science/article/pii/S0306452225009650?dgcid=rss\\_sd\\_all](https://www.sciencedirect.com/science/article/pii/S0306452225009650?dgcid=rss_sd_all)

## Recommending `prek` - the necessary Rust rewrite of `pre-commit`

/u/  
Goldziher



2025-10-15



1

min



176

words

REDDIT PYTHON

**Summary:** Hi peeps, I wanna recommend to all of you the tool [prek](https://github.com/j178/prek) to you. This is a Rust rewrite of the established Python tool [pre-commit](https://pre-commit.com), which is widely used. Pre-commit is a great tool ...



Read full article:

[https://www.reddit.com/r/Python/comments/1o77mip/recommending\\_prek\\_the\\_necessary\\_rust\\_rewrite\\_of/](https://www.reddit.com/r/Python/comments/1o77mip/recommending_prek_the_necessary_rust_rewrite_of/)

## I analyzed 200 e-commerce sites and found 73% of their traffic is fake



2025-10-15



1

min



2

words

HACKER NEWS




**Summary:** [Comments](https://news.ycombinator.com/item?id=45590681)



Read full article:

<https://joindatacops.com/resources/how-73-of-your-e-commerce-visitors-could-be-fake>

## CVE-2025-55315: Asp.net Security Feature Bypass Vulnerability [9.9 Critical]

 2025-10-15  1 min  2 words



HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45590302)

 Read full article:

<https://nvd.nist.gov/vuln/detail/CVE-2025-55315>

## Helpcare AI (YC F24) Is Hiring

 2025-10-15  1 min  2 words


HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45591082)

 Read full article:

<https://news.ycombinator.com/item?id=45591082>

## Why We're Leaving Serverless

 2025-10-15  1 min  2 words

HACKER NEWS



**Summary:** [Comments](https://news.ycombinator.com/item?id=45590756)



Read full article:

<https://www.unkey.com/blog/serverless-exit>

## Esports scholarship at Deutsche Bahn (German railways)

 2025-10-15  1 min  2 words

HACKER NEWS




**Summary:** [Comments](https://news.ycombinator.com/item?id=45590800)



Read full article:

<https://db.jobs/de-de/esports-11092734>

## Show HN: Halloy – the modern IRC client I hope will outlive me




 2025-10-15  1 min  2 words

HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45590949)


 Read full article:  
<https://github.com/squidowl/halloy>

## Ireland Is Making Basic Income for Artists Program Permanent

 2025-10-15  1 min  2 words

HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45590900)

 Read full article:  
<https://www.artnews.com/art-news/news/ireland-basic-income-artists-program-permanent-1234756981/>

## CVE-2025-55315: Asp.net Security Feature Bypass Vulnerability [9.9 Critical]



zeraye



2025-10-15

1  
min13  
words

HACKER NEWS

**Summary:**

Article URL: <https://nvd.nist.gov/vuln/detail/CVE-2025-55315>

Comments URL: <https://news.ycombinator.com/item?id=45590302>

Points: 16

# Comments: 1



Read full article:

<https://nvd.nist.gov/vuln/detail/CVE-2025-55315>

## I analyzed 200 e-commerce sites and found 73% of their traffic is fake



simul007



2025-10-15

1  
min13  
words

HACKER NEWS

**Summary:**

Article URL: <https://joindatacops.com/resources/how-73-of-your-e-commerce-visitors-could-be-fake>

Comments URL: <https://news.ycombinator.com/item?id=45590681>



Read full article:

<https://joindatacops.com/resources/how-73-of-your-e-commerce-visitors-could-be-fake>

## Why We're Leaving Serverless

 vednig  17 2025-10-15  1 min  13 words

HACKER NEWS

**Summary:**

Article URL: <https://www.unkey.com/blog/serverless-exit>





Comments URL: <https://news.ycombinator.com/item?id=45590756>

Points: 65

# Comments: 47

 Read full article:  
<https://www.unkey.com/blog/serverless-exit>

## Esports scholarship at Deutsche Bahn (German railways)

 schaum  17 2025-10-15  1 min  13 words

HACKER NEWS

**Summary:**

Article URL: <https://db.jobs/de-de/esports-11092734>

Comments URL: <https://news.ycombinator.com/item?id=45590800>

Points: 13

# Comments: 7

 Read full article:  
<https://db.jobs/de-de/esports-11092734>

## Ireland Is Making Basic Income for Artists Program Permanent



rbanffy



2025-10-15

1  
min13  
words

HACKER NEWS

**Summary:**

Article URL: <https://www.artnews.com/art-news/news/ireland-basic-income-artists-program-permanent-1234756981/>

Comments URL: <https://news.ycombinator.com/item?id=45590900>...



Read full article:

<https://www.artnews.com/art-news/news/ireland-basic-income-artists-program-permanent-1234756981/>

## Show HN: Halloy – the modern IRC client I hope will outlive me

culinary-  
robot

2025-10-15

1  
min90  
words

HACKER NEWS

**Summary:**

I started working on Halloy back in 2022, with the goal of giving something back to the community I've been a part of for the past two decades. I wanted to create a modern, multi-platform IRC client written in Rust.

Three years later, I've made new friends who have become core contributors, and...




Read full article:

<https://github.com/squidowl/halloy>



## Helpcare AI (YC F24) Is Hiring

 hsial  17 2025-10-15  1 min  9 words [HACKER NEWS](#)





**Summary:**

Comments URL: <https://news.ycombinator.com/item?id=45591082> Points: 0

# Comments: 0

 **Read full article:**  
<https://news.ycombinator.com/item?id=45591082>

## Irish privacy regulator picks ex-Meta lobbyist as third commissioner

 robin\_reala  17 2025-10-15  1 min  13 words [HACKER NEWS](#)




**Summary:**

Article URL: <https://www.euractiv.com/news/irish-privacy-regulator-picks-ex-meta-lobbyist-as-third-commissioner/>

Comments URL: <https://news.ycombinator.com/item?id=455...>

 **Read full article:**  
<https://www.euractiv.com/news/irish-privacy-regulator-picks-ex-meta-lobbyist-as-third-commissioner/>

## Birds' intruder alert hints at how sounds took on new meanings





 2025-10-13  1 min  0 words

NATURE NEUROSCIENCE SUBJECTS

 Read full article:

<https://www.nature.com/articles/d41586-025-03328-6>

## From image to report: automating lung cancer screening interpretation and reporting with vision-language models

 Aokun Chen  2025-10-13  1 min  53 words

LOW VISION


**Summary:** CONCLUSION: LUMEN demonstrates the feasibility of generating clinically accurate lung nodule reports from LDCT images through a nodule-centric VQA approach, highlighting the potential of integrating VLMs and LLMs to support radiologists in lung cancer screening workflows. Our findings also underscor...


 Read full article:


[https://pubmed.ncbi.nlm.nih.gov/41083099/?](https://pubmed.ncbi.nlm.nih.gov/41083099/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015071706&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015071706&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41083099/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015071706&v=2.18.0.post9+e462414)

## Interventional Vitamin Mix Glaucoma Study (IVMGS): study protocol for a prospective, randomized, two-arm, single-center trial in existing glaucoma patients

 Pete A  
Williams

 2025-10-14  1  
min

 64  
words

LOW VISION


**Summary:** BACKGROUND: Glaucoma is a leading cause of irreversible blindness, characterized by progressive degeneration of retinal ganglion cells. Current treatments primarily lower intraocular pressure but do not directly provide neuroprotection. Preclinical studies from our group have identified dysfunction ...


 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/41084053/?](https://pubmed.ncbi.nlm.nih.gov/41084053/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015071706&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015071706&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41084053/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015071706&v=2.18.0.post9+e462414)

## Decision-Making for Endovascular Thrombectomy in Patients With Large Vessel Occlusions and Mild Neurological Deficit: A Consensus Statement

 Johanna M  
Ospel

 2025-10-14  1  
min

 69  
words


LOW VISION



**Summary:** Acute ischemic stroke patients with mild deficits (National Institutes of Health Stroke Scale [NIHSS] of 0-5) but confirmed large vessel occlusions (LVO) present a clinical challenge for endovascular thrombectomy (EVT) decisions due to limited evidence and the absence of clear guidelines. A Delphi c...


 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41084289/?utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015071706&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41084289/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015071706&v=2.18.0.post9+e462414)

## Association of High-Altitude Polycythemia with JAK2V617F Mutation in Pakistani Population

 Uzma  
Zaidi

 2025-10-14  1  
min

 74  
words

LOW VISION


**Summary:** To assessthe prevalence of the JAK2V617F mutation in polycythemia patients living at high altitude. This was a cross-sectional study, conducted at the National Institute of Blood Diseasesand Bone Marrow Transplantation (NIBD-BMT), KarachifromJuly 2022 to July 2023. A total of 132 patients with polyc...

 Read full article:


[https://pubmed.ncbi.nlm.nih.gov/41084570/?utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015071706&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41084570/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015071706&v=2.18.0.post9+e462414)

## Neither exogenous, nor endogenous: Evidence for a distinct role of negative emotion during attentional control

 Gilles  
Pourtois

 2025-10-14

 1  
min

 69  
words

LOW VISION

**Summary:** Negative or threatening stimuli capture attention. However, it remains unclear whether this phenomenon is best conceived as bottom-up (i.e., salience-driven) or top-down (i.e., goal-directed) instead. To address this question, we conducted two experiments using a previously validated dot-probe task ...


 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/41086156/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015071706&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41086156/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015071706&v=2.18.0.post9+e462414)

## Improving object detection in challenging weather for autonomous driving via adversarial image translation

 Yaohua  
Zhao

 2025-10-14

 1  
min

 65  
words

LOW VISION

**Summary:** Vision-based environmental perception is fundamental to autonomous driving, as it enables reliable detection and recognition of diverse objects in complex traffic environments. However, adverse weather conditions (such as rain, fog, and low-light conditions) significantly degrade image quality, ther...

 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/41086174/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015071706&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41086174/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015071706&v=2.18.0.post9+e462414)

## Shared mechanisms of presaccadic and exogenous attention in modulating visual perception of contrast

 Yongchun  
Cai



2025-10-14



1  
min



59  
words

LOW VISION

**Summary:** Different types of attention alter subjective visual perception in fundamentally distinct ways. Previous studies have focused on covert attention without concurrent eye movements, revealing that covert exogenous (involuntary) attention enhances contrast appearance of low-contrast stimuli while dimin...




Read full article:

<https://pubmed.ncbi.nlm.nih.gov/41086688/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnVslegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015071706&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41086688/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnVslegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015071706&v=2.18.0.post9+e462414)

## Halide Perovskites for Neuromorphic Sensing and Computing

 Ho Won  
Jang



2025-10-14



1  
min



56  
words

LOW VISION

**Summary:** The development of semiconductor-based electronic devices has significantly advanced sensor-based data acquisition and processor-driven data analysis. However, conventional complementary metal-oxide-semiconductor technologies are now facing fundamental limitations in scaling, speed, and power effici...




Read full article:

<https://pubmed.ncbi.nlm.nih.gov/41087317/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnVslegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015071706&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41087317/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnVslegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015071706&v=2.18.0.post9+e462414)

## HZO/HSO Superlattice ReFET Array Integrating Optical Sensing for Neuromorphic Vision Computing

 Jingsheng  
Chen

 2025-10-15

 1  
min

 58  
words

LOW VISION

**Summary:** Neuromorphic vision systems require artificial synapses that integrate sensing, memory, and computation with high precision and stability. Conventional memristors face limitations including forming requirements, few multilevel states, low endurance, and poor integration density, while ferroelectric ...


 Read full article:

<https://pubmed.ncbi.nlm.nih.gov/41089064/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015071706&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089064/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015071706&v=2.18.0.post9+e462414)

## Mapping political commitments: Analysing health priorities in Indian election manifestos

 Shilpi S  
Das

 2025-10-15

 1  
min

 35  
words

LOW VISION

**Summary:** CONCLUSION: India's political manifestos recognize health as important but fail to address systemic challenges. Greater political will and citizen engagement, is essential to elevate health as a governance priority, fostering universal health coverage and equity.


 Read full article:

<https://pubmed.ncbi.nlm.nih.gov/41089958/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015071706&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41089958/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015071706&v=2.18.0.post9+e462414)

## Effects of theta burst stimulation on the interoceptive brain network and cardiac interoception

 1  
min

 28  
words


BRAIN RESEARCH

**Summary:**

Publication date: 1 December 2025

Source: Brain Research, Volume 1868


Author(s): Lisa Lai, Til Ole Bergmann, Claus Vögele, Jonathan Cimino, Damien Salles, Marian Van der Meulen, Tabea Schmidt, André Schulz

 Read full article:

[https://www.sciencedirect.com/science/article/pii/S0006899325005591?dgcid=rss\\_sd\\_all](https://www.sciencedirect.com/science/article/pii/S0006899325005591?dgcid=rss_sd_all)

## A deep learning framework for real-time prediction of the behavioral state transition during predation

 1  
min

 23  
words

BRAIN RESEARCH

**Summary:**

Publication date: 1 December 2025

Source: Brain Research, Volume 1868

Author(s): Guifeng Zhai, Jincheng Wang, Qiaoqian Wei, Qiyue Deng, Xue Liu, Zhiyi Chen, Yi Zhou


 Read full article:

[https://www.sciencedirect.com/science/article/pii/S0006899325005451?dgcid=rss\\_sd\\_all](https://www.sciencedirect.com/science/article/pii/S0006899325005451?dgcid=rss_sd_all)



## Astrocyte response in Alzheimer's disease: Good or bad?

 1  
min

 30  
words



BRAIN RESEARCH


**Summary:** <p>Publication date: 1 December 2025</p><p><b>Source:</b> Brain Research, Volume 1868</p><p>Author(s): Alaa Ismail, Hayder M. Al-kuraishy, Ali I. Al-Gareeb, Ali K. Albuhadily, Asmaa S.A. Yassen, Athanasios Alexiou, Marios Papadakis, Gaber El-Saber Batiha</p>

 Read full article:

[https://www.sciencedirect.com/science/article/pii/S0006899325005347?dgcid=rss\\_sd\\_all](https://www.sciencedirect.com/science/article/pii/S0006899325005347?dgcid=rss_sd_all)

## Continuous affect responses to a large diverse set of unfamiliar music: Bayesian time-series and cluster analyses.

 2023-04-20  1  
min

 252  
words



PSYCHOMUSICOLOGY

**Summary:** Sixty-nine participants made continuous response judgments of perceived arousal and valence while listening to 30-s extracts of 100 unfamiliar pieces within a novel recommender system. Our purpose was to take advantage of the relatively large number of participants and pieces studied (compared with ...

 Read full article:

<http://doi.org/10.1037/pmu0000295>

## <em>Psychomusicology</em>: A resounding closing cadence.



 2024-01-22  1 min  256 words

PSYCHOMUSICOLOGY

**Summary:** From 2012 to 2023, the American Psychological Association served as publisher of <em>Psychomusicology: Music, Mind, and Brain</em>. Annabel Cohen and Mark Schmuckler were the successive editors-in-chiefs during this time. As the journal is ceasing publication, the two editors reflect on the developm...

 Read full article:  
<http://doi.org/10.1037/pmu0000305>

## How to deal with regression to the mean when selecting out conscious trials in order to analyze unconscious trials.




 2024-09-09  1 min  261 words

CLINICAL NEUROSCIENCE

**Summary:** In implicit cognition research generally, one standard strategy is to measure the conscious status of knowledge on each trial (e.g., with confidence, structural knowledge attributions, visual clarity ratings) and then subselect the trials where the knowledge is measured to be unconscious. If the acc...

 Read full article:  
<http://doi.org/10.1037/cns0000399>

## Anomalous experiences are associated with high subconscious connectedness.




 2025-04-17  1 min  264 words

CLINICAL NEUROSCIENCE

**Summary:** A series of three studies in the United States, collectively involving 2,216 research participants and including two nationwide Internet surveys, examined the relationship of anomalous experiences with the psychological trait of subconscious connectedness, as well as with several other psychological...


 **Read full article:**  
<http://doi.org/10.1037/cns0000428>

## Britain has wasted £1,112,293,718 switching off wind turbines in 2025





 2025-10-15  1 min  2 words

HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45590236)

 **Read full article:**  
<https://wastedwind.energy/>

## The DHH Problem (2014)

 birdculture  2025-10-15  1 min  13 words

HACKER NEWS

**Summary:**

Article URL: <https://tomstu.art/the-dhh-problem>

Comments URL: <https://news.ycombinator.com/item?id=45589799>

Points: 13

# Comments: 3

 Read full article:  
<https://tomstu.art/the-dhh-problem>

## Britain has wasted £1,112,293,718 switching off wind turbines in 2025

 bashy  2025-10-15  1 min  13 words

HACKER NEWS


**Summary:**

Article URL: <https://wastedwind.energy/>


Comments URL: <https://news.ycombinator.com/item?id=45590236>


Points: 50

# Comments: 2


 Read full article:  
<https://wastedwind.energy/>

## Gradient Porous Flexible Pressure Sensors with the Relay Effect for High-Accuracy Braille-to-Speech Recognition

 Jianming  
Xu

 17 2025-08-25

 1  
min

 62  
words

**BRAILLE**


**Summary:** The development of highly sensitive, wide linear-range flexible pressure sensors is crucial for practical applications in human-computer interaction, physiological signal detection, and motion monitoring. However, traditional flexible pressure sensors often suffer from limited compressibility in the...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/40854103/?](https://pubmed.ncbi.nlm.nih.gov/40854103/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015062223&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015062223&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40854103/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015062223&v=2.18.0.post9+e462414)

## Individual and community level factors influencing modern contraceptive use among women of reproductive age in South Africa: a multilevel analysis

 Million  
Phiri

 17 2025-08-26

 1  
min

 46  
words

**BRAILLE**


**Summary:** CONCLUSION: Sensory disability status influenced women's contraceptive behaviour in South Africa. Current family planning interventions should target women with sensory disabilities by prioritising accessible communication methods (e.g., braille, sign language), disability awareness training for hea...



 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/40855574/?](https://pubmed.ncbi.nlm.nih.gov/40855574/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015062223&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015062223&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40855574/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015062223&v=2.18.0.post9+e462414)

## Explosion-powered eversible tactile displays

 Robert F  
Shepherd

 2025-08-27  1  
min

 64  
words

**BRAILLE**


**Summary:** High-resolution electronic tactile displays stand to transform haptics for remote machine operation, virtual reality, and digital information access for people who are blind or visually impaired. Yet, increasing the resolution of these displays requires increasing the number of individually addressa...



 **Read full article:**


<https://pubmed.ncbi.nlm.nih.gov/40864730/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015062223&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40864730/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015062223&v=2.18.0.post9+e462414)

## A Biomimetic Fiber-Entangled Permeable Electronic Skin for Strain-Insensitive and High-Resolution Tactile Sensing


 Zhijun  
Ma

 2025-08-28  1  
min

 57  
words

**BRAILLE**


**Summary:** Electronic skins (e-skins) incorporating island architectures represent a promising platform for strain-insensitive tactile sensing by mechanically decoupling sensing units from deformations. However, conventional island designs encounter stress concentration issues caused by inherent modulus mismat...


 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/40874468/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015062223&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40874468/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015062223&v=2.18.0.post9+e462414)

## High-Density Tactile Sensor Array for Sub-Millimeter Texture Recognition

 Min  
Zhang

 2025-08-28

 1  
min

 64  
words

**BRAILLE**

**Summary:** High-density tactile sensor arrays that replicate human touch could restore texture perception in paralyzed individuals. However, conventional tactile sensor arrays face inherent trade-offs between spatial resolution, sensitivity, and crosstalk suppression due to microstructure size limitations and ...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/40871941/?](https://pubmed.ncbi.nlm.nih.gov/40871941/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015062223&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015062223&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40871941/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015062223&v=2.18.0.post9+e462414)

## A Diachronic Investigation of the Change in Form and Formational-Semantic Systematicity of the Chinese Sign Language Lexicon

 Hao  
Lin

 2025-09-01

 1  
min

 72  
words

**BRAILLE**

**Summary:** It has been argued in previous research that several competing pressures guide the directions of language evolution (economy vs. redundancy; arbitrariness vs. systematicity). For sign languages, however, the effects of competing pressures on their change of lexical systems remain largely unclear. In...

 **Read full article:**

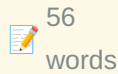
[https://pubmed.ncbi.nlm.nih.gov/40889233/?](https://pubmed.ncbi.nlm.nih.gov/40889233/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015062223&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015062223&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40889233/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015062223&v=2.18.0.post9+e462414)

## Wireless Electrotactile System with Hydrogel-Based Electrodes for Conformal Tactile Interaction

Ji  
Liu

2025-09-02


[BRAILLE](#)

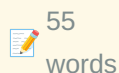
**Summary:** A wireless epidermal electrotactile interface is demonstrated through integration of skin-conformal electrodes and flexible circuitry, addressing existing limitations in haptic technology caused by mechanical mismatch and system-level integration challenges. This electrotactile system achieves low s...


[Read full article:](#)
[https://pubmed.ncbi.nlm.nih.gov/40891563/?](https://pubmed.ncbi.nlm.nih.gov/40891563/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8IvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015062223&v=2.18.0.post9+e462414)
[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8IvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015062223&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40891563/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8IvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015062223&v=2.18.0.post9+e462414)

## Beyond access: rethinking assistive technology for individuals with visual impairments in Türkiye

Önder  
İşlek

2025-09-12



[BRAILLE](#)



**Summary:** CONCLUSION: Despite demonstrating adaptability, individuals with VI in Türkiye face significant structural barriers to equitable AT access. Informal learning limited public support, and a lack of locally adapted tools contribute to digital exclusion. A rights-based approach-emphasizing inclusive fun...



[Read full article:](#)
[https://pubmed.ncbi.nlm.nih.gov/40937808/?](https://pubmed.ncbi.nlm.nih.gov/40937808/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8IvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015062223&v=2.18.0.post9+e462414)
[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8IvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015062223&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40937808/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8IvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015062223&v=2.18.0.post9+e462414)



## High prevalence of bacterial STI, anal HPV, cytological abnormalities and anal lesions among MSM in Togo, 2021: a baseline analysis of the ANRS I MIE 12,400/DepIST-H cohort

 Didier K  
Ekouevi

 2025-09-27  1  
min

 42  
words


[BRAILLE](#)


**Summary:** CONCLUSIONS: These findings emphasize the high prevalence of STIs among MSM and confirm the unusual distribution of HPV types in West Africa, with HPV35 being highly prevalent. A national strategy regarding STI screening and HPV vaccination in this key population is needed.

 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/41013315/?utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015062223&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41013315/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015062223&v=2.18.0.post9+e462414)

## Development and Assessment of a Novel Audiosensory Performance Method for Improving the Oral Health of Visually Impaired Children

 Divya Singh

 2025-10-03

 1 min

 73 words

**BRAILLE**


**Summary:** This study evaluated the effectiveness of an audiosensory performance method in enhancing oral health knowledge and status among visually impaired children aged 6-12 years in the National Capital Region (NCR), Delhi. An interventional study design was used, involving 251 participants equally divided...

 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/41041413/?](https://pubmed.ncbi.nlm.nih.gov/41041413/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015062223&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015062223&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41041413/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=165yO28ehHLjXJb8W3JvTx2bYozdDe8lvyFRBIOfHZxFR8o1uX&fc=None&ff=20251015062223&v=2.18.0.post9+e462414)

## When the unconscious contents are expressed in both Rorschach Performance Assessment System (R-PAS) and dreams: An experimental study.

 2024-07-11

 1 min

 249 words



**CLINICAL NEUROSCIENCE**

**Summary:** The Rorschach cards may elicit components of personality functioning that escape consciousness but which may influence observable performance during the test. Similarly, the manifest content of dreams may contain unconscious experiential elements that contribute to the formation of the content that ...

 **Read full article:**

<http://doi.org/10.1037/cns0000397>

## Ignorance is bliss: A meta-analysis of the fear-reducing effects of very brief exposure.

 2025-07-31  1 min  268 words

CLINICAL NEUROSCIENCE

**Summary:** Neuroscientific research on the unconscious basis of fear has been translated into novel interventions designed to reduce fear without conscious awareness. To date, the most empirically supported nonconscious exposure intervention is *very brief exposure* (VBE), the continuous presentation of...

 **Read full article:**  
<http://doi.org/10.1037/cns0000435>

## Testing the theoretical position that subconscious phenomena are conscious but not self-conscious.



 2024-12-05  1 min  98 words

CLINICAL NEUROSCIENCE

**Summary:** Building on Fechner's theory of subliminal perception (perception below the absolute threshold for self-conscious apperception) and Morton Prince's theory that subconscious experiences are conscious but not self-conscious, source-monitoring theory attributes the generic self-conscious inference...

 **Read full article:**  
<http://doi.org/10.1037/cns0000414>

## Paradigm's relevance in empirical research biases: Hypnotizability, resilience, and self-control, an empty systematic review.

 2023-12-21  1 min  193 words

CLINICAL NEUROSCIENCE

**Summary:** There are different perspectives on the psychological constructs of resilience and hypnotizability, and both are related to aspects of mental health. Resilience has been associated with protective variables, whereas hypnotizability has been related to psychopathological variables. This systematic re...

 Read full article:  
<http://doi.org/10.1037/cns0000384>

## Mechanistic pathways of acceptance: An experimental study.


 2023-08-17  1 min  177 words


CLINICAL NEUROSCIENCE

**Summary:** Acceptance can improve psychological functioning. However, research has yielded inconsistent findings regarding the efficacy of acceptance, which may be related to instructions to accept different aspects of psychological functioning (e.g., thoughts vs. emotion). We compared the effects of self-regu...


 Read full article:  
<http://doi.org/10.1037/cns0000371>

## Python humble bundle, opinions?

 /u/  
Zohvek

 2025-10-14

 1  
min

 51  
words


REDDIT PYTHON

**Summary:** <!-- SC\_OFF --><div class="md"><p><a href="https://www.humblebundle.com/books/python-programming-pearson-books?hmb\_source=&hmb\_medium=product\_tile&hmb\_campaign=mosaic\_section\_1\_layout\_iwww.humblebundle.com/...

 Read full article:

[https://www.reddit.com/r/Python/comments/1o6q3dq/python\\_humble\\_bundle\\_opinions/](https://www.reddit.com/r/Python/comments/1o6q3dq/python_humble_bundle_opinions/)

## A Force/Torque Taxonomy for Classifying States During Physical Co-Manipulation


 2025-06-17

 1  
min

 149  
words




TRANSACTIONS HAPTICS

**Summary:** Achieving seamless human-robot collaboration requires a deeper understanding of how agents manage and communicate forces during shared tasks. Force interactions during collaborative manipulation are inherently complex, especially when considering how they evolve over time. To address this complexity...

 Read full article:

<http://ieeexplore.ieee.org/document/11037651>

## Haptic Relocation Away From the Fingertip: Where, Why, and How

 2025-06-20  1 min  194 words




TRANSACTIONS HAPTICS

**Summary:** Tactile haptic devices are often designed to render meaningful, complex, and realistic touch-based information on users' skin. While fingertips and hands are the most preferred body locations to render haptic feedback, recent trends allow such feedback to be extended to alternative body locations (e...

 Read full article:


<http://ieeexplore.ieee.org/document/11045422>

## Tactile–Thermal Interactions: Cooperation and Competition

 2025-03-10  1 min  198 words


TRANSACTIONS HAPTICS

**Summary:** This review focuses on the interactions between the cutaneous senses, and in particular touch and temperature, as these are the most relevant for developing skin-based display technologies for use in virtual reality (VR) and for designing multimodal haptic devices. A broad spectrum of research is re...

 Read full article:

<http://ieeexplore.ieee.org/document/10918829>

## Twenty Years of World Haptics: Retrospective and Future Directions

 2025-09-19  1 min  1 words

TRANSACTIONS HAPTICS



Read full article:

<http://ieeexplore.ieee.org/document/11174044>

## Why We're Here

 2025-09-11  1 min  352 words

FMHY

**Summary:**

People always want to know what the point of life is. Why are they on earth? What are we doing here? Whats our purpose? *Whats the point?*


For most of my life, I didn't really have any answer, but as I got older, I realized, things weren't about me. I took a step back, and recognize...



Read full article:

<https://fmhy.net/posts/WWH>

## Astrocytic $\text{Ca}^{2+}$ prevents synaptic depotentiation by limiting repetitive activity in dendrites during motor learning

 Wen-Biao  
Gan

 17

2025-10-13



1

min



40

words

NATURE NEUROSCIENCE

**Summary:** <p>Nature Neuroscience, Published online: 13 October 2025; <a href="https://www.nature.com/articles/s41593-025-02072-4">doi:10.1038/s41593-025-02072-4</a></p>Lai et al. show a function of astrocytic  $\text{Ca}^{2+}$  in preventing synaptic depotentiation by reducing repetitive dendritic activity in the motor cor...

 Read full article:

<https://www.nature.com/articles/s41593-025-02072-4>

## Super-resolution microscopy and deep learning methods: what can they bring to neuroscience: from neuron to 3D spine segmentation

 Lydia  
Danglot

 17

2025-09-29



1

min



130

words

FRONTIERS NEUROINFORMATICS


**Summary:** In recent years, advances in microscopy and the development of novel fluorescent probes have significantly improved neuronal imaging. Many neuropsychiatric disorders are characterized by alterations in neuronal arborization, neuronal loss—as seen in Parkinson's disease—or synaptic loss, as in Alzhei...


 Read full article:

<https://www.frontiersin.org/articles/10.3389/fninf.2025.1630133>




## Early heart disease prediction using LV-PSO and Fuzzy Inference Xception Convolution Neural Network on phonocardiogram signals

 C.  
Palanisamy

 2025-10-01

 1  
min

 254  
words

FRONTIERS NEUROINFORMATICS


**Summary:** IntroductionHeart disease is one of the leading causes of mortality worldwide, and early detection is crucial for effective treatment. Phonocardiogram (PCG) signals have shown potential in diagnosing cardiovascular conditions. However, accurate classification of PCG signals remains challenging due t...

 Read full article:


<https://www.frontiersin.org/articles/10.3389/fninf.2025.1655003>

## Circuit-level modeling of prediction error computation of multi-dimensional features in voluntary actions

 Yiling  
Li


 2025-09-29

 1  
min

 207  
words


FRONTIERS COMPUTATIONAL NEUROSCIENCE

**Summary:** IntroductionPredictive processing posits that the brain minimizes discrepancies between internal predictions and sensory inputs, offering a unifying account of perception, cognition, and action. In voluntary actions, it is thought to suppress self-generated sensory outcomes. Although sensory mismatc...

 Read full article:

<https://www.frontiersin.org/articles/10.3389/fncom.2025.1551555>

## Effect of mahjong, a Chinese tiled-based game, combined with upper limb robot training on upper limb function and rehabilitation participation in Chinese stroke patients: a clinical trial protocol

 Yonghong  
Yang

 17

2025-10-10



1  
min



73  
words

**FNIRS**


**Summary:** INTRODUCTION: Stroke is the second leading cause of death and disability creating a huge economic burden annually. Robot-assisted training (RT) is a promising therapy in stroke rehabilitation, but for the elderly, traditional 'reaching objects' tasks do not seem to create sufficient motivation, an ...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41073118/?](https://pubmed.ncbi.nlm.nih.gov/41073118/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015052143&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015052143&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41073118/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015052143&v=2.18.0.post9+e462414)

## Effect of Intelligence Quotient Discrepancy on Attention and Executive Function in Children with Attention Deficit Hyperactivity Disorder: An fNIRS Study

 Xiao-Dan  
Yu

 17 2025-10-11

 1  
min

 70  
words

**fNIRS**

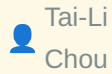
**Summary:** Intelligence quotient discrepancy (IQD) is associated with neurodevelopmental disorders, but its impact on attention and executive function (EF) deficits in children with attention deficit hyperactivity disorder (ADHD) is unknown. This study aimed to examine the effect of IQD by functional near-infra...

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41076036/?](https://pubmed.ncbi.nlm.nih.gov/41076036/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015052143&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015052143&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41076036/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015052143&v=2.18.0.post9+e462414)

## Developmental changes in phonological awareness in Chinese-English bilingual children: An fNIRS longitudinal study



Tai-Li  
Chou



2025-10-11



1  
min



70  
words

**FNIRS**

**Summary:** Learning to read triggers a cascade of changes in children's minds and brains, changes that lead to the formation of the "reading brain". Importantly, the developmental trajectory of these changes differs across languages. The development of phonological literacy skills comes first for learners of a...



**Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41076038/?](https://pubmed.ncbi.nlm.nih.gov/41076038/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015052143&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015052143&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41076038/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015052143&v=2.18.0.post9+e462414)

## Sensitivity Analysis of the Balloon Model Parameters in Functional Near-Infrared Spectroscopy Simulation



Murad  
Althobaiti



2025-10-11



1  
min



43  
words

**FNIRS**

**Summary:** CONCLUSIONS: The fNIRS hemodynamic response is highly sensitive to the Balloon model's  $\alpha$  and  $\tau$  parameters. These findings highlight the importance of accounting for physiological variability in fNIRS analysis and provide a robust framework for generating synthetic data to test signal processing algo...






**Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/41076093/?](https://pubmed.ncbi.nlm.nih.gov/41076093/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015052143&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015052143&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41076093/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015052143&v=2.18.0.post9+e462414)

## Machine learning assessment of cognitive reserve using functional near-infrared spectroscopy in older adults with cognitive frailty

 Zheng  
Li

 2025-10-11  1  
min

 59  
words

**FNIRS**


**Summary:** Cognitive reserve mitigates aging-related cognitive decline and frailty, yet current assessments lack neurobiological specificity. We aimed to develop a noninvasive, functional near infrared spectroscopy (fNIRS)-based machine learning model to classify cognitive reserve levels in older adults with c...

 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/41076505/?](https://pubmed.ncbi.nlm.nih.gov/41076505/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015052143&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015052143&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41076505/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015052143&v=2.18.0.post9+e462414)

## Exploring age and hemispheric differences in cortical plasticity after iTBS using fNIRS

 Melanie  
Burke

 2025-10-12  1  
min

 67  
words

**FNIRS**


**Summary:** Non-invasive brain stimulation applied to the prefrontal cortex (PFC) has been shown to improve cognitive outcomes in older adults with cognitive impairments (Miller et al., 2023). However, the differential impact of left versus right dorsolateral prefrontal cortex (DLPFC) stimulation on prefrontal ...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41077115/?](https://pubmed.ncbi.nlm.nih.gov/41077115/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015052143&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015052143&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41077115/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015052143&v=2.18.0.post9+e462414)

## Single video games improve cognitive functioning in college students: evidence from behavioral and fNIRS assessments

 Shen  
Wang

 17 2025-10-13

 1  
min

 43  
words

**fNIRS**


**Summary:** CONCLUSIONS: Cognitively engaging video games can effectively enhance the cognitive abilities of male college students. The underlying mechanism may be closely related to the promotion of prefrontal lobe activation by video games, which in turn improves reflective ability, processing speed, and deci...

 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/41080773/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015052143&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41080773/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015052143&v=2.18.0.post9+e462414)

## Prefrontal activation in bipolar and unipolar depression patients in the letter fluency tasks and category fluency tasks: a functional near-infrared spectroscopy study

 Zhaohui  
Zhang

 17 2025-10-13

 1  
min

 46  
words

**fNIRS**

**Summary:** CONCLUSION: Our findings indicate that the LFT elicits more extensive prefrontal activation, with differential engagement of the VLPFC in BD compared to UD. These results suggest potential neuroimaging biomarkers for distinguishing between UD and BD, while also providing insights into the neural sub...



 **Read full article:**


<https://pubmed.ncbi.nlm.nih.gov/41080778/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015052143&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41080778/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015052143&v=2.18.0.post9+e462414)

## Neural predictors of hidden, persistent psychological states at work

 Matthew D  
Lieberman

 2025-10-13  1  
min

 69  
words

FNIRS

**Summary:** Common workplace challenges such as feeling overwhelmed, burned out, or disengaged often remain hidden due to fear of judgment or social norms, contributing to rising mental health crises and organizational dysfunction. This study presents a brain-based framework for predicting these hidden and pers...



 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/41082670/?](https://pubmed.ncbi.nlm.nih.gov/41082670/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015052143&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015052143&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41082670/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015052143&v=2.18.0.post9+e462414)

## Dose-Dependent Enhancement of Coordination through Multibrain Transcranial Stimulation: A fNIRS Hyperscanning Study

 Shengjun  
Wu

 2025-10-13  1  
min

 67  
words

FNIRS

**Summary:** Coordination serves as a fundamental driving force in the evolution of human society, and transcranial electrical stimulation (tES) is increasingly recognized for its ability to modulate human coordination. However, the neural mechanisms underlying coordination and whether tES positively influences ...

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41083052/?](https://pubmed.ncbi.nlm.nih.gov/41083052/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015052143&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015052143&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41083052/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251015052143&v=2.18.0.post9+e462414)

## Emerging neuromodulation treatments for opioid and stimulant use disorders



Katherine W.  
Scangos



2025-10-14



1  
min



115  
words

FRONTIERS HUMAN NEUROSCIENCE

**Summary:** Over the past decade, deaths attributable to opioid and stimulant use have risen dramatically. While the U.S. Food and Drug Administration (FDA) has approved three medications for opioid use disorder, there is currently no FDA-approved treatment for stimulant use disorder. Despite the availability o...



Read full article:

<https://www.frontiersin.org/articles/10.3389/fnhum.2025.1570555>

## Listening to mom in the neonatal intensive care unit: a randomized trial of increased maternal speech exposure on white matter connectivity in infants born preterm



Heidi M.  
Feldman



2025-10-14



1  
min



344  
words

FRONTIERS HUMAN NEUROSCIENCE

**Summary:** ObjectiveEarly speech experiences are presumed to contribute to the development of brain structures involved in processing speech. Previous research has been limited to correlational studies. Here, we conducted a randomized trial with neonates born preterm to determine whether increased exposure to ...




Read full article:

<https://www.frontiersin.org/articles/10.3389/fnhum.2025.1673471>




## Adaptive-expert-weight-based load balance scheme for dynamic routing of MoE

 Peng  
Cheng

 17

2025-10-14

 1  
min

 197  
words


FRONTIERS NEUROBOTICS

**Summary:** Load imbalance is a major performance bottleneck in training mixture-of-experts (MoE) models, as unbalanced expert loads can lead to routing collapse. Most existing approaches address this issue by introducing auxiliary loss functions to balance the load; however, the hyperparameters within these lo...

 Read full article:

<https://www.frontiersin.org/articles/10.3389/fnbot.2025.1590994>

## Just Talk to It – The No-Bs Way of Agentic Engineering

 freediver

 17

2025-10-15

 1  
min

 13  
words

HACKER NEWS

**Summary:**

Article URL: <https://steipete.me/posts/just-talk-to-it>

Comments URL: <https://news.ycombinator.com/item?id=45588689>

Points: 3

# Comments: 1

 Read full article:

<https://steipete.me/posts/just-talk-to-it>

## Europe's Digital Sovereignty Paradox – "Chat Control" Update



neustradamus



2025-10-15



1

min



13

words

HACKER NEWS

**Summary:**

Article URL: <https://www.process-one.net/blog/chat-control-update-oct-2025/>

Comments URL: <https://news.ycombinator.com/item?id=45589327>

Points: 7<...



Read full article:

<https://www.process-one.net/blog/chat-control-update-oct-2025/>

## Pattern-Induced Visual Discomfort and Its Temporal Summation Revealed by Pupillary Measures

Meidan, R., Bonne, Y.  
S.

2025-10-15



1

min



250

words

BIORXIV NEUROSCIENCE

**Summary:** Viewing repetitive striped patterns can induce pattern glare, experienced as visual discomfort (VD). While previous studies examined either pupillary responses or VD separately, few have investigated how they covary or evolve with repeated exposure. This study tested whether pupillary dynamics could...




Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.14.682064v1?rss=1>


## Medicine on the menu: When illness informs appetite

Ji Heon HanWilliam W. JaaDepartment of Neuroscience, The Herbert Wertheim UF Scripps Institute  
for Biomedical Innovation & Technology, Jupiter, FL 33458bProgram in Integrative Biology and  
Neuroscience, Department of Biological Sciences, Florida Atlantic University, Jupiter, FL 33458

 2025-10-13  1 min  15 words

PNAS NEUROSCIENCE

**Summary:** Proceedings of the National Academy of Sciences, Volume 122, Issue 42, October 2025. <br />

 **Read full article:**

<https://www.pnas.org/doi/abs/10.1073/pnas.2524005122?af=R>

## Sex differences in healthy brain aging are unlikely to explain higher Alzheimer's disease prevalence in women

Anne Ravndal, Anders M. Fjell, Didac Vidal-Piñeiro, Øystein Sørensen, Emilie S. Falch, Julia Kropiunig, Pablo F. Garrido, James M. Roe, José-Luis Alatorre-Warren, Markus H. Sneve, David Bartrés-Faz, Alvaro Pascual-Leone, Andreas M. Brandmaier, Sandra Düzel, Simone Kühn, Ulman Lindenberger, Lars Nyberg, Leiv Otto Watne, Richard N. Henson, Kristine B. Walhovd, Håkon Grydeland, Center for Lifespan Changes in Brain and Cognition, Department of Psychology, University of Oslo, Oslo 0317, Norway; bComputational Radiology and Artificial Intelligence, Department of Radiology and Nuclear Medicine, Oslo University Hospital, Oslo 0372, Norway; cDepartment of Medicine, Faculty of Medicine and Health Sciences and Neurosciences Institute, University of Barcelona, Barcelona 08036, Spain; dInstitut Guttmann, Institut Universitari de Neurorehabilitació adscrit a la Universidad Autònoma de Barcelona, Badalona 08916, Spain; eFundació de Recerca Clínic Barcelona, Institut d'Investigacions Biomèdiques August Pi i Sunyer, Barcelona 08036, Spain; fHinda and Arthur Marcus Institute for Aging Research and Deanna and Sidney Wolk Center for Memory Health, Hebrew SeniorLife, Boston, MA 02131; gDepartment of Neurology, Harvard Medical School, Boston, MA 02115; hCenter for Lifespan Psychology, Max Planck Institute for Human Development, Berlin 14195, Germany; iDepartment of Psychology, MSB Medical School Berlin, Berlin 14197, Germany; jMax Planck University College London Centre for Computational Psychiatry and Ageing Research, Berlin 14195, Germany; kMax Planck University College London Centre for Computational Psychiatry and Ageing Research, London WC1B 5EH, United Kingdom; lDepartment of Psychiatry and Psychotherapy, University Clinic Hamburg-Eppendorf, Hamburg 20251, Germany; mCenter for Environmental Neuroscience, Max Planck Institute for Human Development, Berlin 14195, Germany; nUmeå Center for Functional Brain Imaging, Umeå University, Umeå 901 87, Sweden; oDepartment of Medical and Translational Biology, Umeå University, Umeå 901 87, Sweden; pDepartment of Diagnostics and Intervention, Umeå University, Umeå 901 87, Sweden; qOslo Delirium Research Group, Institute of Clinical Medicine, Campus Ahus, University of Oslo, Oslo 0318, Norway; rDepartment of Geriatric Medicine, Akershus University Hospital, Lørenskog 1478, Norway; sMedical Research Council Cognition and Brain Sciences Unit, Department of Psychiatry, University of Cambridge, Cambridge CB2 7EF, United Kingdom

17 2025-10-13 1 min 58 words

PNAS NEUROSCIENCE

**Summary:** Proceedings of the National Academy of Sciences, Volume 122, Issue 42, October 2025.   
As Alzheimer's disease (AD) is diagnosed more frequently in women, understanding the role of sex has become a key priority in AD research. However, despite aging being the primary risk factor for AD, it remain...

 **Read full article:**

<https://www.pnas.org/doi/abs/10.1073/pnas.2510486122?af=R>

## Functional organization of the primary motor cortex in psychosis and the potential role of intereffector regions in psychomotor slowing

Sebastian Walther Florian Wüthrich Anastasia Pavlidou Niluja Nadesalingam Stephan Heckers Melanie G. Nuoffer Victoria Chapellier Katharina Stegmayer Lydia V. Maderthaner Alexandra Kyrou Sofie von Känel Stephanie Lefebvre University Hospital of Psychiatry and Psychotherapy Bern, Translational Research Center, University of Bern, 3000 Bern, Switzerland b Translational Imaging Center, Swiss Institute for Translational and Entrepreneurial Medicine, 3000 Bern, Switzerland c Department of Psychiatry, Psychosomatics, and Psychotherapy, Center of Mental Health, University Hospital of Würzburg, 97080 Würzburg, Germany d Department of Psychiatry and Behavioral Science, Vanderbilt University, Nashville, TN 37232 e Graduate School for Health Sciences, University of Bern, 3000 Bern, Switzerland f University Hospital Inselspital Bern, Department for Neurology, Psychosomatic Medicine, 3000 Bern, Switzerland g Department of Consultation-Liaison Psychiatry and Psychosomatic Medicine, University Hospital Zurich, University of Zurich, 8091 Zurich, Switzerland



2025-10-13

1  
min46  
words

PNAS NEUROSCIENCE

**Summary:** Proceedings of the National Academy of Sciences, Volume 122, Issue 42, October 2025.   
Significance Recent literature recommended a revision of the human motor homunculus to include, in addition to the primary motor cortex regions active during movement execution, intereffector regions orchestrat...



Read full article:

<https://www.pnas.org/doi/abs/10.1073/pnas.2425388122?af=R>

## Development of novel signal and spike velocity analysis tools in compact peripheral nerve recording designs



Jonas Klus, Alexander J Boys, Ruben Ruiz-Mateos Serrano, George G Malliaras and Alejandro Carnicer-Lombarte



2025-10-14



1  
min



236  
words

JOURNAL NEURAL ENGINEERING

**Summary:** Objective. Analysis tools for peripheral nerve recordings remain underdeveloped compared to those for brain signals, limiting the advancement of nerve neurotechnologies for clinical treatments such as closed-loop systems. This study introduces and explores the performance of two novel nerve signal a...



Read full article:

<http://iopscience.iop.org/article/10.1088/1741-2552/ae0c3b>

## BGTransform: a neurophysiologically informed EEG data augmentation framework



Jin Yue, Xiaolin Xiao, Hao Zhang, Minpeng Xu and Dong Ming



2025-10-14



1  
min



279  
words

JOURNAL NEURAL ENGINEERING


**Summary:** Objective. Deep learning has emerged as a powerful approach for decoding electroencephalography (EEG)-based brain-computer interface (BCI) signals. However, its effectiveness is often limited by the scarcity and variability of available training data. Existing data augmentation methods often introdu...




Read full article:

<http://iopscience.iop.org/article/10.1088/1741-2552/ae0c3a>

## Inter-ictal spike rates are not modulated by anti-seizure medication taper in the epilepsy monitoring unit: a tale of two confounders \*

 Nina J Ghosn, Katherine Walsh, Kevin Xie, Carlos Aguila, Akash R Pattnaik, Devin Ma, Abba M Krieger, Erin C Conrad and Brian Litt

 2025-10-14  1 min  273 words


JOURNAL NEURAL ENGINEERING

**Summary:** Objective. New implantable and wearable devices hold great promise to help patients manage their seizure disorders. One proposed application is measuring the rate of interictal epileptiform discharges as a biomarker of medication levels and seizure risk. This study aims to determine whether interict...

 Read full article:

<http://iopscience.iop.org/article/10.1088/1741-2552/ae0521>

## Show HN: Firm, a text-based work management system

 2025-10-15  1 min  2 words

HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45588959)

 Read full article:

<https://github.com/42futures/firm>

## Using economic value signals from primate prefrontal cortex in neuro-engineering applications



Tevin C Rouse, Shira M Lupkin and Vincent B McGinty



2025-10-14



1 min



276 words

JOURNAL NEURAL ENGINEERING

**Summary:** Objective. Brain-machine interface (BMI) research has shown the efficacy of using motor and sensory-related neural signals to assist physically impaired patients. Despite the comparable ability to extract more abstract cognitive signals from the brain, little effort has been devoted to leveraging th...



Read full article:

<http://iopscience.iop.org/article/10.1088/1741-2552/ae0bf6>

## Lcn2 from neutrophil extracellular traps induces astrogliosis and post-stroke emotional disorders



Zhengrun Gao



2025-10-11



1 min



63 words

TDCS TACS TRNS

**Summary:** Patients with an ischemic stroke are often predisposed to emotional disorders. However, the mechanisms underlying post-stroke emotional disorders (PSEDs) remain unclear. Recent research highlights the role of neuroinflammation, driven primarily by infiltration of circulating immune cells within the ...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41075784/?](https://pubmed.ncbi.nlm.nih.gov/41075784/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015032114&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015032114&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41075784/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015032114&v=2.18.0.post9+e462414)



## Response to Vogelmann et al.: Contextualizing home-based tDCS safety: The Remotely supervised model



Giuseppina  
Pilloni



2025-10-11



1  
min



2  
words

TDCS TACS TRNS



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41075934/?](https://pubmed.ncbi.nlm.nih.gov/41075934/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015032114&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015032114&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41075934/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015032114&v=2.18.0.post9+e462414)

## Transcranial direct current stimulation (tDCS): A new, (still) legal form of "neurodoping" in sports?



James  
Chmiel



2025-10-13



1  
min



64  
words

TDCS TACS TRNS

**Summary:** Transcranial direct current stimulation (tDCS) has emerged as a widely accessible, noninvasive technique capable of modulating cortical excitability. A rapidly expanding body of sports-science literature suggests that it can produce modest but measurable gains in endurance, strength, skill acquisiti...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41078301/?](https://pubmed.ncbi.nlm.nih.gov/41078301/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015032114&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015032114&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41078301/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015032114&v=2.18.0.post9+e462414)

## Effects of transcranial direct current stimulation on neuro electrical activity in mice with migraine

Jianliang  
Wu

2025-10-13

1  
min

47  
words

TDCS TACS TRNS

**Summary:** CONCLUSION: These results establish that low-intensity tDCS ameliorates migraine pathophysiology through dual mechanisms:  $\theta$ -band synchronization mediating behavioral normalization and  $\gamma$ -band desynchronization reducing neural noise. The  $\delta/\theta$  power reconfiguration implicates thalamocortical rhythm stab...

 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41079350/?](https://pubmed.ncbi.nlm.nih.gov/41079350/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015032114&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015032114&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41079350/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015032114&v=2.18.0.post9+e462414)

## Transcranial direct current stimulation modulates primate brain dynamics across states of consciousness

Béchir  
Jarraya

2025-10-13

1  
min

63  
words

TDCS TACS TRNS


**Summary:** The resting primate brain is traversed by spontaneous functional connectivity patterns that show striking differences between conscious and unconscious states. Transcranial direct current stimulation (tDCS), a non-invasive neuromodulatory technique, can improve signs of consciousness in disorders of...



 Read full article:


[https://pubmed.ncbi.nlm.nih.gov/41081761/?](https://pubmed.ncbi.nlm.nih.gov/41081761/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015032114&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015032114&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41081761/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015032114&v=2.18.0.post9+e462414)

## High-definition Transcranial Direct Current Stimulation over Right Dorsolateral Prefrontal Cortex to Enhance Metacognitive Sensitivity


 Jialu  
Qin

 2025-10-13  1  
min

 69  
words

TDCS TACS TRNS

**Summary:** In human-AI collaboration, task delegation is a critical component. Ideally, if a person believes they are capable of completing a task, they should do so themselves; otherwise, the task should be delegated to the other party. Such delegation decisions are influenced by individuals' assessments of t...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41082455/?](https://pubmed.ncbi.nlm.nih.gov/41082455/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015032114&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015032114&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41082455/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015032114&v=2.18.0.post9+e462414)

## Dose-Dependent Enhancement of Coordination through Multibrain Transcranial Stimulation: A fNIRS Hyperscanning Study

 Shengjun Wu

 17 2025-10-13

 1 min

 67 words

TDCS TACS TRNS

**Summary:** Coordination serves as a fundamental driving force in the evolution of human society, and transcranial electrical stimulation (tES) is increasingly recognized for its ability to modulate human coordination. However, the neural mechanisms underlying coordination and whether tES positively influences ...

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41083052/?](https://pubmed.ncbi.nlm.nih.gov/41083052/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015032114&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015032114&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41083052/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015032114&v=2.18.0.post9+e462414)

## Advances on transcranial electromagnetic stimulation in improving non-motor symptoms of Parkinson's disease

 C F Liu

 17 2025-10-13

 1 min

 1 words

TDCS TACS TRNS

**Summary:** tDCS rTMS  
tDCS rTMS .

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41083398/?](https://pubmed.ncbi.nlm.nih.gov/41083398/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015032114&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015032114&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41083398/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015032114&v=2.18.0.post9+e462414)

# Modification of inhibitory control and craving through transcranial direct current stimulation as an add-on treatment for substance use disorder: protocol for a randomized controlled study



Sarah  
Gerhardt



2025-10-14



1  
min



68  
words

TDCS TACS TRNS

**Summary:** BACKGROUND: Substance use disorders (SUDs) remain a prevalent public health issue characterized by a substantial disease burden and high relapse rates. The aim of this planned project is to investigate the optimal electrode placement and polarity of transcranial direct current stimulation (tDCS) to ...




Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41084082/?](https://pubmed.ncbi.nlm.nih.gov/41084082/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015032114&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015032114&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41084082/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015032114&v=2.18.0.post9+e462414)

## Heartbeat perception is causally linked to frontal delta oscillations

 Surjo R  
Soekadar



2025-10-14



1  
min



71  
words

TDCS TACS TRNS


**Summary:** The ability to accurately perceive one's own bodily signals, such as the heartbeat, plays a vital role in physical and mental health. However, the neurophysiological mechanisms underlying this ability, termed interoception, are not fully understood. Converging evidence suggests that cardiac rhythms ...

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41087675/?](https://pubmed.ncbi.nlm.nih.gov/41087675/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015032114&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015032114&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41087675/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=143rKCPgMwbasrj66gQ1r1ebioUg42SIGRyVKSoW4m6X-ecQ00&fc=None&ff=20251015032114&v=2.18.0.post9+e462414)

## Sensitivity Analysis of the Balloon Model Parameters in Functional Near-Infrared Spectroscopy Simulation

 Murad  
Althobaiti



2025-10-11



1  
min



43  
words

BRAIN COMPUTER INTERFACE

**Summary:** CONCLUSIONS: The fNIRS hemodynamic response is highly sensitive to the Balloon model's  $\alpha$  and  $\tau$  parameters. These findings highlight the importance of accounting for physiological variability in fNIRS analysis and provide a robust framework for generating synthetic data to test signal processing algo...


 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/41076093/?](https://pubmed.ncbi.nlm.nih.gov/41076093/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015032022&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015032022&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41076093/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015032022&v=2.18.0.post9+e462414)

## To Explant or not to Explant Neural Implants: an Empirical Study into Deliberations of Dutch Research Ethics Committees

 Karin  
Jongsma

 2025-10-13  1  
min

 68  
words


BRAIN COMPUTER INTERFACE


**Summary:** Neural implants such as brain-computer interfaces and spinal cord stimulation offer therapeutic prospects for people with neurological and psychiatric disorders. As neural devices are increasingly tested in clinical research, the decision to explant requires carefully weighing both known and unknown...

 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/41079152/?utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015032022&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41079152/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015032022&v=2.18.0.post9+e462414)

## When embodiment matters most: a confirmatory study on VR priming in motor imagery brain-computer interfaces training

 Athanasios  
Vourvopoulos

 2025-10-13

 1  
min

 53  
words

BRAIN COMPUTER INTERFACE

**Summary:** CONCLUSION: Overall, findings indicate that real-time VR-based feedback during training, rather than prior embodiment, is the main driver of MI-BCI performance improvements. These results corroborate earlier findings that real-time rendering of embodied feedback during MI-BCI training constitutes th...

 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/41079401/?](https://pubmed.ncbi.nlm.nih.gov/41079401/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015032022&v=2.18.0.post9+e462414)



[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41079401/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015032022&v=2.18.0.post9+e462414)


[tbw4049Wgf\\_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015032022&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41079401/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015032022&v=2.18.0.post9+e462414)



## A mutational hotspot in TUBB2A associated with impaired heterodimer formation and severe brain developmental disorders

 Vincenzo  
Salpietro

 2025-10-13  1  
min

 62  
words

BRAIN COMPUTER INTERFACE

**Summary:** INTRODUCTION: Microtubules are essential components of the neuronal cytoskeleton. The  $\alpha$ - and  $\beta$ -tubulins, variably expressed in the central nervous system, play key roles in neurogenesis and brain development. Pathogenic variants in TUBB2A have recently been identified as an ultra-rare cause of pedia...


 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/41080462/?](https://pubmed.ncbi.nlm.nih.gov/41080462/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015032022&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41080462/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015032022&v=2.18.0.post9+e462414)


[tbw4049Wgf\\_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015032022&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41080462/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015032022&v=2.18.0.post9+e462414)

## Brain-computer interface training for multimodal functional recovery in patients with brain injury: a case series

 Rui  
Cheng

 2025-10-13

 1  
min

 48  
words

BRAIN COMPUTER INTERFACE

**Summary:** CONCLUSIONS: Motor imagery-based BCI training may facilitate recovery across motor, language, and cognitive domains in patients with subacute brain injury. Functional gains were supported by neurophysiological and connectomics evidence of cross-network reorganization. These preliminary findings sugg...


 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/41081225/?](https://pubmed.ncbi.nlm.nih.gov/41081225/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015032022&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41081225/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015032022&v=2.18.0.post9+e462414)


[tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015032022&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41081225/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015032022&v=2.18.0.post9+e462414)

# Synthesis and characterization of silver nanoparticle-loaded carboxymethylcellulose hydrogels: in vitro and in vivo evaluation of wound healing and antibacterial properties

 Morteza  
Alizadeh

 2025-10-13

 1  
min

 64  
words

BRAIN COMPUTER INTERFACE

**Summary:** The current research was conducted to assess wound healing activity and antibacterial properties of carboxymethyl cellulose (CMC) hydrogels loaded with silver nanoparticles (AgNPs) against excisional wounds (15 × 15 mm<sup>2</sup>) infected with *Pseudomonas aeruginosa* and *Staphylococcus aureus* in a rat model.C...

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41082005/?](https://pubmed.ncbi.nlm.nih.gov/41082005/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015032022&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41082005/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015032022&v=2.18.0.post9+e462414)

[tbw4049Wgf\\_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015032022&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41082005/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015032022&v=2.18.0.post9+e462414)

## Electroceuticals for Paralympic Athletes: A Fair Play and Classification Concern?



Tom E  
Nightingale



2025-10-13



1  
min



66  
words

BRAIN COMPUTER INTERFACE

**Summary:** Electroceuticals such as brain computer interfaces and spinal cord stimulation (SCS) represent transformative strategies for neuromodulation. Research has demonstrated that SCS can ameliorate motor and autonomic cardiovascular dysfunctions, particularly in individuals with spinal cord injury (SCI). ...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41082173/?](https://pubmed.ncbi.nlm.nih.gov/41082173/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015032022&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015032022&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41082173/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015032022&v=2.18.0.post9+e462414)

## Cell-to-cell communication: from physical calling to remote emotional touching



Azadeh Imani  
Rad



2025-10-14



1  
min



55  
words

BRAIN COMPUTER INTERFACE

**Summary:** The emerging paradigm of cell-to-cell communication represents a transformative shift from device-mediated contact to bio-integrated, emotion-driven interactions. This article introduces a novel, multi-layered framework for enabling biologically integrated communication between cells, devices, and c...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41083759/?](https://pubmed.ncbi.nlm.nih.gov/41083759/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015032022&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015032022&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41083759/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015032022&v=2.18.0.post9+e462414)

## Virtual Reality Experience as Reflected in EEG Microstates



2025-10-14



1

min



73

words

BRAIN COMPUTER INTERFACE

**Summary:** The development of virtual reality technology has provided psychological research with powerful tools by presenting stimuli and constructing scenarios, and the combination of VR and neuroimaging techniques begins to provide particularly interesting insights into the experience of virtual events and ...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41085777/?](https://pubmed.ncbi.nlm.nih.gov/41085777/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdTNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015032022&v=2.18.0.post9+e462414)
[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41085777/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdTNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015032022&v=2.18.0.post9+e462414)
[tbw4049Wgf\\_RdKXdTNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015032022&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41085777/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdTNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015032022&v=2.18.0.post9+e462414)

## An incremental adversarial training method enables timeliness and rapid new knowledge acquisition

Chengli  
Wang

2025-10-14



1

min



69

words

BRAIN COMPUTER INTERFACE


**Summary:** Adversarial training is an effective defense method for deep models against adversarial attacks. However, current adversarial training methods require retraining the entire neural network, which consumes a significant amount of computational resources, thereby affecting the timeliness of deep models...




Read full article:


[https://pubmed.ncbi.nlm.nih.gov/41087533/?](https://pubmed.ncbi.nlm.nih.gov/41087533/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdTNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015032022&v=2.18.0.post9+e462414)
[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41087533/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdTNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015032022&v=2.18.0.post9+e462414)
[tbw4049Wgf\\_RdKXdTNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015032022&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41087533/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdTNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015032022&v=2.18.0.post9+e462414)

## GIL free and thread safety

 /u/Active-Fuel-49


 2025-10-15

 1 min

 45 words

REDDIT PYTHON

**Summary:** <!-- SC\_OFF --><div class="md"><p>For Python 3.14 free GIL version to be usable, shouldn't also Python libraries be re-written to become thread safe? (or the underlying C infrastructure)</p> </div><!-- SC\_ON --> &#32; submitted by &#32; <a href="https://www.reddit.com/user/Active-Fuel-49"> /u/Active...

 Read full article:


[https://www.reddit.com/r/Python/comments/1o71ejn/gil\\_free\\_and\\_thread\\_safety/](https://www.reddit.com/r/Python/comments/1o71ejn/gil_free_and_thread_safety/)

## 4E-BP2-dependent translational control in GABAergic interneurons is required for long-term memory

 Huang, Z., Mahmood, N., Psycharis, K., Lister, K. C., Hooshmandi, M., Inturi, N. N., Tavares-Ferreira, D., Wiebe, S., Khoutorsky, A., Sonenberg, N.

 2025-10-14

 1 min

 168 words


BIORXIV NEUROSCIENCE



**Summary:** mRNA translational repression by eukaryotic initiation factor 4E-binding proteins (4E-BPs), plays a critical role in synaptic plasticity and the formation of long-term memory (LTM). Among the three 4E-BP paralogs, 4E-BP2 is the predominant form expressed in neurons, and its full-body deletion in mic...


 Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.14.682450v1?rss=1>

## Distinct neurophysiological features and memory representations along the long axis of the developing medial temporal lobe


 Yin, Q., Dede, A. J. O., Knight, R. T., Asano, E., Johnson, E. L., Ofen, N.

 17 2025-10-14  1 min

 205 words

BIORXIV NEUROSCIENCE

**Summary:** The medial temporal lobe (MTL) is crucial for episodic memory, whereby posterior MTL preferentially represents visuospatial information, and anterior MTL is involved in the representation of semantic or conceptual information. The neurophysiological underpinnings of content-preferential organization...

 Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.14.682334v1?rss=1>

## Noradrenergic Modulation of an Amygdalo-thalamic Circuit

 Yang, T. L., Bucalo, J., Andermann, M. L., Chen, C.

 17 2025-10-14  1 min  177 words

BIORXIV NEUROSCIENCE

**Summary:** Emotional and cognitive processing rely on communication between the basolateral amygdala (BLA) and the medial prefrontal cortex (mPFC). The BLA regulates mPFC both directly and indirectly via the medial sub-division of the medial dorsal thalamus (MDm). Although the BLA projection to MDm has been es...

 Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.14.682083v1?rss=1>

## How the Brain Distinguishes Internal and External Sounds: An fMRI Investigation of Auditory Sound Externalization



Fivel, L., Brunelin, J., Leroux, G., Haesebaert, F., Mondino, M.



2025-10-14



1 min



178 words

BIORXIV NEUROSCIENCE

**Summary:** Auditory externalization, the perception of a sound source as located outside the head, is essential for spatial hearing and auditory scene analysis. However, its neural correlates remain poorly understood. This study investigated differences in brain activation elicited by externalized versus inter...



Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.14.679174v1?rss=1>

## FMRP regulates adult human cortical excitability via cyclic-AMP signalling



Knops, M. J., Meftah, S., Wilson, M. A., Taylor, L. W., Bonthron, C., Bilal, A., Liaquat, I., Brennan, P. M., Durrant, C. S., Booker, S. A.



2025-10-14



1 min



67 words

BIORXIV NEUROSCIENCE

**Summary:** Fragile X Syndrome (FXS) is a common inherited neurodevelopmental condition, resulting from loss of Fragile X Messenger Ribonuclear Protein (FMRP). Rodent models of FXS display cellular hyperexcitability, but it is not known to what extent this is the case in intact human neurons. Depleting FMRP in ...





Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.14.682273v1?rss=1>



## DOJ seizes \$15B in Bitcoin from 'pig butchering' scam based in Cambodia

 2025-10-14  1 min  2 words




HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45580981)

 Read full article:


<https://www.cnn.com/2025/10/14/bitcoin-doj-chen-zhi-pig-butcher-scandal.html>

## I wrote a short tutorial on how to kill the GIL in Python 3.14

 /u/  
nsomani  2025-10-14  1 min  64 words


REDDIT PYTHON

**Summary:** Hey friends, for those who have heard about the new free-threading build but haven't had a chance to try it out, I wrote this tutorial that comes with a benchmark: <https://www.neelsomaniblog.com/p/killing-the-gil-how-to-use-python>

 Read full article:

[https://www.reddit.com/r/Python/comments/1o6v4fb/i\\_wrote\\_a\\_short\\_tutorial\\_on\\_how\\_to\\_kill\\_the\\_gil/](https://www.reddit.com/r/Python/comments/1o6v4fb/i_wrote_a_short_tutorial_on_how_to_kill_the_gil/)

## Pixnapping Attack

 2025-10-15  1 min  2 words

HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45588594)



Read full article:

<https://www.pixnapping.com/>

## I am a programmer, not a rubber-stamp that approves Copilot generated code

 2025-10-15  1 min  2 words

HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45588283)



Read full article:

<https://prahladyeri.github.io/blog/2025/10/i-am-a-programmer.html>

## I am a programmer, not a rubber-stamp that approves Copilot generated code



pyeri



2025-10-15



1

min



13

words

HACKER NEWS

**Summary:**

Article URL: <https://prahladyeri.github.io/blog/2025/10/i-am-a-programmer.html>

Comments URL: <https://news.ycombinator.com/item?id=45588283>

Poin...



Read full article:

<https://prahladyeri.github.io/blog/2025/10/i-am-a-programmer.html>

## Pixnapping Attack



kevcampb



2025-10-15



1

min



13

words

HACKER NEWS

**Summary:**

Article URL: <https://www.pixnapping.com/>

Comments URL: <https://news.ycombinator.com/item?id=45588594>

Points: 4


# Comments: 0






Read full article:

<https://www.pixnapping.com/>

## Loudness dependence of auditory evoked potentials reflects trait anxiety and harm avoidance in healthy adults: an exploratory study

 Makoto  
Nishihara

 2025-10-15  1 min  181 words


FRONTIERS HUMAN NEUROSCIENCE




**Summary:** Loudness dependence of auditory-evoked potentials (LDAEP), a neurophysiological measure that reflects central serotonergic activity, is also influenced by the noradrenaline and dopamine systems. While it has been used in investigations of various psychiatric disorders, the fundamental characteristic...

 Read full article:

<https://www.frontiersin.org/articles/10.3389/fnhum.2025.1615407>


## Longitudinal study of single-pulse TMS in infants with perinatal brain injury: safety and feasibility

 Bernadette T.  
Gillick

 2025-10-15  1 min  206 words


FRONTIERS HUMAN NEUROSCIENCE


**Summary:** Introduction Perinatal brain injury is a leading cause of cerebral palsy. Single-pulse transcranial magnetic stimulation (spTMS) provides a non-invasive method for investigating motor pathway development; however, data on the safety and feasibility of its repeated use in infants are limited. This stu...

 Read full article:

<https://www.frontiersin.org/articles/10.3389/fnhum.2025.1686054>

## Brainstem neurochemical profiles after hospitalisation for COVID-19: a 7T MR spectroscopy study

 Julie-Ann  
Zerrudo

 2025-10-15

 1  
min

 262  
words


FRONTIERS NEUROSCIENCE

**Summary:** BackgroundSomatic, cognitive and mental health issues have been identified in three-quarters of people 5 months after hospitalisation for severe acute SARS-CoV-2 (COVID-19) infection. The underlying neuroanatomical basis of these symptoms remains unclear, but recent studies suggest a role for altere...

 Read full article:


<https://www.frontiersin.org/articles/10.3389/fnins.2025.1617709>

## The diagnostic significance of pupillary reflex pathways: insights from classical examination and advanced pupillometry

 Joanna  
Konopińska

 2025-10-15

 1  
min

 212  
words


FRONTIERS NEUROSCIENCE


**Summary:** Background/objectivesThe pupil, a dynamic ocular structure, serves as a critical indicator of neurological and ophthalmological function. This interdisciplinary review explores the anatomical, physiological, and pathological aspects of pupillary reflexes and disorders.ContentEmphasis is placed on th...

 Read full article:


<https://www.frontiersin.org/articles/10.3389/fnins.2025.1677431>

## Endovascular management of tandem embolic stroke due to cardioembolic free-floating thrombus: a case report

 Liang  
Li

 2025-10-15

 1  
min

 259  
words


FRONTIERS NEUROSCIENCE

**Summary:** BackgroundTandem lesions (TLs), defined as simultaneous occlusions of both extracranial and intracranial arteries, represent a particularly challenging subset of large vessel occlusion (LVO) strokes. While most TLs are attributed to atherosclerotic changes or arterial dissection, a smaller subset or...


 Read full article:

<https://www.frontiersin.org/articles/10.3389/fnins.2025.1654601>

## Examining the associations between nonbelieved memories and memory distrust, self-esteem, and rumination.

 2022-11-10

 1  
min

 175  
words


CLINICAL NEUROSCIENCE

**Summary:** When beliefs in autobiographical memories are reduced while recollections remain relatively intact, a phenomenon termed nonbelieved memories (NBMs) unfolds. The current preregistered study ( $N = 104$ ) used a 3-week longitudinal design to investigate the relationships between the frequency of ...

 Read full article:

<http://doi.org/10.1037/cns0000344>

## Relationship between thought suppression and dissociation and the mediating effect of rumination and unusual sleep experiences.



 2023-08-21  1 min  198 words

CLINICAL NEUROSCIENCE

**Summary:** Dissociation is a phenomenon present in a wide variety of psychiatric disorders as well as in the general population. The objective of this study was to examine the relation between trait thought suppression (TS) and development of dissociative phenomena in the nonclinical population, with emphasis ...

 Read full article:  
<http://doi.org/10.1037/cns0000366>

## Mental pain, boredom, and diffuse nociception.

 2024-11-21  1 min  237 words

CLINICAL NEUROSCIENCE

**Summary:** In this article, I propose a novel theory to explain the possible physiological origins of the relatively mild mental pain that is often labeled as boredom and possibly loneliness or a negative mood, depending on one's situation. My admittedly speculative hypothesis is that most people in modern soc...

 Read full article:  
<http://doi.org/10.1037/cns0000405>

## Cognitive deficits in Spanish-speaking Mexican children with developmental dyslexia.



2025-09-08

1  
min240  
words

NEUROPSYCHOLOGY

**Summary:** Objective: Developmental dyslexia (DD) has been related to deficits in multiple cognitive skills. Phonological processing deficits are the most frequently reported in opaque orthographies, but there are few studies of transparent orthographies, such as Spanish. The aim of this study was to comprehen...



Read full article:

<http://doi.org/10.1037/neu0001035>

## Explicit and implicit representation of reward value in cocaine use disorder (CUD): A mouse kinematic study on intertemporal decision-making.



2025-08-28

1  
min204  
words

NEUROPSYCHOLOGY

**Summary:** Objective: Cocaine use disorder (CUD) is a chronic condition with implications on cognitive functions such as decision-making and impulse control. Intertemporal choice paradigms, measuring temporal discounting, offer insight into decision-making of addictive behaviors. When coupled with mouse kinema...






Read full article:

<http://doi.org/10.1037/neu0001025>



## Anhedonia is associated with impaired memory for positive emotional stimuli in individuals with schizophrenia.




 2025-07-24  1 min  271 words

NEUROPSYCHOLOGY

**Summary:** Objective: Individuals with psychotic disorders routinely display anhedonia when rated on clinical interviews that rely on retrospective reports of pleasure; however, hedonic response is intact on laboratory paradigms measuring self-reported in-the-moment (i.e., consummatory) pleasure. It is current...

 Read full article:  
<http://doi.org/10.1037/neu0001011>

## Table of Contents

 2025-09-19  1 min  1 words

TRANSACTIONS HAPTICS

 Read full article:  
<http://ieeexplore.ieee.org/document/11174043>




## Front Cover

 2025-09-19  1 min  1 words

TRANSACTIONS HAPTICS

 Read full article:  
<http://ieeexplore.ieee.org/document/11174042>

## An Exploration of the Electrocorticogram Signatures Evoked by Ultrasound Thalamus Stimulation Under Isoflurane Anesthesia in Rats

 2025-03-28  1 min  252 words

TRANSACTIONS BIOMEDICAL ENGINEERING

**Summary:** Objective: The transcranial ultrasound stimulation (TUS) on the thalamus can indirectly induce cortical response. Studies have shown that general anesthetic induced unconsciousness is related to interruption of thalamocortical connectivity. However, the neural mechanism of how anesthesia levels infl...

 Read full article:


<http://ieeexplore.ieee.org/document/10945385>

## Pulmonary Hypertension Detection From Heart Sound Analysis

 2025-03-28  1 min  206 words



TRANSACTIONS BIOMEDICAL ENGINEERING

**Summary:** The detection of Pulmonary Hypertension (PH) from the computer analysis of digitized heart sounds is a low-cost and non-invasive solution for early PH detection and screening. We present an extensive cross-domain evaluation methodology with varying animals (humans and porcine animals) and varying au...

 Read full article:

<http://ieeexplore.ieee.org/document/10944577>

## Transcranial Focused Ultrasound Modulates Visual Thalamus in a Nonhuman Primate Model

 2025-04-07  1 min  250 words

TRANSACTIONS BIOMEDICAL ENGINEERING

**Summary:** Objective: The thalamus plays a pivotal role as a neural hub, integrating and distributing visual information to cortical regions responsible for visual processing. Transcranial focused ultrasound (tFUS) has emerged as a promising non-invasive brain stimulation technology, enabling modulation of neu...

 Read full article:

<http://ieeexplore.ieee.org/document/10950083>

## An Active Insole to Reduce Plantar Pressure Loading: Using Predictive Finite Element Driven Soft Hydraulic Actuators to Minimize Plantar Pressure and the Pressure Time Integral for Diabetic Foot Ulceration Risk Management

 2025-03-26  1 min  230 words




TRANSACTIONS BIOMEDICAL ENGINEERING

**Summary:** Objective: This article aims to design, manufacture and evaluate an active insole to reduce plantar tissue loading to minimise the risk of diabetic foot ulceration for people living with diabetes. Methods: A prototype hydraulic soft robotic actuating insole was produced. It was controlled by an appr...

 Read full article:

<http://ieeexplore.ieee.org/document/10938869>

## Optimizing Non-Intersecting Synthetic Vascular Trees in Nonconvex Organs

 2025-03-27  1 min  196 words




TRANSACTIONS BIOMEDICAL ENGINEERING

**Summary:** Objective: The understanding of the mechanisms driving vascular development is still limited. Techniques to generate vascular trees synthetically have been developed to tackle this problem. However, most algorithms are limited to single trees inside convex perfusion volumes. We introduce a new frame...


 Read full article:

<http://ieeexplore.ieee.org/document/10944261>

## Table of Contents

 2025-09-19  1 min  1 words

TRANSACTIONS BIOMEDICAL ENGINEERING


 Read full article:

<http://ieeexplore.ieee.org/document/11173873>

## IEEE Transactions on Biomedical Engineering Handling Editors Information




 2025-09-19  1 min  1 words

TRANSACTIONS BIOMEDICAL ENGINEERING


 Read full article:

<http://ieeexplore.ieee.org/document/11174022>

## IEEE Transactions on Biomedical Engineering Information for Authors




 2025-09-19  1 min  1 words

TRANSACTIONS BIOMEDICAL ENGINEERING

 Read full article:

<http://ieeexplore.ieee.org/document/11173872>

## IEEE Engineering in Medicine and Biology Society Publication Information

 2025-09-19  1 min  1 words

TRANSACTIONS BIOMEDICAL ENGINEERING

 Read full article:

<http://ieeexplore.ieee.org/document/11174019>

## Prevalence and causes of blindness and vision impairment in Western Uganda: Findings from a rapid assessment of avoidable blindness (RAAB) survey

 Khumbo  
Kalua

 17

2025-10-13




1  
min



46  
words

LOW VISION


**Summary:** CONCLUSION: Blindness and vision impairment remain major public health issues in Western Uganda, primarily due to untreated cataract and uncorrected refractive error. Poor post-operative outcomes highlight the urgent need to improve surgical quality. These findings may guide targeted interventions a...

 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41082552/?](https://pubmed.ncbi.nlm.nih.gov/41082552/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015012001&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015012001&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41082552/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015012001&v=2.18.0.post9+e462414)

## Spatially Resolved Molecular Investigation of Perineural Invasion in Lacrimal Gland Adenoid Cystic Carcinoma

 Daniel  
Pelaez

 17

2025-10-13



1  
min



66  
words

LOW VISION


**Summary:** CONCLUSIONS: This study provides novel insights into the complex tumor microenvironment of LGACC PNI, uncovering mechanisms that may drive PNI and treatment resistance. The identification of p75NTR as a potential mediator of neurotropism underscores its relevance as both a therapeutic target and bio...

 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41082926/?](https://pubmed.ncbi.nlm.nih.gov/41082926/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015012001&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015012001&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41082926/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015012001&v=2.18.0.post9+e462414)


## From image to report: automating lung cancer screening interpretation and reporting with vision-language models

 Aokun  
Chen

 17

2025-10-13

 1  
min

 53  
words

LOW VISION

**Summary:** CONCLUSION: LUMEN demonstrates the feasibility of generating clinically accurate lung nodule reports from LDCT images through a nodule-centric VQA approach, highlighting the potential of integrating VLMs and LLMs to support radiologists in lung cancer screening workflows. Our findings also underscor...

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41083099/?](https://pubmed.ncbi.nlm.nih.gov/41083099/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnVslegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015012001&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnVslegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015012001&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41083099/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnVslegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015012001&v=2.18.0.post9+e462414)


## Interventional Vitamin Mix Glaucoma Study (IVMGS): study protocol for a prospective, randomized, two-arm, single-center trial in existing glaucoma patients

 Pete A  
Williams

 17

2025-10-14

 1  
min

 64  
words

LOW VISION

**Summary:** BACKGROUND: Glaucoma is a leading cause of irreversible blindness, characterized by progressive degeneration of retinal ganglion cells. Current treatments primarily lower intraocular pressure but do not directly provide neuroprotection. Preclinical studies from our group have identified dysfunction ...

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41084053/?](https://pubmed.ncbi.nlm.nih.gov/41084053/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnVslegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015012001&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnVslegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015012001&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41084053/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnVslegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015012001&v=2.18.0.post9+e462414)

## Decision-Making for Endovascular Thrombectomy in Patients With Large Vessel Occlusions and Mild Neurological Deficit: A Consensus Statement

 Johanna M  
Ospel



2025-10-14



1  
min



69  
words

LOW VISION


**Summary:** Acute ischemic stroke patients with mild deficits (National Institutes of Health Stroke Scale [NIHSS] of 0-5) but confirmed large vessel occlusions (LVO) present a clinical challenge for endovascular thrombectomy (EVT) decisions due to limited evidence and the absence of clear guidelines. A Delphi c...

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41084289/?](https://pubmed.ncbi.nlm.nih.gov/41084289/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015012001&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015012001&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41084289/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015012001&v=2.18.0.post9+e462414)

## Association of High-Altitude Polycythemia with JAK2V617F Mutation in Pakistani Population

 Uzma  
Zaidi



2025-10-14



1  
min



74  
words

LOW VISION

**Summary:** To assessthe prevalence of the JAK2V617F mutation in polycythemia patients living at high altitude. This was a cross-sectional study, conducted at the National Institute of Blood Diseasesand Bone Marrow Transplantation (NIBD-BMT), KarachifromJuly 2022 to July 2023. A total of 132 patients with polyc...

 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/41084570/?](https://pubmed.ncbi.nlm.nih.gov/41084570/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015012001&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015012001&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41084570/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015012001&v=2.18.0.post9+e462414)



## Neither exogenous, nor endogenous: Evidence for a distinct role of negative emotion during attentional control

 Gilles  
Pourtois

 2025-10-14

 1  
min

 69  
words

LOW VISION

**Summary:** Negative or threatening stimuli capture attention. However, it remains unclear whether this phenomenon is best conceived as bottom-up (i.e., salience-driven) or top-down (i.e., goal-directed) instead. To address this question, we conducted two experiments using a previously validated dot-probe task ...


 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/41086156/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015012001&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41086156/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015012001&v=2.18.0.post9+e462414)

## Improving object detection in challenging weather for autonomous driving via adversarial image translation

 Yaohua  
Zhao

 2025-10-14

 1  
min

 65  
words

LOW VISION

**Summary:** Vision-based environmental perception is fundamental to autonomous driving, as it enables reliable detection and recognition of diverse objects in complex traffic environments. However, adverse weather conditions (such as rain, fog, and low-light conditions) significantly degrade image quality, ther...


 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/41086174/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015012001&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41086174/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015012001&v=2.18.0.post9+e462414)

## Shared mechanisms of presaccadic and exogenous attention in modulating visual perception of contrast

 Yongchun  
Cai

 2025-10-14

 1  
min

 59  
words

LOW VISION


**Summary:** Different types of attention alter subjective visual perception in fundamentally distinct ways. Previous studies have focused on covert attention without concurrent eye movements, revealing that covert exogenous (involuntary) attention enhances contrast appearance of low-contrast stimuli while dimin...

 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/41086688/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnVslegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015012001&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41086688/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnVslegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015012001&v=2.18.0.post9+e462414)

## Halide Perovskites for Neuromorphic Sensing and Computing

 Ho Won  
Jang

 2025-10-14

 1  
min

 56  
words

LOW VISION


**Summary:** The development of semiconductor-based electronic devices has significantly advanced sensor-based data acquisition and processor-driven data analysis. However, conventional complementary metal-oxide-semiconductor technologies are now facing fundamental limitations in scaling, speed, and power effici...


 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/41087317/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnVslegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015012001&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41087317/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnVslegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251015012001&v=2.18.0.post9+e462414)

# Sensitivity Analysis of the Balloon Model Parameters in Functional Near-Infrared Spectroscopy Simulation

 Murad  
Althobaiti

 2025-10-11

 1  
min

 43  
words

BRAIN COMPUTER INTERFACE

**Summary:** CONCLUSIONS: The fNIRS hemodynamic response is highly sensitive to the Balloon model's  $\alpha$  and  $\tau$  parameters. These findings highlight the importance of accounting for physiological variability in fNIRS analysis and provide a robust framework for generating synthetic data to test signal processing algo...

 **Read full article:**



[https://pubmed.ncbi.nlm.nih.gov/41076093/?](https://pubmed.ncbi.nlm.nih.gov/41076093/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015011917&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41076093/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015011917&v=2.18.0.post9+e462414)

[tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015011917&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41076093/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015011917&v=2.18.0.post9+e462414)

## To Explant or not to Explant Neural Implants: an Empirical Study into Deliberations of Dutch Research Ethics Committees

 Karin  
Jongsma

 2025-10-13  1  
min

 68  
words


BRAIN COMPUTER INTERFACE


**Summary:** Neural implants such as brain-computer interfaces and spinal cord stimulation offer therapeutic prospects for people with neurological and psychiatric disorders. As neural devices are increasingly tested in clinical research, the decision to explant requires carefully weighing both known and unknown...

 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/41079152/?utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdTNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015011917&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41079152/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdTNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015011917&v=2.18.0.post9+e462414)

## When embodiment matters most: a confirmatory study on VR priming in motor imagery brain-computer interfaces training

 Athanasios  
Vourvopoulos

 2025-10-13

 1  
min

 53  
words

BRAIN COMPUTER INTERFACE

**Summary:** CONCLUSION: Overall, findings indicate that real-time VR-based feedback during training, rather than prior embodiment, is the main driver of MI-BCI performance improvements. These results corroborate earlier findings that real-time rendering of embodied feedback during MI-BCI training constitutes th...


 **Read full article:**



[https://pubmed.ncbi.nlm.nih.gov/41079401/?](https://pubmed.ncbi.nlm.nih.gov/41079401/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015011917&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41079401/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015011917&v=2.18.0.post9+e462414)

[tbw4049Wgf\\_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015011917&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41079401/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015011917&v=2.18.0.post9+e462414)

## A mutational hotspot in TUBB2A associated with impaired heterodimer formation and severe brain developmental disorders


 Vincenzo  
Salpietro

 2025-10-13  1  
min

 62  
words

BRAIN COMPUTER INTERFACE

**Summary:** INTRODUCTION: Microtubules are essential components of the neuronal cytoskeleton. The  $\alpha$ - and  $\beta$ -tubulins, variably expressed in the central nervous system, play key roles in neurogenesis and brain development. Pathogenic variants in TUBB2A have recently been identified as an ultra-rare cause of pedia...


 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/41080462/?](https://pubmed.ncbi.nlm.nih.gov/41080462/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015011917&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41080462/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015011917&v=2.18.0.post9+e462414)


[tbw4049Wgf\\_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015011917&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41080462/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015011917&v=2.18.0.post9+e462414)

## Brain-computer interface training for multimodal functional recovery in patients with brain injury: a case series

 Rui  
Cheng


 2025-10-13

 1  
min

 48  
words

BRAIN COMPUTER INTERFACE

**Summary:** CONCLUSIONS: Motor imagery-based BCI training may facilitate recovery across motor, language, and cognitive domains in patients with subacute brain injury. Functional gains were supported by neurophysiological and connectomics evidence of cross-network reorganization. These preliminary findings sugg...


 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/41081225/?](https://pubmed.ncbi.nlm.nih.gov/41081225/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015011917&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41081225/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015011917&v=2.18.0.post9+e462414)


[tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015011917&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41081225/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015011917&v=2.18.0.post9+e462414)

# Synthesis and characterization of silver nanoparticle-loaded carboxymethylcellulose hydrogels: in vitro and in vivo evaluation of wound healing and antibacterial properties

 Morteza  
Alizadeh

 2025-10-13

 1  
min

 64  
words

BRAIN COMPUTER INTERFACE

**Summary:** The current research was conducted to assess wound healing activity and antibacterial properties of carboxymethyl cellulose (CMC) hydrogels loaded with silver nanoparticles (AgNPs) against excisional wounds (15 × 15 mm<sup>2</sup>) infected with *Pseudomonas aeruginosa* and *Staphylococcus aureus* in a rat model.C...

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41082005/?](https://pubmed.ncbi.nlm.nih.gov/41082005/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015011917&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41082005/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015011917&v=2.18.0.post9+e462414)

[tbw4049Wgf\\_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015011917&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41082005/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015011917&v=2.18.0.post9+e462414)



## Electroceuticals for Paralympic Athletes: A Fair Play and Classification Concern?



Tom E  
Nightingale

2025-10-13

1  
min

66  
words

BRAIN COMPUTER INTERFACE

**Summary:** Electroceuticals such as brain computer interfaces and spinal cord stimulation (SCS) represent transformative strategies for neuromodulation. Research has demonstrated that SCS can ameliorate motor and autonomic cardiovascular dysfunctions, particularly in individuals with spinal cord injury (SCI). ...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41082173/?](https://pubmed.ncbi.nlm.nih.gov/41082173/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015011917&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015011917&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41082173/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015011917&v=2.18.0.post9+e462414)

## Cell-to-cell communication: from physical calling to remote emotional touching



Azadeh Imani  
Rad

2025-10-14

1  
min

55  
words

BRAIN COMPUTER INTERFACE

**Summary:** The emerging paradigm of cell-to-cell communication represents a transformative shift from device-mediated contact to bio-integrated, emotion-driven interactions. This article introduces a novel, multi-layered framework for enabling biologically integrated communication between cells, devices, and c...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41083759/?](https://pubmed.ncbi.nlm.nih.gov/41083759/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015011917&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--tbw4049Wgf\\_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015011917&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41083759/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtNCvGW0IVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015011917&v=2.18.0.post9+e462414)

## Virtual Reality Experience as Reflected in EEG Microstates



2025-10-14



1

min



73

words

BRAIN COMPUTER INTERFACE

**Summary:** The development of virtual reality technology has provided psychological research with powerful tools by presenting stimuli and constructing scenarios, and the combination of VR and neuroimaging techniques begins to provide particularly interesting insights into the experience of virtual events and ...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41085777/?](https://pubmed.ncbi.nlm.nih.gov/41085777/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015011917&v=2.18.0.post9+e462414)
[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41085777/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015011917&v=2.18.0.post9+e462414)
[tbw4049Wgf\\_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015011917&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41085777/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015011917&v=2.18.0.post9+e462414)

## An incremental adversarial training method enables timeliness and rapid new knowledge acquisition

Chengli  
Wang

2025-10-14



1

min



69

words

BRAIN COMPUTER INTERFACE




**Summary:** Adversarial training is an effective defense method for deep models against adversarial attacks. However, current adversarial training methods require retraining the entire neural network, which consumes a significant amount of computational resources, thereby affecting the timeliness of deep models...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41087533/?](https://pubmed.ncbi.nlm.nih.gov/41087533/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015011917&v=2.18.0.post9+e462414)
[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1rSUu--](https://pubmed.ncbi.nlm.nih.gov/41087533/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015011917&v=2.18.0.post9+e462414)
[tbw4049Wgf\\_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015011917&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41087533/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1rSUu--tbw4049Wgf_RdKXdtnCvGW0lVBZFpHe7zaN4k4DwoD5&fc=None&ff=20251015011917&v=2.18.0.post9+e462414)

## Printing Petscii Faster

 2025-10-10  1 min  2 words

HACKER NEWS




**Summary:** [Comments](https://news.ycombinator.com/item?id=45544500)



**Read full article:**

<https://retrogamecoders.com/printing-petscii-faster/>

## Front Cover

 2025-09-19  1 min  1 words




TRANSACTIONS BIOMEDICAL ENGINEERING



**Read full article:**

<http://ieeexplore.ieee.org/document/11173870>

## A Survey of Few-Shot Learning for Biomedical Time Series

 2024-11-06  1 min  176 words

REVIEWS BIOMEDICAL ENGINEERING

**Summary:** Advancements in wearable sensor technologies and the digitization of medical records have contributed to the unprecedented ubiquity of biomedical time series data. Data-driven models have tremendous potential to assist clinical diagnosis and improve patient care by improving long-term monitoring cap...

 Read full article:

<http://ieeexplore.ieee.org/document/10745649>

## Rethinking task importance in the visual world paradigm

 1 min  14 words

BRAIN RESEARCH

**Summary:**

Publication date: 15 November 2025

Source: Brain Research, Volume 1867


Author(s): Falk Huettig, Michael K. Tanenhaus

 Read full article:

[https://www.sciencedirect.com/science/article/pii/S0006899325005281?dgcid=rss\\_sd\\_all](https://www.sciencedirect.com/science/article/pii/S0006899325005281?dgcid=rss_sd_all)

## Single-cell RNA sequencing reveals the ameliorative effects of Kai-Xin-San on depression via regulating neuroplasticity and inflammation in the hypothalamus of rats

 1  
min

 26  
words

NEUROSCIENCE JOURNAL

**Summary:**

Publication date: 10 November 2025

Source:

 Neuroscience, Volume 587

Author(s): Xiaoxi Li, Yiming Hua, Huiling Li, Yingnan Feng, Chao Wu, Xin Hu, Zhichao Zhang, Xiaojiang Zhou, Xianzhe Dong




Read full article:

[https://www.sciencedirect.com/science/article/pii/S0306452225009674?dgcid=rss\\_sd\\_all](https://www.sciencedirect.com/science/article/pii/S0306452225009674?dgcid=rss_sd_all)

## GlyT1 inhibition promotes post-ischemic neuroprotection in the MCAO model

 1  
min

 34  
words

NEUROSCIENCE JOURNAL

**Summary:**

Publication date: 10 November 2025

Source:

 Neuroscience, Volume 587

Author(s): Daniel Pereira Cavalcante, Antônio Ítalo dos Santos Nunes, Gustavo Almeida de Carvalho, Renato Santiago Gomez, Leandro do Prado Assunção, Alexandre Melo Bailão, Mauro Cunha Xavier Pinto




Read full article:

[https://www.sciencedirect.com/science/article/pii/S0306452225009637?dgcid=rss\\_sd\\_all](https://www.sciencedirect.com/science/article/pii/S0306452225009637?dgcid=rss_sd_all)

## Blackcurrant anthocyanins improve visual contrast resolution for optokinetic responses in aging mice

 1  
min

 18  
words

NEUROSCIENCE JOURNAL

**Summary:**

Publication date: 10 November 2025

Source: Neuroscience, Volume 587


Author(s): Yuko Sugita, Koki Kobayashi, Hung-Ya Tu, Daisuke Okuzaki, Takahisa Furukawa

 Read full article:

[https://www.sciencedirect.com/science/article/pii/S0306452225009170?dgcid=rss\\_sd\\_all](https://www.sciencedirect.com/science/article/pii/S0306452225009170?dgcid=rss_sd_all)

## Neural network topologies supporting individual variations in vividness of visual imagery

 1  
min

 31  
words

NEUROIMAGE

**Summary:**

Publication date: 1 November 2025

Source: NeuroImage, Volume 321

Author(s): Timo L. Kvamme, Massimo Lumaca, Claude J. Bajada, Signe Dall Gregersen, Justyna Hobot, Dunja Paunovic, Michal Wierzchon, Blanka Zana, Juha Silvano, Kristian Sandberg

 Read full article:

[https://www.sciencedirect.com/science/article/pii/S1053811925005233?dgcid=rss\\_sd\\_all](https://www.sciencedirect.com/science/article/pii/S1053811925005233?dgcid=rss_sd_all)

## C9orf72 hexanucleotide repeat expansions impair microglial response in ALS



Philip Van  
Damme

2025-10-14

1  
min

42  
words

NATURE NEUROSCIENCE

**Summary:** <p>Nature Neuroscience, Published online: 14 October 2025; <a href="https://www.nature.com/articles/s41593-025-02075-1">doi:10.1038/s41593-025-02075-1</a></p>  
<p>This study shows that C9orf72 mutations impair immune activation in ALS, affecting how brain cells communicate, and highlights key differences...



Read full article:

<https://www.nature.com/articles/s41593-025-02075-1>

## Region-specific drivers of CSF mobility measured with MRI in humans



Matthias J. P. van  
Osch

2025-10-14

1  
min

44  
words

NATURE NEUROSCIENCE


**Summary:** <p>Nature Neuroscience, Published online: 14 October 2025; <a href="https://www.nature.com/articles/s41593-025-02073-3">doi:10.1038/s41593-025-02073-3</a></p>  
<p>Brain clearance mechanisms are challenging to visualize in humans. Using magnetic resonance imaging, the authors noninvasively mapped cerebro...




Read full article:


<https://www.nature.com/articles/s41593-025-02073-3>

## Science must break its silence to rebuild public trust

 Michael L.  
Platt

 2025-10-14

 1  
min

 95  
words

NATURE NEUROSCIENCE


**Summary:**


Nature Neuroscience, Published online: 14 October 2025; [doi:10.1038/s41593-025-02092-0](https://www.nature.com/articles/s41593-025-02092-0)

This Comment calls on scientists to acknowledge how insufficient communication and limited engagement beyond academia have deepened the divide...

 **Read full article:**  
<https://www.nature.com/articles/s41593-025-02092-0>

## Exercise, circadian rhythms, and muscle regeneration: a path to healthy aging

 Lijuan  
Xiang

 2025-10-09

 1  
min

 178  
words

FRONTIERS NEUROSCIENCE


**Summary:** The circadian system regulates core physiological processes, including muscle regeneration, protein synthesis, and cellular homeostasis. Disruptions in circadian rhythms contribute to impaired muscle function in older adults, with age-related declines in muscle mass and regenerative capacity serving...


 **Read full article:**  
<https://www.frontiersin.org/articles/10.3389/fnins.2025.1633835>



## Inflammation-related biomarkers and berberine therapy in post-stroke depression: evidence from bioinformatics, machine learning, and experimental validation

 Yulai  
Li

 2025-10-14  1  
min

 327  
words

FRONTIERS NEUROSCIENCE



**Summary:** Objective Post-stroke depression (PSD), a common neuropsychiatric complication, significantly hinders stroke recovery and quality of life. Given the established role of inflammation in the pathogenesis of PSD, this study aimed to identify key inflammation-related genes and pathways using bioinformati...


 Read full article:

<https://www.frontiersin.org/articles/10.3389/fnins.2025.1684297>

## Prognostic value of quantitative and visual electroencephalography in disorders of consciousness: a retrospective study

 Itaru  
Miura

 2025-10-14  1  
min

 252  
words

FRONTIERS NEUROSCIENCE

**Summary:** Background Electroencephalography (EEG) is widely used to assess prognosis in patients with disorders of consciousness (DoC). Visual assessments by physicians and quantitative EEG (qEEG) are commonly used; however, only a few studies have directly compared their predictive accuracy. Therefore, in thi...

 Read full article:

<https://www.frontiersin.org/articles/10.3389/fnins.2025.1644497>

## A novel KIDINS220 mutation associated with hereditary spastic paraplegia accompanied by severe peripheral neuropathy

Rui  
Wu

2025-10-14



1

min



243

words

FRONTIERS NEUROSCIENCE

**Summary:** ObjectivesMutations in KIDINS220 are known to cause hereditary spastic paraplegia (HSP) and SINO syndrome. However, the phenotypic and genotypic spectrum of KIDINS220-related disorders remains incompletely understood. Herein, we describe the clinical, electrophysiological, histopathological, and gen...



Read full article:

<https://www.frontiersin.org/articles/10.3389/fnins.2025.1684980>

## A modern approach to preventing CSRF in Go



2025-10-14



1

min



2

words

HACKER NEWS


**Summary:** [Comments](https://news.ycombinator.com/item?id=45581288)




Read full article:

<https://www.alexedwards.net/blog/preventing-csrf-in-go>

## Lowering Barriers to CAD Adoption: A Comparative Study of Augmented Reality-Based CAD (AR-CAD) and a Traditional CAD tool

 Muhammad Talha, Abdullah Mohiuddin, Sehrish Javed, Ahmed Jawad Qureshi

 2025-10-15


 1 min  216 words



ARXIV CS HC

**Summary:** arXiv:2510.12146v1 Announce Type: new Abstract: The paper presents a comparative user study between an Augmented Reality-based Computer-Aided Design (AR-CAD) system and a traditional computer-based CAD modeling software, SolidWorks. Twenty participants of varying skill levels performed 3D modeling ...

 **Read full article:**  
<https://arxiv.org/abs/2510.12146>

## KnowledgeTrail: Generative Timeline for Exploration and Sensemaking of Historical Events and Knowledge Formation

 Sangho Suh, Rahul Hingorani, Bryan Wang, Tovi Grossman


 2025-10-15  1 min  154 words




ARXIV CS HC

**Summary:** arXiv:2510.12113v1 Announce Type: new Abstract: The landscape of interactive systems is shifting toward dynamic, generative experiences that empower users to explore and construct knowledge in real time. Yet, timelines -- a fundamental tool for representing historical and conceptual development -- ...

 **Read full article:**  
<https://arxiv.org/abs/2510.12113>

## Social Simulation for Integrating Self-Care: Measuring the Effects of Contextual Environments in Augmented Reality for Mental Health Practice

 Anna Fang, Jiayang Shi, Hriday Chhabria, Bosi Li, Haiyi Zhu


 2025-10-15  1 min  153 words



ARXIV CS HC


**Summary:** arXiv:2510.12081v1 Announce Type: new Abstract: Despite growing interest in virtual and augmented reality (VR/AR) for mental well-being, prior work using immersive interventions to teach mental health skills has largely focused on calming or abstract settings. As a result, little is known about how...

 **Read full article:**  
<https://arxiv.org/abs/2510.12081>

## Choose Your Own Solution: Supporting Optional Blocks in Block Ordering Problems

 Skyler Oakeson, David H. Smith IV, Jaxton Winder, Seth Poulsen

 2025-10-15  1 min

 157 words

ARXIV CS HC

**Summary:** arXiv:2510.11999v1 Announce Type: new Abstract: This paper extends the functionality of block ordering problems (such as Parsons problems and Proof Blocks) to include optional blocks. We detail the algorithms used to implement the optional block feature and present usage experiences from instructor...

 **Read full article:**  
<https://arxiv.org/abs/2510.11999>

## VizCopilot: Fostering Appropriate Reliance on Enterprise Chatbots with Context Visualization



Sam Yu-Te Lee, Jingya Chen, Albert Calzaretto, Richard Lee, Alice Ferng, Mihaela Vorvoreanu



2025-10-15



1  
min



180  
words

ARXIV CS HC

**Summary:** arXiv:2510.11954v1 Announce Type: new Abstract: Enterprise chatbots show promise in supporting knowledge workers in information synthesis tasks by retrieving context from large, heterogeneous databases before generating answers. However, when the retrieved context misaligns with user intentions, th...



Read full article:

<https://arxiv.org/abs/2510.11954>

## Refashion: Reconfigurable Garments via Modular Design



Rebecca Lin, Michal Luk\`a{v}{c}, Mackenzie Leake



2025-10-15



1  
min



144  
words

ARXIV CS HC

**Summary:** arXiv:2510.11941v1 Announce Type: new Abstract: While bodies change over time and trends vary, most store-bought clothing comes in fixed sizes and styles and fails to adapt to these changes. Alterations can enable small changes to otherwise static garments, but these changes often require sewing an...



Read full article:

<https://arxiv.org/abs/2510.11941>

## Visual Stenography: Feature Recreation and Preservation in Sketches of Noisy Line Charts



Rifat Ara Proma, Michael Correll, Ghulam Jilani Quadri, Paul Rosen



2025-10-15



1 min



196 words

ARXIV CS HC

**Summary:** arXiv:2510.11927v1 Announce Type: new Abstract: Line charts surface many features in time series data, from trends to periodicity to peaks and valleys. However, not every potentially important feature in the data may correspond to a visual feature which readers can detect or prioritize. In this stu...



Read full article:

<https://arxiv.org/abs/2510.11927>

## Evaluating Line Chart Strategies for Mitigating Density of Temporal Data: The Impact on Trend, Prediction, and Decision-Making



Rifat Ara Proma, Ghulam Jilani Quadri, Paul Rosen



2025-10-15



1 min



113 words

ARXIV CS HC

**Summary:** arXiv:2510.11912v1 Announce Type: new Abstract: Overplotted line charts can obscure trends in temporal data and hinder prediction. We conduct a user study comparing three alternatives-aggregated, trellis, and spiral line charts against standard line charts on tasks involving trend identification, m...



Read full article:

<https://arxiv.org/abs/2510.11912>

## A Longitudinal Study on Different Annotator Feedback Loops in Complex RAG Tasks



Sara Rosenthal, Maeda Hanafi, Yannis Katsis, Lucian Popa, Marina Danilevsky



2025-10-15



1  
min



152  
words

ARXIV CS HC

**Summary:** arXiv:2510.11897v1 Announce Type: new Abstract: Grounding conversations in existing passages, known as Retrieval-Augmented Generation (RAG), is an important aspect of Chat-Based Assistants powered by Large Language Models (LLMs) to ensure they are faithful and don't provide misinformation. Several ...



Read full article:

<https://arxiv.org/abs/2510.11897>

## Generative Multi-Sensory Meditation: Exploring Immersive Depth and Activation in Virtual Reality



Yuyang Jiang, Binzhu Xie, Lina Xu, Xiaokang Lei, Shi Qiu, Luwen Yu, Pan Hui



2025-10-15



1  
min



164  
words

ARXIV CS HC

**Summary:** arXiv:2510.11830v1 Announce Type: new Abstract: Mindfulness meditation has seen increasing applications in diverse domains as an effective practice to improve mental health. However, the standardized frameworks adopted by most applications often fail to cater to users with various psychological sta...




Read full article:

<https://arxiv.org/abs/2510.11830>

## The Algorithmic Regulator

 Giulio  
Ruffini

 2025-10-15

 1  
min


 252  
words


ARXIV QBIO NC

**Summary:** arXiv:2510.10300v2 Announce Type: replace-cross Abstract: The regulator theorem states that, under certain conditions, any optimal controller must embody a model of the system it regulates, grounding the idea that controllers embed, explicitly or implicitly, internal models of the controlled. This ...


 Read full article:  
<https://arxiv.org/abs/2510.10300>

## When Purple Perceived Only at Fixation: A Fixation and Distance-Dependent Color Illusion

 Hinnerk Schulz-  
Hildebrandt

 2025-10-15

 1  
min

 58  
words


ARXIV QBIO NC



**Summary:** arXiv:2509.11582v4 Announce Type: replace-cross Abstract: In this paper a novel optical illusion is described in which purple structures are perceived as purple at the point of fixation, while the surrounding structures of the same purple color are perceived toward a blue hue. As the viewing distan...

 Read full article:  
<https://arxiv.org/abs/2509.11582>



## Non-linear associations of amyloid- $\beta$ with resting-state functional networks and their cognitive relevance in a large community-based cohort of cognitively normal older adults

 Junjie Wu, Benjamin B Risk, Taylor A James, Nicholas Seyfried, David W Loring, Felicia C Goldstein, Allan I Levey, James J Lah, Deqiang Qiu


 2025-10-15  1 min  220 words


ARXIV QBIO NC

**Summary:** arXiv:2510.12751v1 Announce Type: new Abstract: Background: Non-linear alterations in brain network connectivity may represent early neural signatures of Alzheimer's disease (AD) pathology in cognitively normal older adults. Understanding these changes and their cognitive relevance could provide se...

 **Read full article:**  
<https://arxiv.org/abs/2510.12751>

## Readout Representation: Redefining Neural Codes by Input Recovery

 Shunsuke Onoo, Yoshihiro Nagano, Yukiyasu Kamitani

 2025-10-15  1 min  159 words

ARXIV QBIO NC

**Summary:** arXiv:2510.12228v1 Announce Type: new Abstract: Sensory representation is typically understood through a hierarchical-causal framework where progressively abstract features are extracted sequentially. However, this causal view fails to explain misrepresentation, a phenomenon better handled by an in...

 **Read full article:**  
<https://arxiv.org/abs/2510.12228>

## MAPS: Masked Attribution-based Probing of Strategies- A computational framework to align human and model explanations



Sabine Muzellec, Yousif Kashef Alghetaa, Simon Kornblith, Kohitij Kar



2025-10-15



1 min



198 words

ARXIV QBIO NC

**Summary:** arXiv:2510.12141v1 Announce Type: new Abstract: Human core object recognition depends on the selective use of visual information, but the strategies guiding these choices are difficult to measure directly. We present MAPS (Masked Attribution-based Probing of Strategies), a behaviorally validated co...



Read full article:

<https://arxiv.org/abs/2510.12141>

## Inpainting the Neural Picture: Inferring Unrecorded Brain Area Dynamics from Multi-Animal Datasets



Ji Xia, Yizi Zhang, Shuqi Wang, Genevera I. Allen, Liam Paninski, Cole Lincoln Hurwitz, Kenneth D. Miller



2025-10-15



1  
min



148  
words

ARXIV QBIO NC

**Summary:** arXiv:2510.11924v1 Announce Type: new Abstract: Characterizing interactions between brain areas is a fundamental goal of systems neuroscience. While such analyses are possible when areas are recorded simultaneously, it is rare to observe all combinations of areas of interest within a single animal ...



Read full article:

<https://arxiv.org/abs/2510.11924>

## A reference brain for the clonal raider ant



Frank, D. D., Lopes, L. E., Mohanta, R., Seckler, I., Lacroix, I., Kronauer, D. J. C.



2025-10-14



1  
min



269  
words

BIORXIV NEUROSCIENCE




**Summary:** Ants exhibit remarkable collective and social behaviors, such as alloparental care, chemical communication, homing, and cooperative group hygiene. The clonal raider ant *Ooceraea biroi* is especially well-suited for investigating the neuronal and genetic underpinnings of these behaviors. Unlike most a...



Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.13.679875v1?rss=1>

# Why The Pentagon run the best schools and the safest nuclear program




 2025-10-15  1 min  2 words

HACKER NEWS

Summary: [Comments](https://news.ycombinator.com/item?id=45587072)

 Read full article:  
<https://www.governance.fyi/p/the-pentagons-best-schools-and-safest>

# Why The Pentagon run the best schools and the safest nuclear program




 2025-10-15  1 min  2 words

HACKER NEWS

Summary: [Comments](https://news.ycombinator.com/item?id=45587072)

 Read full article:  
<https://www.governance.fyi/p/the-pentagons-best-schools-and-safest>

## Interviewing Intel's Chief Architect of x86 Cores

 2025-10-09  1 min  2 words

HACKER NEWS





**Summary:** [Comments](https://news.ycombinator.com/item?id=45529534)



Read full article:

<https://chipsandcheese.com/p/interviewing-intels-chief-architect>

## Nvidia DGX Spark: great hardware, early days for the ecosystem

 GavinAnderegg  2025-10-15  1 min  13 words

HACKER NEWS

**Summary:**

Article URL: <https://simonwillison.net/2025/Oct/14/nvidia-dgx-spark/>

Comments URL: <https://news.ycombinator.com/item?id=45586776>

Points: 11

# Comm...



Read full article:

<https://simonwillison.net/2025/Oct/14/nvidia-dgx-spark/>

## Patterns of Brain Activation and Hippocampal Functional Connectivity Supporting Verbal Memory in Midlife Women



Wugalter, K. A., Thurston, R. C., Wu, M., Schroeder, R. A., Aizenstein, H. J., Maki, P. M.



2025-10-14



1  
min



242  
words

BIORXIV NEUROSCIENCE

**Summary:** Women show declines in verbal memory across the menopause transition that may persist into the postmenopause. The goal of the present study was to characterize the patterns of brain activity and hippocampal functional connectivity that support verbal memory performance in midlife postmenopausal women...



Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.13.681463v1?rss=1>

## Disk Prices



2025-10-15



1  
min



2  
words

HACKER NEWS


**Summary:** [Comments](https://news.ycombinator.com/item?id=45587280)



Read full article:

<https://diskprices.com/?locale=us>

## Disk Prices

 2025-10-15  1 min  2 words

HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45587280)

 **Read full article:**  
<https://diskprices.com/?locale=us>

## Can We Know Whether a Profiler Is Accurate?


 2025-10-15  1 min  2 words

HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45587289)

 **Read full article:**  
<https://stefan-marr.de/2025/10/can-we-know-whether-a-profiler-is-accurate/>

## Can We Know Whether a Profiler Is Accurate?

 2025-10-15  1 min  2 words




HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45587289)

 **Read full article:**

<https://stefan-marr.de/2025/10/can-we-know-whether-a-profiler-is-accurate/>

## New England's last coal plant has stopped operating, according to its owners

 2025-10-15  1 min  2 words

HACKER NEWS



**Summary:** [Comments](https://news.ycombinator.com/item?id=45586962)

 **Read full article:**

<https://www.nhpr.org/nh-news/2025-10-06/new-englands-last-coal-plant-has-stopped-operating-according-to-its-owners>




## New England's last coal plant has stopped operating, according to its owners

 2025-10-15  1 min  2 words



HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45586962)

 Read full article:

<https://www.nhpr.org/nh-news/2025-10-06/new-englands-last-coal-plant-has-stopped-operating-according-to-its-owners>

## Ally Petitt: Youngest OSCP at 16yo. Over 11 CVEs by 18


 nullbyte808  2025-10-14  1 min  13 words

HACKER NEWS

**Summary:**


Article URL: [https://ally-petitt.com/en/posts/2024-05-07\\_how-i-became-a-hacker-before-i-finished-high-school/](https://ally-petitt.com/en/posts/2024-05-07_how-i-became-a-hacker-before-i-finished-high-school/)


Comments URL: <https://news.ycombinator.com/item?id=45586423>...

 Read full article:

[https://ally-petitt.com/en/posts/2024-05-07\\_how-i-became-a-hacker-before-i-finished-high-school/](https://ally-petitt.com/en/posts/2024-05-07_how-i-became-a-hacker-before-i-finished-high-school/)

## Single cell transcriptomics reveals enrichment of aggregation-prone alpha-synuclein isoforms across synucleinopathies

 Shwab, E. K., Pierson, W., Gingerich, D. C., Man, Z., Margalit, S., Yona, D., Sivan, A., Gamache, J., Serrano, G. E. E., Beach, T., Ebenstein, Y., Beck, R., Chiba-Falek, O.

 2025-10-14  1 min  272 words

BIORXIV NEUROSCIENCE

**Summary:** Alpha-synuclein (a-Syn) is the primary component of Lewy bodies, the pathological hallmark of neurodegenerative synucleinopathies, including Parkinsons disease (PD) and dementia with Lewy bodies (DLB). Dysregulated expression of its encoding gene, SNCA, has been identified in association with both P...

 Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.13.682119v1?rss=1>

## Harry Potter meets Markov: Neural event representation in the reading network during narrative processing

 Xue, H., Dokienko, F., Gentile, F., Jansma, B. M.

 2025-10-14  1 min  250 words


BIORXIV NEUROSCIENCE



**Summary:** People segment ongoing information into meaningful mental representations known as events. Recent studies have found a spatio-temporal hierarchy in the event structure during movie watching and story listening. How the human brain segments stories while reading remains unclear. We examined event seg...

 Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.13.682063v1?rss=1>

## Transposable Element-Mediated Epigenomic Remodeling Drives Erythropoietin-Induced Neurogenesis in the Adult Hippocampus

 Cakir, U., Fritz, M., Butt, U. J., Kawaguchi, R., Geschwind, D., Nave, K.-A., Ehrenreich, H., Singh, M.

 2025-10-14  1 min  161 words


BIORXIV NEUROSCIENCE

**Summary:** Understanding the molecular mechanisms by which erythropoietin (EPO) is associated with neurogenesis is essential to harness its therapeutic potential for cognitive and neuropsychiatric disorders. Here, we employed single-nucleus assay for transposase-accessible chromatin sequencing (snATAC-seq), co...

 Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.13.682070v1?rss=1>


## Towards decoding inner speech from EEG and MEG

 Csaky, R., Woolrich, M. W., van Es, M. W. J., Jones, O. P.

 2025-10-14  1 min  283 words

BIORXIV NEUROSCIENCE

**Summary:** Despite the prevalence of inner speech in everyday life, research on this has been limited, particularly when it comes to non-invasive methods. This preprint aims to fill this gap by using EEG and MEG to collect data from three different inner speech paradigms, and by conducting an initial decoding ...

 Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.13.682161v1?rss=1>

# PERINATAL ORGANOPHOSPHATE FLAME RETARDANT EXPOSURE ALTERS ADULT HPA AXIS FUNCTION AND AVOIDANCE BEHAVIOR IN A SEX-SPECIFIC MANNER IN MICE



Rojas, C. M., DeLucca, J., Brown, C. A., Yasrebi, A., Chiou, S., Bello, N. T., Roepke, T. A.



2025-10-14



1

min



248

words

BIORXIV NEUROSCIENCE

**Summary:** Organophosphate flame retardants (OPFRs) are ubiquitous flame-retardant additives with endocrine-disrupting properties. Despite increasing evidence that OPFRs impact neurodevelopment, their effects on the neuroendocrine stress response remain poorly understood. To examine their long-term impact on s...




Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.13.682090v1?rss=1>

## The SNCA A53T mutation sensitizes human neurons and microglia to ferroptosis


Mahoney-Sanchez, L., Clarke-Lucas, H., Penverne, A., Evans, J. R., D'Sa, K., Strohbuecker, S., Lopex

 Garcia, P., Cosker, K., Soltic, D., O'Callaghan, B. J., Griffiths, A., Pintchovski, S. A., Plun-Favreau, H., Hallqvist, J., Mills, K., Gandhi, S.

 2025-10-14  1 min  240 words


BIORXIV NEUROSCIENCE



**Summary:** The major pathological hallmarks of sporadic and familial forms of Parkinson's disease (PD) are the targeted and progressive loss of midbrain dopaminergic neurons (mDA), associated with systemic iron accumulation,  $\alpha$ -synuclein (asyn) accumulation and aggregation, and lipid peroxidation amongst other ...

 Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.13.682089v1?rss=1>

## Slow Intrinsic Oscillations in the Ventrolateral Preoptic nucleus

 Perrenoud, Q., Ribot, J., Geoffroy, H., Gallopin, T., Rouach, N., Rancillac, A.

 2025-10-14  1 min

 180 words


BIORXIV NEUROSCIENCE

**Summary:** The ventrolateral preoptic nucleus (VLPO) of the hypothalamus plays a major role in the induction and consolidation of non-rapid eye movement (NREM) sleep. While VLPO neurons are heterogeneous, they often display low-threshold spikes (LTS), a feature that supports rhythmic activity. Nevertheless, rh...

 Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.13.682168v1?rss=1>

## WFS1E864K in humans and mice causes Wolfram-like syndrome optic atrophy via early axonal mitochondrial dysfunction

Dieguez, H. H., Dubois, K., Reboussin, E., De Muijnck, C., Sarniguet, J., Cazevievieille, C., Alves, S.,  
 Degardin, J., Fradot, V., Picaud, S., Melik-Parsadaniantz, S., Van Genderen, M., Vincent, A. L., Delprat, B., Richard, E. M.

 2025-10-14  1 min  199 words





BIORXIV NEUROSCIENCE

**Summary:** Wolfram-like syndrome leads to retinal ganglion cell degeneration and vision loss. Wolfram-like syndrome is primarily caused by variants in the WFS1 gene, which encodes an endoplasmic reticulum resident transmembrane protein, Wolframin. To date, the disease mechanism remains unclear, and no therapie...

 Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.13.682105v1?rss=1>

## Gave up on C++ and just went with Python

 /u/  
 Gazuroth  2025-10-14  1 min  85 words



REDDIT PYTHON

**Summary:** <!-- SC\_OFF --><div class="md"><p>I was super hesitant on going with python, since it felt like I wasn't gonna learn alot if I just go with python... which everyone in ProgrammingHumor was dissing on... then I started automating stuff... and Python just makes everything so smooth.... then I learned ...

 Read full article:

[https://www.reddit.com/r/Python/comments/1o6u9cg/gave\\_up\\_on\\_c\\_and\\_just\\_went\\_with\\_python/](https://www.reddit.com/r/Python/comments/1o6u9cg/gave_up_on_c_and_just_went_with_python/)

## Meditating with mongooses: Backyard wildlife photography lessons

 2025-10-15  1 min  2 words

HACKER NEWS




**Summary:** [Comments](https://news.ycombinator.com/item?id=45586618)



Read full article:

<https://wildgundmi.com/meditating-with-mongooses>

## Interior cancels largest solar project in North America

 2025-10-14  1 min  2 words

HACKER NEWS



**Summary:** [Comments](https://news.ycombinator.com/item?id=45586282)



Read full article:

<https://www.politico.com/news/2025/10/10/trump-interior-department-cancels-largest-solar-project-in-north-america-00602071>

## FSF announces Librephone project

 2025-10-14  1 min  2 words

HACKER NEWS



**Summary:** [Comments](https://news.ycombinator.com/item?id=45586339)



Read full article:

<https://www.fsf.org/news/librephone-project>

## Interior cancels largest solar project in North America

 pseudolus  2025-10-14  1 min  13 words

HACKER NEWS

**Summary:**

Article URL: <https://www.politico.com/news/2025/10/10/trump-interior-department-cancels-largest-solar-project-in-north-america-00602071>

Comments URL: [...](#)



Read full article:

<https://www.politico.com/news/2025/10/10/trump-interior-department-cancels-largest-solar-project-in-north-america-00602071>



## FSF announces Librephone project



g-b-r



2025-10-14



1

min



13

words

HACKER NEWS

**Summary:**

Article URL: <https://www.fsf.org/news/librephone-project>

Comments URL: <https://news.ycombinator.com/item?id=45586339>

Points: 138

# Comments: 53



Read full article:

<https://www.fsf.org/news/librephone-project>

## Meditating with mongooses: Backyard wildlife photography lessons



mylittlefinger



2025-10-15



1

min



13

words

HACKER NEWS

**Summary:**

Article URL: <https://wildgundmi.com/meditating-with-mongooses>

Comments URL: <https://news.ycombinator.com/item?id=45586618>

Points: 4




# Comments: 0



Read full article:

<https://wildgundmi.com/meditating-with-mongooses>

## Foundation Model for Advancing Healthcare: Challenges, Opportunities and Future Directions

 2024-11-12  1 min  214 words

REVIEWS BIOMEDICAL ENGINEERING

**Summary:** Foundation model, trained on a diverse range of data and adaptable to a myriad of tasks, is advancing healthcare. It fosters the development of healthcare artificial intelligence (AI) models tailored to the intricacies of the medical field, bridging the gap between limited AI models and the varied n...

 Read full article:

<http://ieeexplore.ieee.org/document/10750441>

## Data- and Physics-Driven Deep Learning Based Reconstruction for Fast MRI: Fundamentals and Methodologies

 2024-10-22  1 min  151 words




REVIEWS BIOMEDICAL ENGINEERING

**Summary:** Magnetic Resonance Imaging (MRI) is a pivotal clinical diagnostic tool, yet its extended scanning times often compromise patient comfort and image quality, especially in volumetric, temporal and quantitative scans. This review elucidates recent advances in MRI acceleration via data and physics-drive...

 Read full article:

<http://ieeexplore.ieee.org/document/10729663>

## Artificial General Intelligence for Medical Imaging Analysis

 2024-11-07  1 min  159 words




REVIEWS BIOMEDICAL ENGINEERING

**Summary:** Large-scale Artificial General Intelligence (AGI) models, including Large Language Models (LLMs) such as ChatGPT/GPT-4, have achieved unprecedented success in a variety of general domain tasks. Yet, when applied directly to specialized domains like medical imaging, which require in-depth expertise, ...

 Read full article:

<http://ieeexplore.ieee.org/document/10746601>

## Exhaled Breath Analysis: From Laboratory Test to Wearable Sensing

 2024-10-16  1 min  182 words




REVIEWS BIOMEDICAL ENGINEERING

**Summary:** Breath analysis and monitoring have emerged as pivotal components in both clinical research and daily health management, particularly in addressing the global health challenges posed by respiratory and metabolic disorders. The advancement of breath analysis strategies necessitates a multidisciplinary...

 Read full article:

<http://ieeexplore.ieee.org/document/10720187>

## Earable Multimodal Sensing and Stimulation: A Prospective Toward Unobtrusive Closed-Loop Biofeedback

 2024-11-29  1 min  200 words


REVIEWS BIOMEDICAL ENGINEERING

**Summary:** The human ear has emerged as a bidirectional gateway to the brain's and body's signals. Recent advances in around-the-ear and in-ear sensors have enabled the assessment of biomarkers and physiomarkers derived from brain and cardiac activity using ear-electroencephalography (ear-EEG), photoplethysmog...

 Read full article:

<http://ieeexplore.ieee.org/document/10771694>

## Correction: Pathological respiratory chemoreflex activation predicts improvement of neurocognitive function in response to continuous positive airway pressure therapy

 Robert Joseph  
Thomas




 2025-10-13  1 min  0 words

FRONTIERS NEUROSCIENCE

 Read full article:

<https://www.frontiersin.org/articles/10.3389/fnins.2025.1714129>



# Editorial: Harnessing Reviews to Advance Biomedical Engineering's New Horizons

 2025-01-28  1 min  1 words

REVIEWS BIOMEDICAL ENGINEERING

 Read full article:  
<http://ieeexplore.ieee.org/document/10856220>




## Table of Contents

 2025-01-28  1 min  1 words

REVIEWS BIOMEDICAL ENGINEERING

 Read full article:  
<http://ieeexplore.ieee.org/document/10856214>


## IEEE Engineering in Medicine and Biology Society


 2025-01-28  1 min  1 words

REVIEWS BIOMEDICAL ENGINEERING

 Read full article:  
<http://ieeexplore.ieee.org/document/10856213>

## Chord Colourizer: A Near Real-Time System for Visualizing Musical Key

 Paul  
Haimes

 2025-10-14

 1  
min

 234  
words

ARXIV CS HC


**Summary:** arXiv:2510.10173v1 Announce Type: new Abstract: This paper introduces Chord Colourizer, a near real-time system that detects the musical key of an audio signal and visually represents it through a novel graphical user interface (GUI). The system assigns colours to musical notes based on Isaac Newto...





Read full article:

<https://arxiv.org/abs/2510.10173>

## BrainForm: a Serious Game for BCI Training and Data Collection

 Michele Romani, Devis Zanoni, Elisabetta Farella, Luca  
Turchet

 2025-10-14  1  
min

 137  
words

ARXIV CS HC

**Summary:** arXiv:2510.10169v1 Announce Type: new Abstract:  $\textit{BrainForm}$  is a gamified Brain-Computer Interface (BCI) training system designed for scalable data collection using consumer hardware and a minimal setup. We investigated (1) how users develop BCI control skills across repeated sessions and ...



Read full article:

<https://arxiv.org/abs/2510.10169>

## How AI Companionship Develops: Evidence from a Longitudinal Study



Angel Hsing-Chi Hwang, Fiona Li, Jacy Reese Anthis, Hayoun Noh



2025-10-14



1 min



154 words

ARXIV CS HC

**Summary:** arXiv:2510.10079v1 Announce Type: new Abstract: The quickly growing popularity of AI companions poses risks to mental health, personal wellbeing, and social relationships. Past work has identified many individual factors that can drive human-companion interaction, but we know little about how these...



Read full article:

<https://arxiv.org/abs/2510.10079>

## ALLOY: Generating Reusable Agent Workflows from User Demonstration



Jiawen Li, Zheng Ning, Yuan Tian, Toby Jia-jun Li



2025-10-14



1 min



172 words

ARXIV CS HC


**Summary:** arXiv:2510.10049v1 Announce Type: new Abstract: Large language models (LLMs) enable end-users to delegate complex tasks to autonomous agents through natural language. However, prompt-based interaction faces critical limitations: Users often struggle to specify procedural requirements for tasks, esp...






Read full article:

<https://arxiv.org/abs/2510.10049>

## Between Knowledge and Care: Evaluating Generative AI-Based IUI in Type 2 Diabetes Management Through Patient and Physician Perspectives

 Yibo Meng, Ruiqi Chen, Zhiming Liu, Xiaolan Ding, Yan Guan

 2025-10-14  1 min  171 words


ARXIV CS HC



**Summary:** arXiv:2510.10048v1 Announce Type: new Abstract: Generative AI systems are increasingly adopted by patients seeking everyday health guidance, yet their reliability and clinical appropriateness remain uncertain. Taking Type 2 Diabetes Mellitus (T2DM) as a representative chronic condition, this paper ...

 **Read full article:**  
<https://arxiv.org/abs/2510.10048>



## "Can I Decorate My Teeth With Diamonds?": Exploring Multi-Stakeholder Perspectives on Using VR to Reduce Children's Dental Anxiety

 Yaxuan Mao, Yanheng Li, Duo Gong, Pengcheng An, Yuhan Luo

 2025-10-14  1 min

 171 words

ARXIV CS HC

**Summary:** arXiv:2510.10019v1 Announce Type: new Abstract: Dental anxiety is prevalent among children, often leading to missed treatment and potential negative effects on their mental well-being. While several interventions (e.g., pharmacological and psychotherapeutic techniques) have been introduced for anxi...




Read full article:

<https://arxiv.org/abs/2510.10019>

## Read the Room or Lead the Room: Understanding Socio-Cognitive Dynamics in Human-AI Teaming



Jaeyoon Choi, Mohammad Amin Samadi, Spencer JaQuay, Seehee Park, Nia Nixon

 2025-10-14



1  
min



199  
words

ARXIV CS HC

**Summary:** arXiv:2510.09944v1 Announce Type: new Abstract: Research on Collaborative Problem Solving (CPS) has traditionally examined how humans rely on one another cognitively and socially to accomplish tasks together. With the rapid advancement of AI and large language models, however, a new question emerge...



Read full article:

<https://arxiv.org/abs/2510.09944>

## ROBOPSY PL[AI]: Using Role-Play to Investigate how LLMs Present Collective Memory



Margarete Jahrmann, Thomas Brandstetter, Stefan Glasauer



2025-10-14



1  
min



203  
words

ARXIV CS HC


**Summary:** arXiv:2510.09874v1 Announce Type: new Abstract: The paper presents the first results of an artistic research project investigating how Large Language Models (LLMs) curate and present collective memory. In a public installation exhibited during two months in Vienna in 2025, visitors could interact w...





Read full article:

<https://arxiv.org/abs/2510.09874>

## PRAXA: A Framework for What-If Analysis

 Sneha Gathani, Kevin Li, Raghav Thind, Sirui Zeng, Matthew Xu, Peter J. Haas, Cagatay Demiralp, Zhicheng Liu


 2025-10-14  1 min  153 words



ARXIV CS HC

**Summary:** arXiv:2510.09791v1 Announce Type: new Abstract: Various analytical techniques-such as scenario modeling, sensitivity analysis, perturbation-based analysis, counterfactual analysis, and parameter space analysis-are used across domains to explore hypothetical scenarios, examine input-output relations...

 **Read full article:**  
<https://arxiv.org/abs/2510.09791>

## Network Traffic as a Scalable Ethnographic Lens for Understanding University Students' AI Tool Practices

 Donghan Hu, Rameen Mahmood, Annabelle David, Danny Yuxing Huang

 2025-10-14  1 min

 171 words

ARXIV CS HC

**Summary:** arXiv:2510.09763v1 Announce Type: new Abstract: AI-driven applications have become woven into students' academic and creative workflows, influencing how they learn, write, and produce ideas. Gaining a nuanced understanding of these usage patterns is essential, yet conventional survey and interview ...

 **Read full article:**  
<https://arxiv.org/abs/2510.09763>

## People use fast, flat goal-directed simulation to reason about novel problems



Katherine M. Collins, Cedegao E. Zhang, Lionel Wong, Mauricio Barba da Costa, Graham Todd, Adrian Weller, Samuel J. Cheyette, Thomas L. Griffiths, Joshua B. Tenenbaum



2025-10-14



1  
min



304  
words

ARXIV QBIO NC

**Summary:** arXiv:2510.11503v1 Announce Type: new Abstract: Games have long been a microcosm for studying planning and reasoning in both natural and artificial intelligence, especially with a focus on expert-level or even super-human play. But real life also pushes human intelligence along a different frontier...



Read full article:

<https://arxiv.org/abs/2510.11503>

## Refining RDoC Using Individual-Level Task fMRI Factor Models Reveals Reproducible Brain-wide Motifs



Quah, S. K. L., Madsen, S., Pirzada, S., Jo, B., Uddin, L. Q., Mumford, J. A., Barch, D. M., Gotlib, I. H., Fair, D. A., Poldrack, R. A., Saggar, M.



2025-10-14



1  
min



296  
words

BIORXIV NEUROSCIENCE

**Summary:** The Research Domain Criteria (RDoC) framework was introduced to guide psychiatric research using biologically grounded, dimensional constructs of mental function. However, its current hierarchical domain structure remains largely unvalidated against individual-level brain imaging data. Building on o...



Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.13.682124v1?rss=1>

## Mesoscale developmental rivalry in human extrastriate visual cortex



Nasr, S., Skerswetat, J., Kennedy, B., Schmidt, M. E., Gaier, E. D., Morland, A. B., Hunter, D. G.



2025-10-14



1  
min



134  
words

BIORXIV NEUROSCIENCE

**Summary:** In humans and non-human primates, the extrastriate visual cortex contains fine-scale columns selectively responsive to motion, disparity, and color. However, the developmental interplay between these functional modules remains poorly understood. Using high-resolution fMRI, we compared the mesoscale ...



Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.13.682053v1?rss=1>

## Age differences in electrocortical dynamics during uneven terrain walking



Liu, C., Pliner, E. M., Salminen, J., Downey, R. J., Hwang, J., Roy, A., Swearingner, R., Richer, N., Hass, C. J., Clark, D. J., Manini, T. M., Cruz-Almeida, Y., Seidler, R., Ferris, D. P.



2025-10-14



1  
min



327  
words

BIORXIV NEUROSCIENCE

**Summary:** Walking on uneven terrain becomes more difficult as we age, and gait becomes less automatic. Using mobile brain imaging via high-density electroencephalography (EEG) can provide insight into the neural mechanisms contributing to reduced mobility capability with aging. The objective of this study was...






Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.13.682080v1?rss=1>

## Peripheral Inflammation Limits Serotonin Neuron Signaling Capacity via Serotonergic IL-1R1 to Reduce Neuronal Excitability and Enhance Serotonin Clearance

 Gajewski, P. A., Iwamoto, H., Tillman, A. N., Filliben, Z., Walsh, A. E., Baganz, N. L., Robson, M. J., Zapata, M., Quan, N., Blakely, R. D.

 2025-10-14  1 min  316 words

BIORXIV NEUROSCIENCE


**Summary:** Neurobehavioral disorders, ranging from depression to schizophrenia, have been found to display immune system alterations. The high incidence of comorbidity of these disorders, particularly depression, with chronic inflammatory conditions suggests shared mechanisms contributing to the manifestation ...




Read full article:


<https://www.biorxiv.org/content/10.1101/2025.10.13.682078v1?rss=1>

## Resolution of Near-Work-Related Effects, Accommodation, and Binocular Vision Changes of 0.05% Atropine After 1 Year: Secondary Analysis of a Prospective Study

 Xiaoning  
Li

 2025-10-13

 1  
min

 37  
words

LOW VISION

**Summary:** CONCLUSIONS: Long-term use of 0.05% atropine appears to be safe in children with myopia. Although short-term visual function changes and side effects were associated with higher dosing frequency, these effects were largely transient and resolved over time.


 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41082167/?](https://pubmed.ncbi.nlm.nih.gov/41082167/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnVSlégfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251014191841&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnVSlégfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251014191841&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41082167/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnVSlégfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251014191841&v=2.18.0.post9+e462414)

## Hierarchical Semantic Compression for Consistent Image Semantic Restoration

 Ce  
Zhu

 2025-10-13

 1  
min

 63  
words

LOW VISION


**Summary:** The emerging semantic compression has been receiving increasing research efforts most recently, capable of achieving high fidelity restoration during compression, even at extremely low bitrates. However, existing semantic compression methods typically combine standard pipelines with either pre-defin...

 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41082430/?](https://pubmed.ncbi.nlm.nih.gov/41082430/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnVSlégfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251014191841&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnVSlégfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251014191841&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41082430/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnVSlégfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251014191841&v=2.18.0.post9+e462414)

## Prevalence and causes of blindness and vision impairment in Western Uganda: Findings from a rapid assessment of avoidable blindness (RAAB) survey

 Khumbo  
Kalua



2025-10-13



1  
min



46  
words

LOW VISION

**Summary:** CONCLUSION: Blindness and vision impairment remain major public health issues in Western Uganda, primarily due to untreated cataract and uncorrected refractive error. Poor post-operative outcomes highlight the urgent need to improve surgical quality. These findings may guide targeted interventions a...




Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41082552/?](https://pubmed.ncbi.nlm.nih.gov/41082552/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251014191841&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251014191841&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41082552/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251014191841&v=2.18.0.post9+e462414)

## Spatially Resolved Molecular Investigation of Perineural Invasion in Lacrimal Gland Adenoid Cystic Carcinoma

 Daniel  
Pelaez



2025-10-13



1  
min



66  
words

LOW VISION

**Summary:** CONCLUSIONS: This study provides novel insights into the complex tumor microenvironment of LGACC PNI, uncovering mechanisms that may drive PNI and treatment resistance. The identification of p75NTR as a potential mediator of neurotropism underscores its relevance as both a therapeutic target and bio...




Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41082926/?](https://pubmed.ncbi.nlm.nih.gov/41082926/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251014191841&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251014191841&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41082926/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBNvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251014191841&v=2.18.0.post9+e462414)




## From image to report: automating lung cancer screening interpretation and reporting with vision-language models

 Aokun  
Chen

 17

2025-10-13

 1  
min

 53  
words

LOW VISION

**Summary:** CONCLUSION: LUMEN demonstrates the feasibility of generating clinically accurate lung nodule reports from LDCT images through a nodule-centric VQA approach, highlighting the potential of integrating VLMs and LLMs to support radiologists in lung cancer screening workflows. Our findings also underscor...

 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/41083099/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnVslegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251014191841&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41083099/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnVslegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251014191841&v=2.18.0.post9+e462414)


## Interventional Vitamin Mix Glaucoma Study (IVMGS): study protocol for a prospective, randomized, two-arm, single-center trial in existing glaucoma patients

 Pete A  
Williams

 17

2025-10-14

 1  
min

 64  
words

LOW VISION


**Summary:** BACKGROUND: Glaucoma is a leading cause of irreversible blindness, characterized by progressive degeneration of retinal ganglion cells. Current treatments primarily lower intraocular pressure but do not directly provide neuroprotection. Preclinical studies from our group have identified dysfunction ...



 **Read full article:**


<https://pubmed.ncbi.nlm.nih.gov/41084053/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnVslegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251014191841&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41084053/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnVslegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251014191841&v=2.18.0.post9+e462414)

## Decision-Making for Endovascular Thrombectomy in Patients With Large Vessel Occlusions and Mild Neurological Deficit: A Consensus Statement

 Johanna M  
Ospel

 2025-10-14  1  
min

 69  
words

LOW VISION


**Summary:** Acute ischemic stroke patients with mild deficits (National Institutes of Health Stroke Scale [NIHSS] of 0-5) but confirmed large vessel occlusions (LVO) present a clinical challenge for endovascular thrombectomy (EVT) decisions due to limited evidence and the absence of clear guidelines. A Delphi c...



 Read full article:


[https://pubmed.ncbi.nlm.nih.gov/41084289/?](https://pubmed.ncbi.nlm.nih.gov/41084289/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251014191841&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251014191841&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41084289/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251014191841&v=2.18.0.post9+e462414)

## Association of High-Altitude Polycythemia with JAK2V617F Mutation in Pakistani Population

 Uzma  
Zaidi

 2025-10-14  1  
min

 74  
words

LOW VISION

**Summary:** To assessthe prevalence of the JAK2V617F mutation in polycythemia patients living at high altitude. This was a cross-sectional study, conducted at the National Institute of Blood Diseasesand Bone Marrow Transplantation (NIBD-BMT), KarachifromJuly 2022 to July 2023. A total of 132 patients with polyc...


 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/41084570/?](https://pubmed.ncbi.nlm.nih.gov/41084570/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251014191841&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251014191841&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41084570/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251014191841&v=2.18.0.post9+e462414)

## Neither exogenous, nor endogenous: Evidence for a distinct role of negative emotion during attentional control

 Gilles  
Pourtois

 2025-10-14

 1  
min

 69  
words

LOW VISION


**Summary:** Negative or threatening stimuli capture attention. However, it remains unclear whether this phenomenon is best conceived as bottom-up (i.e., salience-driven) or top-down (i.e., goal-directed) instead. To address this question, we conducted two experiments using a previously validated dot-probe task ...


 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/41086156/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251014191841&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41086156/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251014191841&v=2.18.0.post9+e462414)

## Improving object detection in challenging weather for autonomous driving via adversarial image translation

 Yaohua  
Zhao

 2025-10-14

 1  
min

 65  
words

LOW VISION

**Summary:** Vision-based environmental perception is fundamental to autonomous driving, as it enables reliable detection and recognition of diverse objects in complex traffic environments. However, adverse weather conditions (such as rain, fog, and low-light conditions) significantly degrade image quality, ther...

 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/41086174/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251014191841&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41086174/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1xePBFBnvSlegfqCbvp45N3V9WgCNCS63Z1PLmhwJSPGd18QMT&fc=None&ff=20251014191841&v=2.18.0.post9+e462414)

## The taste of trigeminal sensations: relation between taste, lingual tactile acuity, and spicy perception in patients with taste dysfunction

 Thomas Hummel

 2025-05-28  1 min  70 words


TACTILE ACUITY

**Summary:** In the oral cavity, oral stereognosis and chemesthesis refer to the abilities to recognize shapes and detect noxious substances, respectively, through various receptors distributed on the tongue. The absence of standardized methods to assess oral somatosensory perception has led to a lack of consens...

 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/40434896/?utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251014191811&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40434896/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251014191811&v=2.18.0.post9+e462414)

## Measuring the Distribution of Tactile Acuity at the Index Finger and Thumb Fingertips

 Hiroyuki Kajimoto

 2025-06-17  1 min  75 words


TACTILE ACUITY


**Summary:** In our day-to-day activities, we utilize not only the pads of our fingers but also the sides and hemispherical tips when manipulating objects. For teleoperation systems to replicate these real-life interactions, tactile sensation must be presented and distributed across the entire fingertip. Thus, u...

 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/40526544/?utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251014191811&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40526544/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251014191811&v=2.18.0.post9+e462414)

## Optimizing Vibrotactile Feedback for Sensory Substitution in the Thigh: Spatial Acuity and Frequency Characteristics

 Leah R  
Bent

 2025-06-27

 1  
min

 69  
words

TACTILE ACUITY


**Summary:** Amputation of a lower limb not only affects mobility but also interferes with sensory feedback, leading to an elevated risk of falls among individuals living with amputation. Sensory substitution, achieved through tactile displays embedded in transfemoral prosthetic sockets, presents a promising non...


 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/40577301/?](https://pubmed.ncbi.nlm.nih.gov/40577301/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251014191811&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251014191811&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40577301/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251014191811&v=2.18.0.post9+e462414)

## Directional vibro-tactile hazard warnings for drivers with vision impairments

 Alex R  
Bowers

 2025-07-02

 1  
min

 80  
words

TACTILE ACUITY


**Summary:** Vision impairment may delay responses to hazards when driving. In a proof-of-concept driving simulator study, we evaluated a hazard warning device designed for vision impaired drivers. Three groups participated: 11 persons with central vision loss (CVL; median age 60 years), 12 with homonymous field...

 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/40601880/?](https://pubmed.ncbi.nlm.nih.gov/40601880/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251014191811&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251014191811&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40601880/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251014191811&v=2.18.0.post9+e462414)

## Sensitivity and vagal reactivity to C-tactile-mediated affective touch in mild cognitive impairment due to Alzheimer's disease

 Cecilia  
Guariglia



2025-08-01



1  
min



64  
words

TACTILE ACUITY

**Summary:** BackgroundC-tactile (CT) afferents preferentially activate in response to slow caress-like touch, evoking a diffuse pleasant sensation and promoting autonomic regulation. According to Braak's classic model, the neurodegenerative process in Alzheimer's disease (AD) only affects somatosensory cortices...



Read full article:

[https://pubmed.ncbi.nlm.nih.gov/40746091/?](https://pubmed.ncbi.nlm.nih.gov/40746091/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251014191811&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251014191811&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40746091/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251014191811&v=2.18.0.post9+e462414)

## Differences in tactile grid localization accuracy between people with back pain compared to individuals without pain

 Eric  
Fjeldheim



2025-08-24



1  
min



22  
words

TACTILE ACUITY

**Summary:** OBJECTIVES: The study aimed to investigate the grid localization test (GLT) between patients with lower back pain and those without back pain.





Read full article:

[https://pubmed.ncbi.nlm.nih.gov/40850311/?](https://pubmed.ncbi.nlm.nih.gov/40850311/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251014191811&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251014191811&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40850311/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPlx7YY7aF6AfClqP-RYZd&fc=None&ff=20251014191811&v=2.18.0.post9+e462414)

# Eye Drop Instillation Success and Hand Function in Adults with Glaucoma: A Pilot Study

 Paula Anne Newman-Casey

 2025-09-09

 1 min

 74 words


TACTILE ACUITY


**Summary:** CONCLUSIONS: Despite hand function deficits, in this exploratory pilot study, adults with glaucoma demonstrated eye drop instillation success comparable to those without glaucoma, though with higher rates of bottle tip contact with the eye, skin, or eyelashes, suggesting an increased risk of potenti...

 Read full article:


[https://pubmed.ncbi.nlm.nih.gov/40924900/?utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251014191811&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40924900/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251014191811&v=2.18.0.post9+e462414)

# Functional evidence for early origin of tactile acuity in the vertebrate somatosensory system

 Sviatoslav N Bagriantsev

 2025-09-13

 1 min

 58 words

TACTILE ACUITY



**Summary:** Mammals and reptiles possess a sophisticated somatosensory system for precise tactile discrimination via mechanosensory end-organs, such as Meissner and Pacinian corpuscles and others. These structures detect sustained pressure, velocity, and vibrations, thereby facilitating nuanced environmental in...


 Read full article:

[https://pubmed.ncbi.nlm.nih.gov/40945511/?utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251014191811&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40945511/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251014191811&v=2.18.0.post9+e462414)

## The coarse mental map of the breast is anchored on the nipple

 Charles M  
Greenspon

 2025-09-18  1  
min

 86  
words

TACTILE ACUITY

**Summary:** Touch plays a key role in our perception of our body and shapes our interactions with the world, from the objects we manipulate to the people we touch. While the tactile sensibility of the hand has been extensively characterized, much less is known about touch on other parts of the body. Despite the...



 Read full article:


<https://pubmed.ncbi.nlm.nih.gov/40964349/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251014191811&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/40964349/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251014191811&v=2.18.0.post9+e462414)

## Haptic Feedback Systems for Lower-Limb Prosthetic Applications: A Review of System Design, User Experience, and Clinical Insights

 Runar  
Unnthorsson

 2025-09-27  1  
min

 65  
words

TACTILE ACUITY

**Summary:** Systems presenting haptic information have emerged as an important technological advance in assisting individuals with sensory impairments or amputations, where the aim is to enhance sensory perception or provide sensory substitution through tactile feedback. These systems provide information on lim...



 Read full article:

<https://pubmed.ncbi.nlm.nih.gov/41007234/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1no\\_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251014191811&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41007234/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1no_pWrIHWS46ep2l9cVOQkZ1QsEMPLx7YY7aF6AfClqP-RYZd&fc=None&ff=20251014191811&v=2.18.0.post9+e462414)



## Hacking the Humane AI Pin

 2025-10-08  1 min  2 words





HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45515915)

 Read full article:

[https://writings.agg.im/posts/hacking\\_ai\\_pin/](https://writings.agg.im/posts/hacking_ai_pin/)

## Unpacking Cloudflare Workers CPU Performance Benchmarks

 makepanic  2025-10-14  1 min  13 words

HACKER NEWS

**Summary:**





Article URL: <https://blog.cloudflare.com/unpacking-cloudflare-workers-cpu-performance-benchmarks/>

Comments URL: [https://news.ycombinato...](https://news.ycombinator.com/item?id=45584281)

 Read full article:

<https://blog.cloudflare.com/unpacking-cloudflare-workers-cpu-performance-benchmarks/>

## Why Is SQLite Coded in C and not Rust

 plainOldText  2025-10-14  1 min  13 words

HACKER NEWS

**Summary:**

Article URL: <https://www.sqlite.org/whyc.html>





Comments URL: <https://news.ycombinator.com/item?id=45584464>

Points: 13

# Comments: 8

 Read full article:  
<https://www.sqlite.org/whyc.html>

## GrapheneOS is finally ready to break free from Pixels and it may never look back


 MaximilianEmel  2025-10-14  1 min  13 words

HACKER NEWS


**Summary:**



Article URL: <https://www.androidauthority.com/graphene-os-major-android-oem-partnership-3606853/>

Comments URL: <https://news.ycombinator.com/item?id=45585869>

 Read full article:  
<https://www.androidauthority.com/graphene-os-major-android-oem-partnership-3606853/>

## A compressed code for memory discrimination

 Dale Zhou, Sharon Mina Noh, Nora C Harhen, Nidhi V Banavar, C. Brock Kirwan, Michael A Yassa, Aaron M Bornstein


 2025-10-14  1 min  253 words


ARXIV QBIO NC

**Summary:** arXiv:2510.10791v1 Announce Type: new Abstract: The ability to discriminate similar visual stimuli is an important index of memory function. This ability is widely thought to be supported by expanding the dimensionality of relevant neural codes, such that neural representations for similar stimuli ...

 **Read full article:**  
<https://arxiv.org/abs/2510.10791>

## The Cost of Simplicity: How Reducing EEG Electrodes Affects Source Localization and BCI Accuracy

 Eva Guttmann-Flury, Yanyan Wei, Shan Zhao, Jian Zhao, Mohamad Sawan

 2025-10-14  1 min

 246 words

ARXIV QBIO NC

**Summary:** arXiv:2510.10770v1 Announce Type: new Abstract: Electrode density optimization in electroencephalography (EEG)-based Brain-Computer Interfaces (BCIs) requires balancing practical usability against signal fidelity, particularly for source localization. Reducing electrodes enhances portability but it...

 **Read full article:**  
<https://arxiv.org/abs/2510.10770>

## Does Re-referencing Matter? Large Laplacian Filter Optimizes Single-Trial P300 BCI Performance



Eva Guttmann-Flury, Jian Zhao, Mohamad  
Sawan



2025-10-14



1  
min



169  
words

ARXIV QBIO NC

**Summary:** arXiv:2510.10733v1 Announce Type: new Abstract: Electroencephalography (EEG) provides a non-invasive window into brain activity, enabling Brain-Computer Interfaces (BCIs) for communication and control. However, their performance is limited by signal fidelity issues, among which the choice of re-ref...



Read full article:

<https://arxiv.org/abs/2510.10733>

## Evidence of Physiological Co-Modulation During Human-Animal Interaction: A Systematic Review



G. Bargigli, L. Frassinetti, A. Lanata', P. Baragli, C. Scopa, A.  
Vignoli



2025-10-14



1  
min



249  
words

ARXIV QBIO NC

**Summary:** arXiv:2510.10559v1 Announce Type: new Abstract: This review examines the evidence in the literature for physiological co-modulation during human-animal interaction. The aim of this work is to identify studies that assessed co-modulation via simultaneous measurement of physiological signals in both ...



Read full article:

<https://arxiv.org/abs/2510.10559>

## Artificial intelligence as a surrogate brain: Bridging neural dynamical models and data



Yinuo Zhang, Demao Liu, Zhichao Liang, Jiani Cheng, Kexin Lou, Jinqiao Duan, Ting Gao, Bin Hu, Quanying Liu



2025-10-14



1

min



159

words

ARXIV QBIO NC

**Summary:** arXiv:2510.10308v1 Announce Type: new Abstract: Recent breakthroughs in artificial intelligence (AI) are reshaping the way we construct computational counterparts of the brain, giving rise to a new class of "surrogate brains". In contrast to conventional hypothesis-driven biophysical models, the ...



Read full article:

<https://arxiv.org/abs/2510.10308>

## AI-Assisted Geometric Analysis of Cultured Neuronal Networks: Parallels with the Cosmic Web



Wolfgang Kurz, Danny Baranes



2025-10-14



1

min



97

words

ARXIV QBIO NC


**Summary:** arXiv:2510.10286v1 Announce Type: new Abstract: Building on evidence of structural parallels between brain networks and the cosmic web [1], we apply AI-based geometric analysis to cultured neuronal networks. Isolated neurons self-organize into dendritic lattices shaped by reproducible wiring rules....





Read full article:

<https://arxiv.org/abs/2510.10286>

## Neural Hardware for the Language of Thought: New Rules for an Old Game

 Gualtiero  
Piccinini

 2025-10-14  1  
min


 148  
words


ARXIV QBIO NC


**Summary:** arXiv:2510.10251v1 Announce Type: new Abstract: The Language of Thought (LOT) hypothesis posits that at least some important cognitive processes involve language-like representations. These representations must be processed by appropriate hardware. Since the organ of biological cognition is the ner...

 **Read full article:**  
<https://arxiv.org/abs/2510.10251>

## Egocentric Visual Navigation through Hippocampal Sequences

 Xiao-Xiong Lin, Yuk Hoi Yiu, Christian  
Leibold

 2025-10-14  1  
min

 228  
words

ARXIV QBIO NC

**Summary:** arXiv:2510.09951v1 Announce Type: new Abstract: Sequential activation of place-tuned neurons in an animal during navigation is typically interpreted as reflecting the sequence of input from adjacent positions along the trajectory. More recent theories about such place cells suggest sequences arise ...

 **Read full article:**  
<https://arxiv.org/abs/2510.09951>

## A mathematical theory for understanding when abstract representations emerge in neural networks



Bin Wang, W. Jeffrey Johnston, Stefano

Fusi



2025-10-14

1  
min258  
words

ARXIV QBIO NC

**Summary:** arXiv:2510.09816v1 Announce Type: new Abstract: Recent experiments reveal that task-relevant variables are often encoded in approximately orthogonal subspaces of the neural activity space. These disentangled low-dimensional representations are observed in multiple brain areas and across different s...



Read full article:

<https://arxiv.org/abs/2510.09816>

## Activin A protects against lipopolysaccharide/TNF- $\alpha$ induced damage of dopaminergic neurons both in vivo and in vitro by regulating mitochondrial fusion

1  
min22  
words

NEUROSCIENCE JOURNAL

**Summary:** <p>Publication date: 10 November 2025</p><p><b>Source:</b> Neuroscience, Volume 587</p><p>Author(s): Yue Zhang, Shuxiang Tian, Mingguang Niu, Han Yang, Lulu Liu, Yuyang Kang, Yanyan Yin</p>




Read full article:

[https://www.sciencedirect.com/science/article/pii/S030645222500973X?dgcid=rss\\_sd\\_all](https://www.sciencedirect.com/science/article/pii/S030645222500973X?dgcid=rss_sd_all)

## C9orf72 related poly-Glycine-Alanine promotes tau phosphorylation and cell death via ERK1/2 interaction in cellular models

 1  
min

 24  
words

NEUROSCIENCE JOURNAL

**Summary:** <p>Publication date: 10 November 2025</p><p><b>Source:</b> Neuroscience, Volume 587</p><p>Author(s): Jiahan Zhuang, Zixuan Zhang, Hongfu Jin, Ji Qi, Yuanyuan Chen, Lin Ding, Chenglai Fu, Weiwei Cheng</p>




Read full article:

[https://www.sciencedirect.com/science/article/pii/S0306452225009832?dgcid=rss\\_sd\\_all](https://www.sciencedirect.com/science/article/pii/S0306452225009832?dgcid=rss_sd_all)

## Show HN: An open source access logs analytics script to block bot attacks

 2025-10-14  1  
min

 2  
words

HACKER NEWS

**Summary:** <a href="https://news.ycombinator.com/item?id=45583667">Comments</a>



Read full article:

<https://github.com/tempesta-tech/webshield>



## Preparing for AI's economic impact: exploring policy responses



grantpitt



2025-10-14



1

min



13

words

HACKER NEWS

**Summary:**

Article URL: <https://www.anthropic.com/research/economic-policy-responses>

Comments URL: <https://news.ycombinator.com/item?id=45583574>

Points: 5

 ...



Read full article:

<https://www.anthropic.com/research/economic-policy-responses>

## Show HN: An open source access logs analytics script to block bot attacks



krizhanovsky



2025-10-14



1

min



386

words

HACKER NEWS

**Summary:**

This is a small PoC Python project for web server access logs analyzing to classify and dynamically block bad bots, such as L7 (application-level) DDoS bots, web scrappers and so on.

We'll be happy to gather initial feedback on usability and features, especially from people having good or bad ex...




Read full article:

<https://github.com/tempesta-tech/webshield>

## Assessment of elephant claustrum by combined histological analysis and high-resolution micro-CT

 1  
min

 29  
words

NEUROSCIENCE JOURNAL

**Summary:**

Publication date: 10 November 2025

Source:

Neuroscience, Volume 587


Author(s): Chao Fang, Anne Schnurpfeil, Lennart Eigen, Olivia Heise, Tabea Pottek, Johannes Alkofer, Thomas Hildebrandt, Tim Salditt, Robert K. Naumann, Michael Brecht

 Read full article:

[https://www.sciencedirect.com/science/article/pii/S0306452225009741?dgcid=rss\\_sd\\_all](https://www.sciencedirect.com/science/article/pii/S0306452225009741?dgcid=rss_sd_all)

## Effect of *Origanum majorana* tea on oxidative stress biomarkers in Parkinson's disease: a randomized placebo-controlled pilot study

 1  
min

 24  
words

NEUROSCIENCE JOURNAL


**Summary:**

Publication date: 10 November 2025

Source:

Neuroscience, Volume 587


Author(s): Chbili Chahra, Mrad Sawssen, Hassine Anis, Naija Salma, Nouria Manel, Ben Amor Sana, Ben Fredj Maha

 Read full article:

[https://www.sciencedirect.com/science/article/pii/S0306452225009777?dgcid=rss\\_sd\\_all](https://www.sciencedirect.com/science/article/pii/S0306452225009777?dgcid=rss_sd_all)


## The Smarce1 subunit of the BAF complex performs distinct, stage-specific functions during zebrafish retinal development

 1  
min

 17  
words


NEUROSCIENCE JOURNAL


**Summary:** <p>Publication date: 10 November 2025</p><p><b>Source:</b></p>Neuroscience, Volume 587</p><p>Author(s): Laura Ramírez, Denhí Schnabel, Flavio R. Zolessi, Hilda Lomelí</p>

 Read full article:


[https://www.sciencedirect.com/science/article/pii/S0306452225009753?dgcid=rss\\_sd\\_all](https://www.sciencedirect.com/science/article/pii/S0306452225009753?dgcid=rss_sd_all)

## Error-Related Memory Biases Are Specific to Social Stimuli for Socially Anxious Individuals

 Hosseini, K., Mattfeld, A. T., Pettit, J. W., Buzzell, G. A.


 2025-10-14

 1  
min

 150  
words

BIORXIV NEUROSCIENCE

**Summary:** Social anxiety (SA) is associated with enhanced error monitoring, yet underlying mechanisms remain unclear. Consistent with cognitive models of SA, we propose that stronger error monitoring contributes to SA by strengthening memory encoding of errors (including relevant social cues), negatively bias...

 Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.13.682081v1?rss=1>

## Kappa opioid receptor control of motivated behavior revisited

 2025-10-13  1 min  0 words




NATURE NEUROSCIENCE SUBJECTS



Read full article:

<https://www.nature.com/articles/s41386-025-02226-9>

## Dopamine dynamics during stimulus-reward learning in mice can be explained by performance rather than learning

 2025-10-13  1 min  0 words

NATURE NEUROSCIENCE SUBJECTS



Read full article:

<https://www.nature.com/articles/s41467-025-64132-4>

## Integrated single-cell multiomic profiling of caudate nucleus suggests key mechanisms in alcohol use disorder

 2025-10-13  1 min  0 words




NATURE NEUROSCIENCE SUBJECTS



Read full article:

<https://www.nature.com/articles/s41467-025-64136-0>

## Structural and diffusion imaging in olfactory-related brain regions in Parkinson's disease: predictors of clinical progression




 2025-10-13  1 min  0 words

NATURE NEUROSCIENCE SUBJECTS

 Read full article:

<https://www.nature.com/articles/s41598-025-19551-0>

## Color vision and luminance discrimination throughout the life span



 2025-10-13  1 min  0 words

NATURE NEUROSCIENCE SUBJECTS

 Read full article:

<https://www.nature.com/articles/s41598-025-19430-8>

## SmolBSD – build your own minimal BSD system

 2025-10-14  1 min  2 words



HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45582758)

 Read full article:

<https://smolbsd.org>

## SmolBSD – build your own minimal BSD system

 birdculture  2025-10-14  1 min  13 words

HACKER NEWS


**Summary:**

Article URL: <https://smolbsd.org>





Comments URL: <https://news.ycombinator.com/item?id=45582758>

Points: 30

# Comments: 2

 Read full article:  
<https://smolbsd.org>

## Leveraging neuroinformatics to understand cognitive phenotypes in elite athletes through systems neuroscience

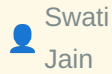
 Qi Yu  2025-08-19  1 min  152 words

FRONTIERS NEUROINFORMATICS

**Summary:** Introduction Understanding the cognitive phenotypes of elite athletes offers a unique perspective on the intricate interplay between neurological traits and high-performance behaviors. This study aligns with advancing neuroinformatics by proposing a novel framework designed to capture and analyze the...

 Read full article:  
<https://www.frontiersin.org/articles/10.3389/fninf.2025.1557879>

## Improving EEG classification of alcoholic and control subjects using DWT-CNN-BiGRU with various noise filtering techniques



Swati  
Jain



2025-08-19



1  
min



188  
words

FRONTIERS NEUROINFORMATICS

**Summary:** Electroencephalogram (EEG) signal analysis plays a vital role in diagnosing and monitoring alcoholism, where accurate classification of individuals into alcoholic and control groups is essential. However, the inherent noise and complexity of EEG signals pose significant challenges. This study invest...



Read full article:

<https://www.frontiersin.org/articles/10.3389/fninf.2025.1618050>

## Large language models can extract metadata for annotation of human neuroimaging publications



Jessica A.  
Turner



2025-08-20



1  
min



171  
words

FRONTIERS NEUROINFORMATICS

**Summary:** We show that recent (mid-to-late 2024) commercial large language models (LLMs) are capable of good quality metadata extraction and annotation with very little work on the part of investigators for several exemplar real-world annotation tasks in the neuroimaging literature. We investigated the GPT-4o...



Read full article:

<https://www.frontiersin.org/articles/10.3389/fninf.2025.1609077>

## A correlation-based tool for quantifying membrane periodic skeleton associated periodicity



Hanne B.  
Rasmussen



2025-08-22



1  
min



156  
words

FRONTIERS NEUROINFORMATICS

**Summary:** IntroductionThe advent of super-resolution microscopy revealed the membrane-associated periodic skeleton (MPS), a specialized neuronal cytoskeletal structure composed of actin rings spaced 190 nm apart by two spectrin dimers. While numerous ion channels, cell adhesion molecules, and signaling protei...



Read full article:

<https://www.frontiersin.org/articles/10.3389/fninf.2025.1628538>

## AppLovin Nonconsensual Installs



2025-10-14



1  
min



2  
words

HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45584226)






Read full article:

<https://www.benedelman.org/applovin-nonconsensual-installs/>



## AppLovin Nonconsensual Installs

 2025-10-14  1 min  2 words





HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45584226)

 Read full article:

<https://www.benedelman.org/applovin-nonconsensual-installs/>

## U.S. Sanctions Cambodian Conglomerate, Citing Role in 'Pig-Butchering' Scams

 paulpauper  2025-10-14  1 min  13 words

HACKER NEWS

**Summary:**

Article URL: <https://www.wsj.com/business/u-s-sanctions-cambodian-conglomerate-citing-role-in-pig-butchering-scams-0cf2e0ff>

Comments URL: <https://news.ycomb...>

 Read full article:

<https://www.wsj.com/business/u-s-sanctions-cambodian-conglomerate-citing-role-in-pig-butchering-scams-0cf2e0ff>

## New-Vehicle Avg Price Hits Record High in Sep, Surges Past \$50k for First Time



rntn



2025-10-14

1  
min13  
words

HACKER NEWS

**Summary:**

Article URL: <https://www.coxautoinc.com/insights-hub/sept-2025-atp-report/>

Comments URL: <https://news.ycombinator.com/item?id=45584809>

Points: 7



Read full article:

<https://www.coxautoinc.com/insights-hub/sept-2025-atp-report/>

## Pragmatic representations of self- and others action in the monkey putamen



Rotunno, C., Reni, M., Ferroni, C. G., Ismaiel, E., Ballestrazzi, G., Borra, E., Maranesi, M., Bonini, L.



2025-10-14

1  
min156  
words

BIORXIV NEUROSCIENCE


**Summary:** Social coordination in primates relies on parieto-frontal networks encoding self- and others actions. These areas send convergent projections to the putamen, but its role in representing self- and others actions remains unknown. We recorded neuronal activity from anatomically characterized putamen r...



Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.13.682054v1?rss=1>


## Comparison of T1- and T2-weighted MRI contrasts of ex vivo ex situ brains fixed with solutions used in gross anatomy laboratories

 Frigon, E.-M., Perreault, V., Gerin-Lajoie, A., Sanches, L. G., Moqadam, R., Zeighami, Y., Boire, D., Dadar, M., Maranzano, J.

 2025-10-14  1 min  250 words

BIORXIV NEUROSCIENCE

**Summary:** Post-mortem magnetic resonance imaging (MRI) offers high resolution and histological correlation, so protocols have been developed by brain banks using hemispheres fixed by immersion in Neutral-buffered formalin (NBF), but they provide limited tissue samples. Conversely, anatomy laboratories could s...

 **Read full article:**

<https://www.biorxiv.org/content/10.1101/2025.10.13.682071v1?rss=1>

## Functional MRI signals as fast as 1Hz are coupled to brain states and predict spontaneous neural activity



Jacob, L. P. L., Bailes, S. M., Stringer, C., Polimeni, J. R., Lewis, L. D.



2025-10-14



1 min



205 words

BIORXIV NEUROSCIENCE

**Summary:** fMRI signals were traditionally seen as slow and sampled in the order of seconds, but recent technological advances have enabled much faster sampling rates. We hypothesized that high-frequency fMRI signals can capture spontaneous neural activity that index brain states. Using fast fMRI (TR=378ms) an...



Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.13.681720v1?rss=1>

## HIF1 $\alpha$ -dependent induction of the T-Type calcium channel CaV3.2 mediates hypoxia-induced neuronal hyperexcitability

Troesch, A. R., Tsortouktzidis, D., Ammer-Pickhardt, F., Aichholzer, M., Rauch, P.-R., Rossmann, T., Stroh-Holly, N., Alti, B., Gruber, A., Helbok, R., Haubold, J., Thome, C., Engelhardt, M., von Oertzen, T. J., Schoch, S., Becker, A., van Loo, K. M. J.



2025-10-14



1 min



234 words

BIORXIV NEUROSCIENCE




**Summary:** Post-stroke epilepsy (PSE) is a major cause of acquired epilepsy in adults, yet the molecular mechanisms linking post-ischemic hypoxia to neuronal hyperexcitability remain poorly understood. The transcription factor hypoxia-inducible factor 1 (HIF1) is a central mediator of the cellular response to ...



Read full article:

<https://www.biorxiv.org/content/10.1101/2025.10.13.682038v1?rss=1>

## Surveillance Secrets

 2025-10-14  1 min  2 words

HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45584498)

 Read full article:

<https://www.lighthousereports.com/investigation/surveillance-secrets/>

## Half of America's Voting Machines Are Now Owned by a MAGA Oligarch


 mdhb  2025-10-14  1 min  13 words

HACKER NEWS

**Summary:**





Article URL: <https://dissentinbloom.substack.com/p/half-of-americas-voting-machines>

Comments URL: <https://news.ycombinator.com/item?id=45584295>

 Read full article:

<https://dissentinbloom.substack.com/p/half-of-americas-voting-machines>

## Surveillance Secrets

 \_tk\_ 
  2025-10-14 
  1 min 
  13 words 
 [HACKER NEWS](#)

**Summary:**





Article URL: <https://www.lighthousereports.com/investigation/surveillance-secrets/>

Comments URL: <https://news.ycombinator.com/item?id=45584498>

...

 **Read full article:**  
<https://www.lighthousereports.com/investigation/surveillance-secrets/>



## Dynamic electrocortical states and paradoxical complexity during desflurane anesthesia

 Li, D., Hudetz, A. G. 
  2025-10-14 
  1 min 
  311 words 
 [BIORXIV NEUROSCIENCE](#)

**Summary:** Background: How general anesthesia alters the dynamics of electrocortical activity is crucial to understand the neural mechanisms of unconsciousness. Local cortical activity undergoes spontaneous transitions at constant anesthetic concentration. The spatial organization and temporal dynamics of stat...


 **Read full article:**  
<https://www.biorxiv.org/content/10.1101/2025.10.13.682019v1?rss=1>

## Show HN: Wispbit – Keep codebase standards alive



 2025-10-14  1 min  2 words

HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45584017)

 Read full article:  
<https://wispbit.com>

## The Day My Smart Vacuum Turned Against Me



 2025-10-07  1 min  2 words

HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45503560)

 Read full article:  
<https://codetiger.github.io/blog/the-day-my-smart-vacuum-turned-against-me/>

## How to Turn Liquid Glass into a Solid Interface – TidBITS

 2025-10-14  1 min  2 words




HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45583787)

 Read full article:

<https://tidbits.com/2025/10/09/how-to-turn-liquid-glass-into-a-solid-interface/>

## How to Turn Liquid Glass into a Solid Interface – TidBITS


 tambourine\_man  2025-10-14  1 min  13 words

HACKER NEWS

**Summary:**

Article URL: <https://tidbits.com/2025/10/09/how-to-turn-liquid-glass-into-a-solid-interface/>





Comments URL: <https://news.ycombinator.com/item?id=45583787>

 Read full article:

<https://tidbits.com/2025/10/09/how-to-turn-liquid-glass-into-a-solid-interface/>




## Show HN: Wispbit – Keep codebase standards alive




 dearilos  2025-10-14  1 min  324 words

HACKER NEWS

**Summary:** <p>Hey HN! Ilya and Nikita here. We're building wispbit (<a href="https://wispbit.com" rel="nofollow">https://wispbit.com</a>) - a tool that helps keep codebase standards alive.<p>With the help of AI coding tools, engineers are writing more code than ever. Code output has increased, but the tooling ...


 Read full article:  
<https://wispbit.com>

## Effect of mahjong, a Chinese tiled-based game, combined with upper limb robot training on upper limb function and rehabilitation participation in Chinese stroke patients: a clinical trial protocol


 Yonghong Yang  2025-10-10  1 min  73 words


FNIRS

**Summary:** INTRODUCTION: Stroke is the second leading cause of death and disability creating a huge economic burden annually. Robot-assisted training (RT) is a promising therapy in stroke rehabilitation, but for the elderly, traditional 'reaching objects'" tasks do not seem to create sufficient motivation, an ...


 Read full article:  
[https://pubmed.ncbi.nlm.nih.gov/41073118/?utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251014153748&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41073118/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251014153748&v=2.18.0.post9+e462414)

## Effect of Intelligence Quotient Discrepancy on Attention and Executive Function in Children with Attention Deficit Hyperactivity Disorder: An fNIRS Study

 Xiao-Dan  
Yu

 17 2025-10-11

 1  
min

 70  
words

**fNIRS**

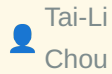
**Summary:** Intelligence quotient discrepancy (IQD) is associated with neurodevelopmental disorders, but its impact on attention and executive function (EF) deficits in children with attention deficit hyperactivity disorder (ADHD) is unknown. This study aimed to examine the effect of IQD by functional near-infra...

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41076036/?](https://pubmed.ncbi.nlm.nih.gov/41076036/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251014153748&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251014153748&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41076036/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251014153748&v=2.18.0.post9+e462414)

## Developmental changes in phonological awareness in Chinese-English bilingual children: An fNIRS longitudinal study



Tai-Li  
Chou



2025-10-11



1  
min



70  
words

**FNIRS**

**Summary:** Learning to read triggers a cascade of changes in children's minds and brains, changes that lead to the formation of the "reading brain". Importantly, the developmental trajectory of these changes differs across languages. The development of phonological literacy skills comes first for learners of a...



**Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41076038/?](https://pubmed.ncbi.nlm.nih.gov/41076038/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251014153748&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251014153748&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41076038/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251014153748&v=2.18.0.post9+e462414)

## Sensitivity Analysis of the Balloon Model Parameters in Functional Near-Infrared Spectroscopy Simulation



Murad  
Althobaiti



2025-10-11



1  
min



43  
words

**FNIRS**

**Summary:** CONCLUSIONS: The fNIRS hemodynamic response is highly sensitive to the Balloon model's  $\alpha$  and  $\tau$  parameters. These findings highlight the importance of accounting for physiological variability in fNIRS analysis and provide a robust framework for generating synthetic data to test signal processing algo...





**Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41076093/?](https://pubmed.ncbi.nlm.nih.gov/41076093/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251014153748&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251014153748&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41076093/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251014153748&v=2.18.0.post9+e462414)

## Machine learning assessment of cognitive reserve using functional near-infrared spectroscopy in older adults with cognitive frailty

 Zheng  
Li

 2025-10-11

 1  
min

 59  
words

**FNIRS**


**Summary:** Cognitive reserve mitigates aging-related cognitive decline and frailty, yet current assessments lack neurobiological specificity. We aimed to develop a noninvasive, functional near infrared spectroscopy (fNIRS)-based machine learning model to classify cognitive reserve levels in older adults with c...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41076505/?](https://pubmed.ncbi.nlm.nih.gov/41076505/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251014153748&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251014153748&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41076505/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251014153748&v=2.18.0.post9+e462414)

## Exploring age and hemispheric differences in cortical plasticity after iTBS using fNIRS

 Melanie  
Burke

 2025-10-12

 1  
min

 67  
words

**FNIRS**


**Summary:** Non-invasive brain stimulation applied to the prefrontal cortex (PFC) has been shown to improve cognitive outcomes in older adults with cognitive impairments (Miller et al., 2023). However, the differential impact of left versus right dorsolateral prefrontal cortex (DLPFC) stimulation on prefrontal ...


 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41077115/?](https://pubmed.ncbi.nlm.nih.gov/41077115/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251014153748&v=2.18.0.post9+e462414)


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251014153748&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41077115/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251014153748&v=2.18.0.post9+e462414)

## Single video games improve cognitive functioning in college students: evidence from behavioral and fNIRS assessments

 Shen  
Wang

 17 2025-10-13

 1  
min

 43  
words

**FNIRS**


**Summary:** CONCLUSIONS: Cognitively engaging video games can effectively enhance the cognitive abilities of male college students. The underlying mechanism may be closely related to the promotion of prefrontal lobe activation by video games, which in turn improves reflective ability, processing speed, and deci...


 **Read full article:**

<https://pubmed.ncbi.nlm.nih.gov/41080773/?>


[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251014153748&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41080773/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251014153748&v=2.18.0.post9+e462414)

## Prefrontal activation in bipolar and unipolar depression patients in the letter fluency tasks and category fluency tasks: a functional near-infrared spectroscopy study

 Zhaohui  
Zhang

 17 2025-10-13

 1  
min

 46  
words

**FNIRS**


**Summary:** CONCLUSION: Our findings indicate that the LFT elicits more extensive prefrontal activation, with differential engagement of the VLPFC in BD compared to UD. These results suggest potential neuroimaging biomarkers for distinguishing between UD and BD, while also providing insights into the neural sub...



 **Read full article:**


<https://pubmed.ncbi.nlm.nih.gov/41080778/?>

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251014153748&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41080778/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251014153748&v=2.18.0.post9+e462414)

## Neural predictors of hidden, persistent psychological states at work

 Matthew D  
Lieberman

 2025-10-13  1  
min

 69  
words

FNIRS

**Summary:** Common workplace challenges such as feeling overwhelmed, burned out, or disengaged often remain hidden due to fear of judgment or social norms, contributing to rising mental health crises and organizational dysfunction. This study presents a brain-based framework for predicting these hidden and pers...



 **Read full article:**


[https://pubmed.ncbi.nlm.nih.gov/41082670/?](https://pubmed.ncbi.nlm.nih.gov/41082670/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251014153748&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251014153748&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41082670/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251014153748&v=2.18.0.post9+e462414)

## Dose-Dependent Enhancement of Coordination through Multibrain Transcranial Stimulation: A fNIRS Hyperscanning Study

 Shengjun  
Wu

 2025-10-13  1  
min

 67  
words

FNIRS




**Summary:** Coordination serves as a fundamental driving force in the evolution of human society, and transcranial electrical stimulation (tES) is increasingly recognized for its ability to modulate human coordination. However, the neural mechanisms underlying coordination and whether tES positively influences ...

 **Read full article:**

[https://pubmed.ncbi.nlm.nih.gov/41083052/?](https://pubmed.ncbi.nlm.nih.gov/41083052/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251014153748&v=2.18.0.post9+e462414)

[utm\\_source=BucketBot&utm\\_medium=rss&utm\\_campaign=None&utm\\_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251014153748&v=2.18.0.post9+e462414](https://pubmed.ncbi.nlm.nih.gov/41083052/?utm_source=BucketBot&utm_medium=rss&utm_campaign=None&utm_content=1JKSd2KF3MGnV7oFVD2g6PNu7rHRFDsLyCNjKkkf4KHBUA3c8P&fc=None&ff=20251014153748&v=2.18.0.post9+e462414)

## Why your boss isn't worried about AI – "can't you just turn it off?"

 2025-10-14  1 min  2 words

HACKER NEWS

**Summary:** [Comments](https://news.ycombinator.com/item?id=45583180)

 Read full article:  
<https://boydkane.com/essays/boss>

## How AI hears accents: An audible visualization of accent clusters

 ilyausorov  2025-10-14  1 min  13 words

HACKER NEWS


**Summary:**

Article URL: <https://accent-explorer.boldvoice.com/>





Comments URL: <https://news.ycombinator.com/item?id=45581735>

Points: 23

# Comments: 7

 Read full article:  
<https://accent-explorer.boldvoice.com/>

## Why your boss isn't worried about AI – "can't you just turn it off?"

 beyarkay  2025-10-14  1 min  13 words

HACKER NEWS

**Summary:**

Article URL: <https://boydkane.com/essays/boss>

Comments URL: <https://news.ycombinator.com/item?id=45583180>

Points: 9

# Comments: 0

 Read full article:  
<https://boydkane.com/essays/boss>

## Intel Announces Inference-Optimized Xe3P Graphics Card with 160GB VRAM

 wrigby  2025-10-14  1 min  13 words

HACKER NEWS

**Summary:**

Article URL: <https://www.phoronix.com/review/intel-crescent-island>

Comments URL: <https://news.ycombinator.com/item?id=45583243>





Points: 15

# Comments...

 Read full article:  
<https://www.phoronix.com/review/intel-crescent-island>



## What do Americans die from vs. what the news report on

 alphabetatango  2025-10-14  1 min  13 words

HACKER NEWS

**Summary:**

Article URL: <https://ourworldindata.org/does-the-news-reflect-what-we-die-from>




Comments URL: <https://news.ycombinator.com/item?id=45583336>

Poin...

 Read full article:

<https://ourworldindata.org/does-the-news-reflect-what-we-die-from>

## America Is Sliding Toward Illiteracy

 JumpCrisscross  2025-10-14  1 min  13 words

HACKER NEWS

**Summary:**

Article URL: <https://www.theatlantic.com/ideas/archive/2025/10/education-decline-low-expectations/684526/>



Comments URL: <https://news.ycombinator.com/item?id=45583730>

https://...

 Read full article:

<https://www.theatlantic.com/ideas/archive/2025/10/education-decline-low-expectations/684526/>

## Front Cover

 2025-01-28  1 min  1 words

REVIEWS BIOMEDICAL ENGINEERING



Read full article:

<http://ieeexplore.ieee.org/document/10856260>



Bucket Newsletter

Generated automatically from 40 RSS feeds

Powered by GitHub Actions • Updated every 30 minutes

Visit: [yuckyman.github.io/bucket](https://yuckyman.github.io/bucket)