

Published Paper List

Jianting CAO

更新日：2021/10/25

2021

Journal Articles

- (308) Wenping Luo, Jianting Cao, Dongying Ju, and Kousuke Ishikawa: “Experimental validation of intelligent recognition of eye movements in the application of autonomous vehicle driving.” *International Journal of Biomedical Soft Computing and Human Sciences (IJBSCHS)* (Under review)
- (307) Xusheng Li, Dongying Ju, Jianting Cao, Sirui Wang, Yong Chen, Fangbo He and Hui Li: “Effect of Transformation Plasticity on Gear Distortion and Residual Stresses in Carburizing Quenching Simulation.” (In press)
- (306) Wenping Luo, Jianting Cao, Kousuke Ishikawa and Dongying Ju: “A Human-Computer Control System Based on Intelligent Recognition of Eye Movements and Its Application in Wheelchair Driving.” *Multimodal Technol. Interact.* 2021, 5(9), 50. <https://doi.org/10.3390/mti5090050>
- (305) Mo Xia , Linfeng Sui, Xuyang Zhao, Toshihisa Tanaka, Jianting Cao: “Convolution Neural Network Recognition of Epileptic Foci Based on Composite Signal Processing of Electroencephalograph Data.” *Procedia Computer Science*, Vol. 192, pp. 688-696, 2021. <https://doi.org/10.1016/j.procs.2021.08.071>
- (304) Qipeng Chen and Jianting Cao: “Low Tensor-Train Rank with Total Variation for Magnetic Resonance Imaging Reconstruction.” *Science China Technological Sciences, Special issue: Tensor Methods in Machine Learning*, (2021). <https://doi.org/10.1007/s11431-020-1851-5>
- (303) Linfeng Sui, Xuyang Zhao, Qibin Zhao, Toshihisa Tanaka and Jianting Cao: “Hybrid Convolutional Neural Network for Localization of Epileptic Focus Based on iEEG.”, *Neural Plasticity*, vol. 2021, Article ID 6644365, 9 pages, 2021. <https://doi.org/10.1155/2021/6644365>
- (302) Li Zhu, Changle Zhou, Fabien Lotte, Junhua Li, Jianting Cao and Andrzej Cichocki: “Power spectrum and connectivity analysis for detecting human brain death.” *Biomedical Signal Processing and Control* (In press).

Conference Papers

- (301) Xuyang Zhao, Jordi Sole-Casals, Qibin Zhao, Jianting Cao and Toshihisa Tanaka: “Multi-feature Fusion for Epileptic Focus Localization Based on Tensor Representation.” *13th Asia Pacific Signal and Information Processing Association Annual Summit and Conference (APSIPA ASC)*, 2021. (In press)

Conference Papers (without review)

- (300) Rui Deng, Boning Li, and Jianting Cao: “機械学習に基づく睡眠段階の分類に関する研究” 埼玉工業大学, 第19回 若手研究フォーラム。(In press)

- (299) Pengju Zhang, and Jianting Cao: “DenseNet に基づいた COVID-19 CT 画像の自動識別” 埼玉工業大学, 第 19 回 若手研究フォーラム。(In press)
- (298) Mo Xia, Jianting Cao: “脳波の複合信号処理と畳み込みニューラルネットワークに基づく癲癇焦点チャンネル信号分類” 埼玉工業大学, 第 19 回 若手研究フォーラム,
- (297) Honghao Jia, Jianting Cao and Dong-Ying Ju: “バックプロパゲーションアルゴリズムに基づく真空浸炭プロセス予測の最適化” 埼玉工業大学, 第 19 回 若手研究フォーラム。(In press)
- (296) Yihong Wu, Boning Li and Jianting Cao: “実時間ロボット制御のための脳・コンピュータインタフェースシステム” 埼玉工業大学, 第 19 回 若手研究フォーラム。(In press)
- (295) Rong Su, and Jianting Cao: “ロバスト主成分分析に基づく画像復元のための新しいアルゴリズム” 埼玉工業大学, 第 19 回 若手研究フォーラム。(In press)
- (294) Yingbo Xu and Jianting Cao: “ノンローカルネットワークを用いた手まねの画像分類” 埼玉工業大学, 第 19 回 若手研究フォーラム。(In press)

2020

Journal Articles

- (293) Haijian Wang, Haiwei Wang, Takashi Kumazawa, Dongying Ju, and Jianting Cao: “Effect of casting speed on microstructure, corrosion behaviour and in vivo bone reaction of Mg-rare earth alloys.” *SCIENCE CHINA Technological Sciences* SCTS-2020-0689, June 2020 (In press).
- (292) Xuanyu Jin, Jiajia Tang, Xianghao Kong, Yong Peng, Jianting Cao, Qibin Zhao, Wanzeng Kong: “CTNN: A Convolutional Tensor-Train Neural Network For Multi-task Brainprint Recognition.” *IEEE Transactions on Neural Systems and Rehabilitation Engineering: a Publication of the IEEE Engineering in Medicine and Biology Society*, 2020, DOI: 10.1109/TNSRE.2020.3035786

Conference Papers

- (291) Xuyang Zhao, Jordi Solé-Casals, Binghua Li, Zihao Huang, Andong Wang, Jianting Cao, Toshihisa Tanaka and Qibin Zhao: “Classification of Epileptic iEEG signals by CNN and Data Augmentation”, *IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, 2020, DOI: 10.1109/ICASSP40776.2020.9052948
- (290) Xuyang Zhao, Linfeng Sui, Toshihisa Tanaka, Jianting Cao and Qibin Zhao: “Epileptic Focus Localization Based on iEEG Plot Images by Using Convolutional Neural Network”, *EPiC Series in Computing*, 2020, 70: 173-181., DOI: <https://doi.org/10.29007/9jmg>.

Conference Papers (without review)

- (289) Honghao Jia and Jianting Cao: “LDA トピックモデルと畳み込みニューラルネットワークに基づくトピックローラ,” 埼玉工業大学, 第 18 回 若手研究フォーラム, ISSN: 1880-392X, pp. 156-157, August 2020
- (288) Rong Su and Jianting Cao: “独立成分解析による信号分離,” 埼玉工業大学, 第 18 回 若手研究フォーラム, ISSN: 1880-392X, pp. 152-154, August 2020
- (287) Yihong Wu and Jianting Cao: “P300 Signal Classification by Machine Learning for BCI system,” 埼玉工業大学, 第 18 回 若手研究フォーラム, ISSN: 1880-392X, pp. 150-151, August 2020
- (286) Yingbo Xu and Jianting Cao: “深層学習に基づく表情認識システム,” 埼玉工業大学, 第 18

回 若手研究フォーラム, ISSN: 1880-392X, pp. 148-149, August 2020

- (285) Mo Xia, Linfeng Sui, Xuyang Zhao and Jianting Cao: “畳み込みニューラルネットワークを用いた連続ウェーブレット変換処理のてんかん脳波の分類,” 埼玉工業大学, 第 18 回 若手研究フォーラム, ISSN: 1880-392X, pp. 146-147, August 2020
- (284) Linfeng Sui, Xuyang Zhao and Jianting Cao: “脳波に基づいて混合畳み込みニューラルネットワークを用いた癲癇焦点推定,” 埼玉工業大学, 第 18 回 若手研究フォーラム, ISSN: 1880-392X, pp.80-81, August 2020
- (283) Haonan Du and Jianting Cao: “経験的モード分解に基づく患者の脳波エネルギー解析,” 埼玉工業大学, 第 18 回 若手研究フォーラム, ISSN: 1880-392X, pp.78-79, August 2020
- (282) Boning Li and Jianting Cao: “機械学習に基づいた話し中の脳波の識別に関する研究,” 埼玉工業大学, 第 18 回 若手研究フォーラム, ISSN: 1880-392X, pp.76-77, August 2020

2019

Journal Articles

- (281) Li Zhu, Gaochao Cui, Jianting Cao, Andrzej Cichocki, Jianhai Zhang, Changle Zhou: “A hybrid system for distinction of brain death and coma using diverse EEG features.” *Sensors*, Vol.19, No.6, pp.1342-1357, 2019, DOI: <https://doi.org/10.3390/s19061342>.
- (280) Cui Gaochao, Zhu Li, Gui Lihua, Zhao Qibin, Zhang Jianhai, Cao Jianting: “Multidimensional clinical data denosing via Bayesian CP factorization.” *Science China (Technological Sciences)*, Vol. 63, pp. 249-254, 2019, DOI: <https://doi.org/10.1007/s11431-018-9493-9>
- (279) Linfeng Sui, Xuyang Zhao, Jianting Cao and Qibin Zhao: “Localization of Epileptic Foci from iEEG via Mixed Convolutional Neural Network”, *International Journal of Latest Trends in Engineering and Technology (IJLTET)*, Vol. 14, pp. 008-013, 2019, DOI: <http://dx.doi.org/10.21172/1.144.03> https://www.ijltet.org/journal_details.php?id=951&j_id=4842
- (278) Xuyang Zhao, Lihua Gui, Jianting Cao and Qibin Zhao: “Epileptic Focus Localization Based on Entropy and Convolutional Neural Network,” *International Journal of Latest Trends in Engineering and Technology (IJLTET)*, Vol. 14, pp. 014-017, 2019, DOI: <http://dx.doi.org/10.21172/1.144.04> https://www.ijltet.org/journal_details.php?id=951&j_id=4843
- (277) Longhao Yuan, Chao Li, Jianting Cao and Qibin Zhao: “Rank Minimization on Tensor Ring: An Efficient Approach for Tensor Decomposition and Completion”, *Machine Learning*, ISSN 0885-6125, Vol.109, pp.603-622, 2019, DOI:<https://doi.org/10.1007/s10994-019-05846-7>
- (276) Longhao Yuan, Jianting Cao and Qibin Zhao: “Tensor Ring Decomposition for Visual Data Denoising via Tensor Random Projection”, *International Journal of Latest Trends in Engineering and Technology (IJLTET)*, Vol. 13, No. 2, 2019, DOI: <http://dx.doi.org/10.21172/1.132.19>. https://www.ijltet.org/journal_details.php?id=945&j_id=4791

Conference Papers

- (275) Boning Li, Xuyang Zhao, Qibin Zhao, Toshihisa Tanaka, and Jianting Cao: "A One-Dimensional Convolutional Neural Network Model for Automated Localization of Epileptic Foci," *2019 Asia-Pacific Signal and Information Processing Association Annual Summit and Conference (APSIPA ASC)*, Lanzhou, China, 2019, pp. 741-744,

DOI: 10.1109/APSIPAASC47483.2019.9023214

- (274) Yao Miao, Toshihisa Tanaka, Shintaro Ito, and Jianting Cao: “Seizure Detection of Epileptic EEG Based on Multiple Phase-Amplitude Coupling Methods,” *The 7th International Congress on Cognitive Neurodynamics (ICCN)*, September 2019, Alghero, Italy. (In press)
- (273) Linfeng Sui, Xuyang Zhao, Qibin Zhao, Toshihisa Tanaka and **Jianting Cao**: “Localization of Epileptic Foci by Using Convolutional Neural Network Based on iEEG”, *IFIP International Conference on Artificial Intelligence Applications and Innovations (AIAI2019)*, May 2019, Crete, Greece, pp. 331-339, DOI: https://doi.org/10.1007/978-3-030-19823-7_27.
- (272) Qipeng Chen, Longhao Yuan, Yao Miao, Qibin Zhao, Toshihisa Tanaka and **Jianting Cao**: “Quasi-Brain-Death EEG Diagnosis Based on Tensor Train Decomposition”, *International Symposium on Neural Networks (ISSN2019)*, July 2019, Moscow, Russia, pp. 501-511, DOI: https://doi.org/10.1007/978-3-030-22808-8_49
- (271) Longhao Yuan, Chao Li, **Jianting Cao**, Qibin Zhao: “Randomized Tensor Ring Decomposition and Its Application to Large-scale Data Reconstruction,” *2019 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, May 2019, Brighton, UK, DOI: <https://doi.org/10.1109/ICASSP.2019.8682197>
- (270) Longhao Yuan, Chao Li, Danilo Mandic, Jianting Cao and Qibin Zhao: “Tensor Ring Decomposition with Rank Minimization on Latent Space: An Efficient Approach for Tensor Completion,” *Proceedings of the Thirty-Third AAAI Conference on Artificial Intelligence (AAAI-2019)*, Vol. 33, pp. 9151-9158, January 2019, Hawaii, USA, DOI: <https://doi.org/10.1609/aaai.v33i01.33019151>.

Conference Papers (without review)

- (269) Linfeng Sui and Jianting Cao: “畳み込みニューラルネットワークを用いた BCI システムにおける脳波成分の分類,” *埼玉工業大学, 第 17 回 若手研究フォーラム*, ISSN: 1880-392X, August 2019
- (268) Mo Xia, Gaochao Cui, Linfeng Sui and Jianting Cao: “Comparison of Dialing Systems Based on SSVEP and P300,” *APSIPA BioSiPS Workshop*, August 2019, Manila, Philipine
- (267) Yihong Wu, Xuyang Zhao, Lihua Gui and Jianting Cao: “Quasi-Brain-Death EEG Classification using Machine Learning Technique,” *APSIPA BioSiPS Workshop*, August 2019, Manila, Philippine

2018

Journal Articles

- (266) Longhao Yuan, Jianting Cao, Lihua Gui, Qibin Zhao: “High-dimension Tensor Completion via Gradient-based Optimization Under Tensor-train Format.” *Signal Processing: Image Communication: Special Issue on Tensor Image Processing*, Springer, vol. 73, pp. 53-61, 2018, DOI: <https://doi.org/10.1016/j.image.2018.11.012>.
- (265) Lihua Gui, Xuyang Zhao, Qibin Zhao and Jianting Cao: “Non-local Image Denoising by Using Bayesian Low-rank Tensor Factorization on High-order Patches,” *International Journal of*

- Computer Science Issues*, Vol. 15, No.5, 2018, DOI: <https://doi.org/10.5281/zenodo.1467648>
- (264) Lihua Gui, Xuyang Zhao, Qibin Zhao and Jianting Cao: "Image and Video Completion by Using Bayesian Tensor Decomposition," *International Journal of Computer Science Issues*, Vol. 15, No.5, 2018, DOI: <https://doi.org/10.5281/zenodo.1467644>
- (263) Yao Miao and Jianting Cao: "Descriptive Statistical Analysis Based on Patients' EEG Energy in Coma and Quasi-brain-death State," *International Journal of Computers & Technology*, ISSN 2277-3061, Vol. 17, No. 1, pp. 7140-7145, March 2018, DOI: <https://doi.org/10.24297/ijct.v17i1.7171>.

Conference Papers

- (262) Longhao Yuan, Qibin Zhao, Jianting Cao: "High-Order Tensor Completion for Data Recovery via Sparse Tensor-Train Optimization," *2018 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, April 2018, Calgary, Canada, pp. 1258-1262, DOI: [10.1109/ICASSP.2018.8462592](https://doi.org/10.1109/ICASSP.2018.8462592).
- (261) Jianhai Zhang, Na Zhang, Jianting Cao, Yao Miao, Li Zhu, Wanzeng Kong: "Analysis of Deep Coma and Brain Death Based on Phase Synchronization with EEG," *the 14th IEEE International Conference on Signal Processing (ICSP)*, August 2018, Beijing, China, DOI: <https://doi.org/10.1109/ICSP.2018.8652349>.
- (260) Yao Miao, Jianting Cao: "Patients' EEG Analysis Based on Multi-indicator Dynamic Analysis Measure for Supporting Brain Death Determination," *International Symposium on Neural Networks*, Lecture Notes in Computer Science, Springer, Cham, Vol. 10878, pp. 824-833, 2018, DOI: https://doi.org/10.1007/978-3-319-92537-0_93.
- (259) Xingwei Cao, Xuyang Zhao and Qibin Zhao: "Tensorizing Generative Adversarial Nets," *International Conference on Consumer Electronics Asia (ICCE-Asia)*, Jeju, Korea, 2018, DOI: [10.1109/ICCE-ASIA.2018.8552122](https://doi.org/10.1109/ICCE-ASIA.2018.8552122).
- (258) Xuyang Zhao, Gaochao Cui, Longhao Yuan and Jianting Cao: "A Hybrid Brain Computer Interface Based on Audiovisual Stimuli P300," *International Conference on Consumer Electronics Asia (ICCE-Asia)*, Jeju, Korea, 2018, DOI: <https://doi.org/10.1109/ICCE-ASIA.2018.8552155>.
- (257) Xuyang Zhao, Qibin Zhao, Toshihisa Tanaka, Jianting Cao, Wanzeng Kong, Hidenori Sugano and Noboru Yoshida: "Detection of Epileptic Foci Based on Interictal iEEG by Using Convolutional Neural Network," *The 23rd International Conference on Digital Signal Processing (DSP)*, Shanghai, China, 2018, DOI: [http://doi.org/10.1109/ICDSP.2018.8631885](https://doi.org/10.1109/ICDSP.2018.8631885)
- (256) Longhao Yuan, Jianting Cao, Xuyang Zhao, Qiang Wu, Qibin Zhao: "Higher-dimension Tensor Completion via Low-rank Tensor Ring Decomposition," *Asia-Pacific Signal and Information Processing Association Annual Summit and Conference (APSIPA ASC)*, November 2018, Hawaii, USA, DOI: <https://doi.org/10.23919/APSIPA.2018.8659708>
- (255) Xuyang Zhao, Toshihisa Tanaka, Wanzeng Kong, Qibin Zhao, Jianting Cao, Hidenori Sugano and Yoshida, Noboru: "Epileptic Focus Localization Based on iEEG by Using Positive Unlabeled (PU) Learning," *Asia-Pacific Signal and Information Processing Association Annual Summit and Conference (APSIPA ASC)*, November 2018, Hawaii, USA, DOI: [10.23919/APSIPA.2018.8659747](https://doi.org/10.23919/APSIPA.2018.8659747)

Journal Articles

- (254) Yao Miao, Dongsheng Wang, Gaochao Cui, Li Zhu and Jianting Cao: "Analyzing patients' EEG energy for brain death determination based on Dynamic 2T-EMD," *International Journal of Computers & Technology*, ISSN 2277-3061, Vol. 16, No. 1, pp. 7573-7580, March 2017, DOI: [10.24297/ijct.v16i1.5934](https://doi.org/10.24297/ijct.v16i1.5934).

Conference Papers (Reviewed)

- (253) Gaochao Cui, Li Zhu, Qibin Zhao, Jianting Cao and Andrzej Cichocki: "A graph theory analysis on distinguishing EEG-based brain death and coma," *the 24th International Conference on Neural Information Processing*, Lecture Notes in Computer Science, Springer, Vol.10637, pp. 589-595, Guangzhou, China, DOI: 10.1007/978-3-319-70093-9_62, Nov. 2017.
- (252) Longhao Yuan, Qibin Zhao and Jianting Cao: "Completion of High Order Tensor Data with Missing Entries via Tensor-train Decomposition," *the 24th International Conference on Neural Information Processing*, Lecture Notes in Computer Science, Springer, pp. 222-229, Guangzhou, China, DOI: 10.1007/978-3-319-70087-8_24, November 2017.
- (251) L. Gui, Q. Zhao, and J. Cao: "Brain Image completion by bayesian tensor decomposition," *International Conference on Digital Signal Processing*, London, England, August, 2017.
- (250) Qingyao Ni, Jianting Cao: "A Real-time Mobile Phone Dialing System using OpenBCI Device," *The 8th International IEEE EMBS Conference On Neural Engineering*, Shanghai, China, May 2017.
- (249) Longhao Yuan and Jianting Cao: "Patients' EEG Data Analysis via Spectrogram Image with a Convolution Neural Network," *International Conference on Intelligent Decision Technologies*, Springer, Cham, pp. 13-21, Vilamoura, Portugal, DOI: 10.1007/978-3-319-59421-7_2, May 2017
- (248) Yao Miao and Jianting Cao: "Comparison of EMD, MEMD and 2T-EMD by analyzing standard artificial signals and EEG," *2017 International Joint Conference on Neural Networks*, IEEE press, pp. 1367-1371, Anchorage, AK, USA, DOI: [10.1109/IJCNN.2017.7966012](https://doi.org/10.1109/IJCNN.2017.7966012), May 2017.

Conference Papers (without review)

- (247) Xuyang Zhao, Gaochao Cui, Longhao Yuan and Jianting Cao: "A Hybrid Brain Computer Interface Based on Audiovisual Stimuli P300," *2017 International Workshop on Neurodynamics and Its Applications*, Nagano, Japan, September 2017.
- (246) Longhao Yuan, Qibin Zhao and Jianting Cao: "Color Image Recovery via Tensor Completion: Tensor Train Weighted Optimization," *2017 International Workshop on Neurodynamics and Its Applications*, Nagano, Japan, September 2017.
- (245) Lihua Gui, Qibin Zhao and Jianting Cao: "Brain Image Completion by Bayesian Tensor Decomposition," *2017 International Workshop on Neurodynamics and Its Applications*, Nagano, Japan, September 2017.
- (244) Yao Miao, and Jianting Cao: "EEG analysis based on energy and complexity for supporting Brain Death Determination," *2017 International Workshop on Neurodynamics and Its Applications*, Nagano, Japan, September 2017.
- (243) Gaochao Cui, Li Zhu, Qibin Zhao, Jianting Cao and Andrzej Cichocki: "A graph theory analysis on distinguishing EEG-based brain and coma," *2017 International Workshop on Neurodynamics and Its Applications*, Nagano, Japan, September 2017.

- (242) Qingyao Ni and Jianting Cao: “OpenBCI を利用したリアルタイムの携帯システムの試作,” 埼玉工業大学, 第 15 回 若手研究フォーラム, pp. 118-119, ISSN: 1880-392X, July 2017

2016

Journal Articles

- (241) Gaochao Cui, Li Zhu, Dongsheng Wang and Jianting Cao: “EEG analysis for differentiating between brain death and coma in humans,” *International Journal of Computer and Technology*, ISSN: 2277-3061, Vol. 15, No. 11, pp. 7189-7201, August 2016.
- (240) Gaochao Cui, Li Zhu, Dongsheng Wang and Jianting Cao: “An intelligent data processing method for residential load analysis,” *International Journal of Computer Science Issues*, ISSN: 1694-0784, Vol. 13, No. 4, pp. 32-40, July 2016.

Conference Papers (Reviewed)

- (239) L. Gui, Q. Zhao, and J. Cao: “Tensor denoising using Bayesian CP factorization,” *Proceeding of Sixth International Conference on Information Science and Technology*, pp. 49-54, Dalian, China, May 2016.
- (238) Lihua Gui, Gaochao Cui, Qibin Zhao, Dongsheng Wang, Andrzej Cichocki and Jianting Cao: “Video denoising using low rank tensor decomposition,” *Ninth International Conference on Machine Vision*, Proceedings of the SPIE, pp. 103410V-103410V-5, Nice, France, November 2016.
- (237) Dongsheng Wang, Toshiaki Kobayashi, Gaochao Cui, Daishi Watabe and Jianting Cao: “Real-time mobile phone dialing system based on SSVEP,” *International Conference on Machine Vision*, Nice, France, November 2016.
- (236) Gaochao Cui, Qibin Zhao, Toshihisa Tanaka, Jianting Cao and Andrzej Cichocki: “Dynamic MEMD associated with approximate entropy in patients’ consciousness evaluation,” *Lecture Notes in Computer Science*, Springer, Vol. 9947, pp. 138-146, October 2016
- (235) Gaochao Cui, Lihua Gui, Qibin Zhao, Andrzej Cichocki and Jianting Cao: “Bayesian CP factorization of incomplete tensor for EEG signal application,” *IEEE World Congress on Computational Intelligence*, IEEE press, pp. 2170-2173, Vancouver, Canada, July 2016

Conference Papers (without review)

- (234) Dongsheng Wang, Gaochao Cui and Jianting Cao: “Online BCI phone system based on SSVEP technology,” 脳波デコーディング～信号処理と機械学習合同研究会, Nagano, Japan, August 2016.
- (233) Longhao Yuan and Jianting Cao: “Comparison of deep learning and shallow learning methods tested on handwritten digit recognition,” 脳波デコーディング～信号処理と機械学習合同研究会, Nagano, Japan, August 2016.
- (232) Yao Miao and Jianting Cao: “Analyzing the EEG energy of patients using EMD, MEMD, 2T-EMD and Dynamic 2T-EMD,” 脳波デコーディング～信号処理と機械学習合同研究会, Nagano, Japan, August 2016.
- (231) Gaochao Cui, Qibin Zhao, Jianting Cao and Andrzej Cichocki: “Hybrid-BCI system based on audio and visual event related potentials P300,” 脳波デコーディング～信号処理と機械学習合同研究会, Nagano, Japan, August 2016.

- (230) Lihua Gui, Gaochao Cui, Qibin Zhao and Jianting Cao: “Multidimensional brain signal analysis by low-rank tensor decomposition,” 脳波デコーディング～信号処理と機械学習合同研究会, Nagano, Japan, August 2016.
- (229) Longhao Yuan and Jianting Cao: “Comparison of deep learning and BP-NNs methods on handwritten digit recognition,” *APSIPA Workshop on the Frontier in Biomedical Signal Processing and Systems*, Tokyo, Japan, July 2016.
- (228) Yao Miao, Dongsheng Wang and Jianting Cao: “Comparison among EMD, MEMD and 2T-EMD and the introduction of Dynamic 2T-EMD,” *APSIPA Workshop on the Frontier in Biomedical Signal Processing and Systems*, Tokyo, Japan, July 2016.
- (227) Lihua Gui: “Image and MRI data denoising by low-rank tensor decomposition,” *APSIPA Workshop on the Frontier in Biomedical Signal Processing and Systems*, Tokyo, Japan, July 2016
- (226) 楊朔, 曹建庭: “患者 EEG データ解析システム,” 埼玉工業大学若手研究フォーラム, pp. 116-117, ISSN: 1880-392X, June 2016
- (225) Lihua Gui: “Multidimensional brain signal analysis by Bayesian CP decomposition,” 埼玉工業大学 若手研究フォーラム, pp. 164-165, ISSN: 1880-392X, July 2016
- (224) Dongsheng Wang, Gaochao Cui, Daishi Watabe and Jianting Cao: “Real-time BCI system used in mobile phone”, 埼玉工業大学若手研究フォーラム, pp. 112-113, ISSN: 1880-392X, June 2016
- (223) Longhao Yuan and Jianting Cao: “Comparison of deep learning and BP-NNs methods on handwritten digit recognition,” 埼玉工業大学若手研究フォーラム, pp. 180-181, ISSN: 1880-392X, June 2016
- (222) Yao Miao and Jianting Cao: “Comparison among EMD, MEMD and 2T-EMD based on standard artificial data and patients’ EEG data,” 埼玉工業大学若手研究フォーラム, pp. 178-179, ISSN: 1880-392X, June 2016

2015

Journal Articles

- (221) L. Tang, P. Peng, Q. Zhao, L. Gui, and L. Qing: “Tensor-based Gaussian regression using a probabilistic kernel with information divergence,” *International Journal of Simulation Systems, Science & Technology*, Vol. 16, No.5, pp. 131-137, 2015 (Referred).
- (220) Daishi Watabe, Takanari Minamidani, Wenbo Zhao, Hideyasu Sai and Jianting Cao: “Examining barrel distortion, super-resolution on single-view-based war biometrics rotated in depth,” *International Journal of Affective Engineering*, Vol. 14, No. 2, pp.103-110, ISSN: 2187-5413, DOI: 10.5057/ijae.14.103, February 2015.
- (219) Li Ni, Jianting Cao and Rubin Wang : “Dynamic multivariate multiscale entropy based analysis on brain death diagnosis”, *SCIENCE CHINA Technological Sciences*, 58(3): 425-433. doi:10.1007/s11431-014-5757-0, 2015.
- (218) Daishi Watabe, Takanari Minamidani, Wenbo Zhao, Hideyasu Sai and Jianting Cao: “Examining Barrel Distortion, Super-resolution on Single-view-based Ear Biometrics Rotated in Depth”, *International Journal of Affective Engineering*, Vol.14 No.2, pp.1-8, 2015.

Conference Papers (Reviewed)

- (217) Daren Zheng, Gaochao Cui, Toshihisa Tanaka and Jianting Cao: "Analysis of brain-death EEG data using 2T-EMD algorithm," *IEEE International Conference on Signal Image Technology & Internet Based Systems*, IEEE press, pp. 528-531, Bangkok, Thailand, ISBN: 978-1-4673-9721-6, DOI: 10.1109/SITIS.2015.84, November 2015
- (216) Daishi Watabe, Takanari Minamidani, Hideyasu Sai, Taiyo Maeda, Takaharu Yamazaki and Jianting Cao: "Estimating a shooting angle in ear recognition," *Lecture Notes in Computer Science*, Springer, Vol. 9339, pp. 559-570, ISBN: 978-3-319-24368-9, DOI: 10.1007/978-3-319-24369-6, October 2015
- (215) Dongsheng Wang, Toshiki Kobayashi, Gaochao Cui, Daishi Watabe and Jianting Cao: "BCI based mobile phone using SSVEP techniques," *Advances in Cognitive Neurodynamics (V)*, Springer, pp.379-382, DOI: 10.1007/978-981-10-0207-6_52, June 2015
- (214) Li Ni, Jianting Cao and Rubin Wang. "A Bayes classifier based on multiscale features in brain death diagnosis," *Advances in Cognitive Neurodynamics (V)*, Springer, pp.439-455. DOI: 10.1007/978-981-10-0207-6_60, June 2015

Conference Papers (without review)

- (213) Dongsheng Wang, Toshiki Kobayashi, Gaochao Cui, Daishi Watabe and Jianting Cao: "The experiments of BCI based mobile phone," *APSIPA Workshop on the Frontier in Biomedical Processing and Systems*, Shanghai, China, June 2015.
- (212) Daren Zheng, Toshihisa Tanaka and Jianting Cao: "Comparing 2T-EMD and MEMD in the estimation of accuracy and calculating speed," *APSIPA Workshop on the Frontier in Biomedical Signal Processing and Systems*, Shanghai, China, June 2015.
- (211) Daren Zheng, Toshihisa Tanaka and Jianting Cao: "Comparing 2T-EMD and MEMD in the calculating speed of test for quasi-brain-death EEG," *埼玉工業大学, 若手研究フォーラム*, ISSN: 1880-392X, pp. 64-65, July 2015
- (210) Dongsheng Wang, Toshiki Kobayashi, Gaochao Cui, Daishi Watabe and Jianting Cao: "SSVE に基づいた携帯電話オフラインシステム," *埼玉工業大学, 若手研究フォーラム*, ISSN: 1880-392X, pp. 62-63, July 2015
- (209) Jianting Cao: "Dynamic multivariate multiscale entropy based analysis on brain death diagnosis," *APSIPA Workshop on the Frontier in Biomedical Signal Processing and Systems*, Shanghai, China, June 2015.

2014

Journal Articles

- (208) Li Ni, Jianting Cao, and Rubin Wang "Brain death diagnosis based on adaptive multi-scale entropy analysis ", *Journal of Dynamics and Control*, Vol. 2014-1 pp.74-78, DOI: 10.6052/1672-6553-2013-086, March 2014.

- (207) 曹 建庭: "脳・コンピュータインターフェイス (BCI)基礎とその応用 ", 電気学会研究発表会論文集, pp.3-4, March 2014.

Conference Papers (Reviewed)

- (206) Gaochao Cui, Qibin Zhao, Jianting Cao and Andrzej Cichocki: "Hybrid-BCI: Classification of auditory and visual related potentials ", in *Proceeding of Joint 7th International Conference on Soft Computing and Intelligent Systems and 15th International Symposium on Advanced Intelligent Systems*, DOI: 10.1109/SCIS-ISIS. 2014.7044768, pp. 297-300, Kitakyushu, Japan, December 2014.
- (205) Daishi Watabe Takanari Minamidani, Hideyasu Sai, and Jianting Cao: "Comparison of Ear Recognition Robustness of Single-View-Based Images Rotated in Depth", *2014 Fifth International Conference on Emerging Security Technologies (EST) Alcala de Henares, Spain*, 2014 ISBN: 978-1-4799-7007-0 pp: 19-23, Sept., 2014.
- (204) Gaochao Cui, Yunchao Yin, Toshihisa Tanaka and Jianting Cao: "EEG Energy Analysis for Evaluating Consciousness Level Using Dynamic MEMD", in *Proceeding of IEEE world congress on computational intelligence*, ISBN: 978-1-1484-5, pp. 3247-3250, Beijing, China, July 2014.

Conference Papers (without review)

- (203) Gaochao Cui, Dongsheng Wang, Qibin Zhao, Jianting Cao and Andrzej Cichocki: "Classification of event-related potentials P300 based on Hybrid-BCI system", 埼玉工業大学 若手研究フォーラム, pp. 130-131, 2014.

2013

Journal Articles

- (202) Li Ni, Jianting Cao, and Rubin Wang "Analyzing EEG of Quasi-Brain-Death Based on Dynamic Sample Entropy Measures", *Computational and Mathematical Methods in Medicine*, Volume Article ID 618743, 6 pages <http://dx.doi.org/10.1155/2013/618743> 2013

Conference Papers (Reviewed)

- (201) Yunchao Yin, Daren Zheng, Jianting Cao, Toshihisa Tanaka: "Dynamic Approximate Entropy with Band Filtering for Patient's EEG Consciousness Analysis", the *IEEE International Conference on Bioinformatics and Biomedicine*, Shanghai, China, ISBN: 978-4799-1309-1 (CD-ROM) Dec, 2013.
- (200) Gaochao Cui, Yunchao Yin, Qibin Zhao, Andrzej Cichocki and Jianting Cao: " Patients' consciousness analysis using Dynamic Approximate Entropy and MEMD method ", *Asia-Pacific Signal and Information Processing Association Annual Summit and Conference*, Kaohsiung, Taiwan, ISBN: 978-986-90006-0-4, (CD-ROM), October 2013.
- (199) Gaochao Cui and Jianting Cao: "P300 oddball task and classification based on Support Vector Machine for BCI system", *Applied Mechanics and Materials*, Vol. 397, pp. 2187-2190, Trans Tech Publications, Sep. 2013.

- (198) Jianting Cao, Daishi Watabe, Liqing Zhang: "An EEG Diagnosis System for Quasi Brain Death Based on Complexity and Energy Analyses". *Proceedings of the IEEE Engineering in Medicine and Biology 35th Annual Conference*. Osaka, Japan, pp.7132-7135, July 2013.
- (197) Hao Zhang, Ye Liu, Jianyi Liang, Jianting Cao, Liqing Zhang: "Gaussian Mixture Modeling in Stroke Patients' Rehabilitation EEG Data Analysis". *Proceedings of the 2013 IEEE Engineering in Medicine and Biology 35th Annual Conference*. Osaka, Japan, pp.2208-2211, July 2013.
- (196) Ye Liu, Mingfen Li, Hao Zhang, Junhua Li, Jie Jia, Yi Wu, Jianting Cao, Liqing Zhang: "Single-Trial Discrimination of EEG Signals for Stroke Patients: A General Multi-Way Analysis". *Proceedings of the 2013 IEEE Engineering in Medicine and Biology 35th Annual Conference*. Osaka, Japan, pp.2204-2207, July 2013.
- (195) Daishi Watabe, Takanari Minamidani, Wenbo Zhao, Hideyasu Sai, Jianting Cao: "Effect of barrel distortion and super-resolution for single-view-based ear biometrics rotated in depth". *Proceedings of the 2013 International Conference on Biometrics and Kansei Engineering*, Osaka, Japan, DOI 10.1109/ICBAKE.2013.49, pp.183-188, July 2013.
- (194) Li Ni, Jianting Cao and Rubin Wang. Time-dependent Approximate and Sample Entropy Measures for Brain death Dignosis. *The 4th International Conference on Cognitive Neurodynamics*, Sigtuna, Sweden, June 2013.
- (193) L. Ni, J. Cao and R. Wang, "Time-Dependent Multivariate Multiscale Entropy Based Analysis on Brain Consciousness Diagnosis," *Lecture Notes in Computer Science*, Vol. 7888, Springer Berlin Heidelberg, ISBN 978-3-642-38785-2, pp.75-82, May 2013
- (192) Jianting Cao: "Complexity and Energy Analysis Methods for the Real World Recored EEG Signals", *The first APSIPA Workshop on Frontier in Biomedical Signal Processing and Systems* (BioSiPS 2013), Mahidol University, Thailand, March 2013.

Conference Papers (without review)

- (191) Gaochao Cui, Qibin Zhao and Jianting Cao: "P300 classification based on Linear Discriminant Analysis for BCI system ", *埼玉工業大学 第11回若手研究フォーラム論文集*, pp.104-105, July 2013.

2012

Journal Articles

- (190) 曹 建庭 :“脳死判定ための弱脳活動成分解析と識別基準”, *映像情報メディア学会技術報告*, Vol. 36, No. 54, pp. 29-32, Dec 2012.
- (189) 諏訪 祥平, 曹 建庭: “聴覚P300とP100によるブレインコンピュータインタフェー (BCI) システム”, *映像情報メディア学会技術報告*, Vol. 36, No. 54, pp. 69-71, Dec 2012.
- (188) Ling Li, Yili Xia, Beth Jelfs, Jianting Cao and Danilo P. Mandic "Modelling of brain consciousness based on collaborative adaptive filters", *Neurocomputing*, vol.76, issue 1, pp. 36-43, ELSEVIER, Jan. 2012.

Conference Papers (Reviewed)

- (187) Yunchao Yin, Jianting Cao, and Toshihisa Tanaka: "EEG energy analysis based on MEMD with ICA pre-processing", *Proc. of Asia-Pacific Signal and Information Processing Association Annual Summit and Conference (APSIPA ASC 2012)*, Los Angeles, U.S.A., Dec. 2012.
- (186) Qibin Zhao, Liqing Zhang, Cao Jianting, and Andrzej Cichocki : "Higher-order PLS for Classification of ERPs with Application to BCIs", *Proc. of 2012 Asia-Pacific Signal and Information Processing Association Annual Summit and Conference (APSIPA ASC 2012)*, Los Angeles, U.S.A., Dec. 2012 (CDROM).
- (185) Yunchao Yin, Huili Zhu, Toshihisa Tanaka and Jianting Cao: "Analyzing the EEG energy of healthy human, comatose patient and brain death using multivariate empirical mode decomposition algorithm", *Proceedings of the IEEE International Conference on Signal Processing*, Beijiang, China, pp.148-151, Oct. 2012.
- (184) Shohei Suwa, Yunchao Yin, Gaochao Cui, Toshihisa Tanaka and Jianting Cao: "A design method of an auditory P300 with P100 brain computer interface system", *Proceedings of the IEEE International Conference on Signal Processing*, Beijiang, China, pp.152-156, Oct. 2012.
- (183) Li Ni, Jianting Cao, Rubin Wang: "Analyzing EEG of quasi-brain-death based on dynamic sample entropy measures". *Proceedings of the Fifth International Conference on Brain Inspired Cognitive Systems*, China, Shenyang, pp.1-10. July 2012.

Conference Papers (without review)

- (182) 諏訪 祥平, 曹 建庭: "聴覚 P300 反応によるブレインコンピュータインタフェース(BCI) システム", *埼玉工業大学 第十回若手研究フォーラム*, pp.58-59, July, 2012.
- (181) Yunchao Yin and Jianting Cao: "Patient's EEG data analysis using MEMD method ", *埼玉工業大学 第十回若手研究フォーラム*, pp.56-57, July 2012.

2011

Journal Articles

- (180) T.M. Rutkowski, T. Tanaka, A. Cichocki, D. Erickson, and J.Cao, D.P. Mandic "Interactive components extraction from fEEG and fNIRS for affective brain machine interfacing paradigms," *Computers in Human Behavior*, Vol.27, issue 5, pp.1512-1518, ELSEVIER, Sept. 2011.
- (179) Rubin Wang, Zhikang Zhang, Chi K. Tse, Jingyi Qu, Jianting Cao " Neural coding in networks of multi-populations of neural oscillators", *Mathematics and Computer in Simulation*, *MATCOM* -3563, 15 pages, ELSEVIER, Sept. 2011
- (178) Rubin Wang, Zhikang Zhang, Jingyi Qu and Jianting Cao, "Phase synchronization motion and neural coding in dynamic transmission of neural information", *IEEE Transactions on Neural Networks*, Vol.22, No.7, pp.1097-1106, July 2011.
- (177) Yohei Tomita, Yasue Mitsukura, Toshihisa Tanaka and Jianting Cao: "Detection of dozing with high temporal resolution using instantaneous EEG features", *Jouranl ofSignal Processing*, Vol. 15, No. 4, pp. 303-306, July 2011
- (176) Weigang Sun, Jianting Cao and Rubin Wang "Complex network approach for the brain death determination", *Chinese Physics Letters*, Vol.28, No. 6, pp.1-3, June 2011.

- (175) Gen Hori and Jianting Cao, "Selecting EEG components using time series analysis in brain death diagnosis", *Cognitive Neurodynamics*, Springer, Vol.5 No.2, pp.311-320, DOI 10.1007/s11571-010-9149-2, May 2011
- (174) Qiwei Shi, Juhong Yang, Jianting Cao, Toshihisa Tanaka, Rubin Wang and Huili Zhu, "EEG data analysis based on EMD for coma and quasi-brain-death patients", *Journal of Experimental & Theoretical Artificial Intelligence*, Taylor & Francis, Vol. 23, No.1, pp.97-110, March 2011.
- (173) K. Yang, J. Cao, R. Wang and H. Zhu "Analyzing EEG of quasi-brain-death based on dynamic approximate entropy measures", *Chinese Journal of Biomedical Engineering*, Vol.30, No.1, pp.91-97, Feb. 2011.

Conference Papers (Reviewed)

- (172) Gen Hori and Jianting Cao, "An application of translation error to brain death diagnosis", *Lecture Notes in Computer Science*, Vol.7062, pp.314-321, Springer, Nov. 2011.
- (171) Qibin Zhao, Akinari Onishi, Yu Zhang, Jianting Cao, Liqing Zhang, and Andrzej Cichocki: "A novel oddball paradigm for affective BCIs using emotional faces as stimuli", *Lecture Notes in Computer Science*, Vol.7062, pp.279-286, Springer, Nov. 2011.
- (170) Long Zhang, Cheng Zhang, Hiroshi Higashi, Jianting Cao and Toshihisa Tanaka: "Common Spatial Pattern Using Multivariate EMD for EEG Classification", *Proc. of 2011 Asia-Pacific Signal and Information Processing Association Annual Summit and Conference (APSIPA ASC 2011)*, Xian, China, Oct. 2011.
- (169) Yunchao Yin, Jianting Cao, Qiwei Shi, Danilo P. Mandic, Toshihisa Tanaka and Rubin Wang "Analyzing the EEG energy of quasi brain death using MEMD", *Proc. of 2011 Asia-Pacific Signal and Information Processing Association Annual Summit and Conference (APSIPA ASC 2011)*, Xian, China, Oct. 2011.
- (168) Mosabber Uddin Ahmed, Ling Li, Jianting Cao and Danilo P. Mandic: "Multivariate multiscale entropy for brain consciousness analysis". *Proceedings of the 2011 IEEE Engineering in Medicine and Biology 33th Annual Conference*. Boston, U.S.A., pp.810-813, Aug. 2011.
- (167) Wei Zhou, Gang Liu, Qiwei Shi, Shilei Cui, Yina Zhou, Huili Zhu, Rubin Wang, and Jianting Cao, "Blind Testing of Quasi Brain Deaths Based on Analysis of EEG Energy", *Lecture Notes in Artificial Intelligence*, Vol. 6840, pp. 514-520, Springer, Aug. 2011.
- (166) Yohei Tomita, Yasue Mitsukura, Toshihisa Tanaka and Jianting Cao, "Dimension reduction of RCE signal by PCA and LPP for estimation of the sleeping", *Lecture Notes in Computer Science*, Vol.6677, pp.306-312, Springer, June. 2011.
- (165) Anh Huy Phan, Andrzej Cichocki, Kiyotoshi Matsuoka and Jianting Cao, "Novel hierarchical ALS algorithm for nonnegative tensor factorization", *2011 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP2011)*, pp. 1984-1987, May 2011.
- (164) Yili Xia, Ling Li, Jianting Cao, M. Golz and Danilo P. Mandic, "A collaborative filtering approach for quasi-brain-death EEG analysis", *2011 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP2011)*, pp. 645-648, May 2011.
- (163) Yohei Tomita, Yasue Mitsukura, Toshihisa Tanaka, and Jianting Cao: "A doze detection with high temporal resolution using instantaneous EEG features", in *Proceedings of 2011 RISP International Workshop on Nonlinear Circuits and Signal Processing (NCSP'11)*, pp.443-446, TianJin, China, March 2011.

Journal Articles

- (162) Weigang Sun, Rubin Wang and Jianting Cao "Analyzing inner and outer synchronization between two coupled discrete-time network with time delays", *Cognitive Neurodynamics*, Vol.4, No.3, pp.225-231, Springer, June. 2010.
- (161) Xiaodan Zhang, Rubin Wang, Zhikang Zhang, Jingyi Qu, Jianting Cao, Xianfa Jiao: "Dynamic phase synchronization characteristics of variable high-order coupled neuronal oscillator population", *Neurocomputing*, Vol. 73, Issue 13-15, pp.2665-2670, ELSEVIER, Aug. 2010.

Conference Papers (Reviewed)

- (160) Qiwei Shi, Yunchao Yin, Shilei Cui, Yinan Zhou, Huili Zhu*, Jianting Cao and Rubin Wang, "Blind experiment based on dynamic approximate entropy measure for quasi-brain-death EEG", *IEEE International Symposium on Information Science and Engineering (ISISE 2010)*, pp. 240-243, Shanghai, China, Dec. 2010.
- (159) Jianpeng Zhang, Rubin Wang, Zhikang Zhang, and Jianting Cao "A Spatial Temporal Integration Model of Primary Visual Cortex Concerning Directional Selectivity", *Advances in Cognitive Neurodynamics, the Proceedings of the International Conference on Cognitive Neurodynamics 2009*, Springer, pp.479-486, Dec. 2010.
- (158) Wei Dong, Rubin Wang, Zhikang Zhang, and Jianting Cao "Discussion on Rhythmic Gait Movement Affected by Cerebral Cortex Signal", *Advances in Cognitive Neurodynamics, the Proceedings of the International Conference on Cognitive Neurodynamics 2009*. Springer, pp.459-466, Dec. 2010.
- (157) Weigang Sun, Rubin Wang, Weixiang Wang, Jianting Cao, Outer Synchronization of Coupled Discrete-time Networks with Time Delay, *Advances in Cognitive Neurodynamics, the Proceedings of the International Conference on Cognitive Neurodynamics 2009*, Springer, pp.327-332, Dec. 2010.
- (156) Jiong Wu, Rubin Wang, Zhikang Zhang, Jianting Cao Periodic Motion Control of Human Arm Movement Based on Cpg Model, *Advances in Cognitive Neurodynamics, the Proceedings of the International Conference on Cognitive Neurodynamics 2009*, Springer, pp.487-494, Dec.2010.
- (155) Chunjiang Fu, Rubin Wang, Jianting Cao "Re-optimization Contributes to the Adaption of External V_f Fiel", *Advances in Cognitive Neurodynamics, the Proceedings of the International Conference on Cognitive Neurodynamics 2009*, Springer, pp.467-472, Dec. 2010.
- (154) Xiaodan Zhang, Rubin Wang, Zhikang Zhang, Xianfa Jiao, Jianting Cao, Stochastic Evolution Model of Neuronal Oscillator Population under the Condition of the Variable Higher Order Coupling, *Advances in Cognitive Neurodynamics, the Proceedings of the International Conference on Cognitive Neurodynamics 2009*, Springer, pp.223-228, Dec. 2010.
- (153) Yan Liu, Rubin Wang, Zhikang Zhang, Xianfa Jiao, Jianting Cao "Determination of the Number Ratio Between Excitation Neurons and Inhibitory Neurons in Activities of Neural Networks", *Advances in Cognitive Neurodynamics, the Proceedings of the International Conference on Cognitive Neurodynamics 2009*, Springer, pp.235-242, Dec. 2010 .
- (152) Kun Yang, Qiwei Shi, Jianting Cao, and Rubin Wang, "Analyzing EEG of quasi brain death based on approximate entropy measure", *Advances in Cognitive Neurodynamics, the Proceedings of the International Conference on Cognitive Neurodynamics 2009*. Springer, pp.729-734, Dec. 2010.

- (151) Wei Zhou, Qiwei Shi, Shilei Cui, Jianting Cao, Yang Cao, Huili Zhu and Rubin Wang, “Blind testing based on ICA for quasi-brain-death EEG”, The 6th International Conference on Natural Computation (ICNC’10), pp.763-766, IEEE express, Aug, 2010.
- (150) Qiwei Shi, Wei Zhou, Jianting Cao, Danilo P. Mandic, Toshihisa Tanaka, Tomasz M. Rutkowski, and Rubin Wang, “An Auditory Oddball Based Brain-Computer Interface System Using Multivariate EMD”, Lecture Notes in Artificial Intelligence, Vol. 6216, pp. 140-148, Springer, Aug. 2010.
- (149) Yohei Tomita, Yasue Mitsukura, Toshihisa Tanaka and Jianting Cao "EEG frequency analysis for dozing detection system", 2010 IEEE World Congress on Computational Intelligence (IJCNN-2010), ISBN 978-1-4244-6917-8, pp.1715-1718, July 2010.
- (148) Qiwei Shi, Jianting Cao, Wei Zhou, Toshihisa Tanaka, and Rubin Wang, "Dynamic extension of approximate entropy measure for brain-death EEG", Lecture Notes in Computer Science, Vol.6064, pp.353-359, Springer, June. 2010.
- (147) Qiwei Shi, Wei Zhou, Jianting Cao Toshihisa Tanaka, and Rubin Wang "Brain-computer interface system using approximate entropy and EMD techniques”, Lecture Notes in Computer Science, Vol.6146, pp.204-212, Springer, June. 2010.

Conference Papers (without review)

- (146) Wei Zhou, Jianting Cao “ICA for Quasi-Brain-Death EEG preliminary examination in supporting clinical diagnosis”, 2010 年埼玉工業大学第 8 回若手フォーラム論文集, pp. 168-172, Jul. 2010.
- (145) 石 奇衛, 曹 建庭, “聴覚P300反応及び視覚誘発電位(SSVEP)に基づいた脳コンピュータインタフェース(BCI)システム”, 埼玉工業大学若手フォーラム2010第8回論文集, pp. 33-37, Jul. 2010.

2009

Journal Articles

- (144)
Juhong Yang, Yuki Saito, Jianting Cao, Toshihisa Tanaka and Tsunehiro Takeda:“Empirical mode decomposition method for MEG data analysis”,Journal of Circuit, Systems, and Computers, Vol. 18, No. 8, pp.1467–1480, Dec. 2009.

Conference Papers (Reviewed)

- (143) Yohei Tomita, Shin-ichi Ito, Yasue Mitsukura, Toshihisa Tanaka, Jianting Cao “The Extraction of Sleep Quality by using the multi-channel EEG Signal “,2009 Asia-Pacific Signal and Information Processing Association Annual Summit and Conference (APSIPA ASC 2009), pp.174-179, Sapporo, Japan, Oct. 2009.

- (142) Juhong Yang, Qiwei Shi, Jianting Cao and Tsunehiro Takeda, "Auditory evoked fields analysis using EMD and ICA", 2009 Asia-Pacific Signal and Information Processing Association Annual Summit and Conference (APSIPA ASC 2009), pp.165-169, Sapporo, Japan, Oct. 2009.
- (141) Yohei Tomita, Yasue Mitsukura, Toshihisa Tanaka, and Jianting Cao " Analysis of the EEG during the Sleeping by the Rhythmic Component Extraction", 18th IEEE International Symposium on Robot and Human Interactive Communication, pp.1054-1059, September, Toyama, Japan, 2009.
- (140) Qiwei Shi, Juhong Yang, Jianting Cao, Toshihisa Tanaka, Tomasz M. Rutkowski, Rubin Wang and Huili Zhu, "EMD based power spectral pattern analysis for quasi-brain-death EEG", Lecture Notes in Artificial Intelligence, 2009 International Conference on Intelligent Computing (ICIC 2009), Ulsan, South Korea, Vol.5755, pp.814-823 Sep. 2009.
- (139) T. M. Rutkowski, A. Cichocki, T. Tanaka, D.P. Mandic, J. Cao, A. L. Ralescu, "Multichannel spectral pattern separation - An EEG processing application," in Proceedings of the 2009 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP2009, (Taipei, Taiwan), pp. 373-376, IEEE, April 19-24, 2009.
- (138) Yohei Tomita, Shin-Ichi Ito, Yasue Mitsukura, Toshihisa Tanaka, Jianting Cao: "Rhythmic component extraction for sleeping electroencephalogram analysis'', in Proceedings of 2009 RISP International Workshop on Nonlinear Circuits and Signal Processing (NCSP'09), pp.443-446, March 2009.
- (137) Junko Murakami, Shin-Ichi Ito, Yasue Mitsukura, Jianting Cao, Minoru Fukumi, Taketoshi Suzuki: " Classification of the vision correction by the EEG'' , in Proceedings of 2009 RISP International Workshop on Nonlinear Circuits and Signal Processing (NCSP'09), pp. 435-438, March 2009.
- (136) T.M. Rutkowski, A. Cichocki, T. Tanaka, D. P. Mandic, and J. Cao, "Multichannel spectral pattern separation - a nonlinear approach to EEG signals from interferences separation in frequency domain," in Proceedings of 2009 International Workshop on Nonlinear Circuits and Signal Processing NCSP'09, (Honolulu HI, USA), pp. 439-442, Research Institute of Signal Processing Japan, RISP Japan, March 1-3, 2009.

Conference Papers (without review)

- (135) Qiwei Shi, Jianting Cao, and Toshihisa Tanaka: `` EMD technique for a motor imagery based BCI System", Proceedings of 24th Digital Signal Processing Symposium, pp.408-411, Kagoshima, Japan, Nov. 2009.
- (134) 杨琨, 宋哲, 曹建庭, 王如彬, "疑似脑死患者脑电信号的近似熵分析", 中国力学学会学术大会论文集, pp.130-138, 鄭州, 中国, Aug. 2009.
- (133) Jianting CAO, "Brain-death Determination Based On EEG Approach", 中国力学学会学术大会论文集, pp.1-4, 鄭州, 中国, Aug. 2009.
- (132) 富田 洋平 深井 寛修 満倉 靖恵 田中 聡久 曹 建庭 PCA と LPP を用いた睡眠脳波の律動成分の解析 電気学会 電子・情報・システム部門大会 pp.762-765, 2009
- (131) Qiwei Shi and Jianting Cao, "Brain-computer Interface System Based on Motor Imagery and EMD Technique", 埼玉工業大学若手フォーラム 2009 第 7 回论文集, pp. 195-198, Jul. 2009

2008

Journal Articles

- (130) Yohei Tomita, Shin-ichi Ito, Yasue Mitsukura, Naoko Koda, Jinting Cao, and Minoru Fukumi, "Objectively psychological evaluation using the EEG ", *Journal of Signal Processing*, Vol. 12, No.6, pp.465-472, Nov. 2008.
- (129) Chen Z, Jianting Cao, Yang Cao, Yue Zhang, Fanji Gu, Guoxian Zhu, Zhen Hong, Bin Wang, Andrzej Cichocki: "Qualitative evaluation and quantitative EEG analysis in brain death diagnosis for adults: An empirical study", *Cognitive Neurodynamics*, ISSN 1871-4080 (Print) 1871-4099 (Online), Vol.2, No.3, pp.257-271, Springer, Sept.2008.

Conference Papers (Reviewed)

- (128) Zhaoshui He, Andrzej Cichocki, Rafal Zdunek and Jianting Cao, "CG-M-FOCUSS and its Application to Distributed Compressed Sensing", *Lecture Notes in Computer Science*, Springer, pp.237-245, Sept.2008.
- (127) Jianting Cao and Zhe Chen "ICA and Complexity Measures of EEG Analysis in Brain Death Determination", *Advances in Cognitive Neurodynamics ICCN 2007*. Wang, Rubin; Gu, Fanji; Shen, Enhua (Eds.) ISBN: 978-1-4020-8386-0, Springer, pp.669-704, June. 2008.
- (126) Yuki Saito, Toshihisa Tanaka, Jianting Cao, and Danilo P. Mandic, "Quasi-Brain-Death EEG Data Analysis by Empirical Mode Decomposition", *International Conference of Cognitive Neurodynamics, Advances in Cognitive Neurodynamics ICCN 2007*: Wang, Rubin; Gu, Fanji; Shen, Enhua (Eds.) ISBN: 978-1-4020-8386-0, Springer, pp.837-842, June. 2008.
- (125) Yohei Tomita, Shin-ichi Ito, Yasue Mitsukura, Naoko Koda, Jianting Cao, Minoru Fukumi: "Benefits of the Animal Assisted Therapy -- Comparison the EEG features", in *Proceedings of 2008 RISP International Workshop on Nonlinear Circuits and Signal Processing (NCSP'08)*, pp. 299-302, March 2008.

Conference Papers (without review)

- (124) Juhong Yang, Yuki Saito, Jianting Cao, and Toshihisa Tanaka: "Analysis of the Real-Measured MEG Phantom Data and EEG Quasi-Brain-Death Data Using EMD Method", *Proceedings of 23th Digital Signal Processing Symposium*, pp.46-51, Kanazawa, Japan, Nov. 2008.

2007

Journal Articles

- (123) Juhong Yang, Jianting Cao and Yasue Mitsukura, EEG data analysis for coma and quasi-brain-death patients, *Journal of Signal Processing*, Vol. 11, No. 6, PP. 481-487, November 2007.
- (122) 伊藤伸一, 満倉靖恵, 宮村(中村)浩子, 斎藤隆文, 福見稔, 曹建庭, "前頭前野の脳波を用いた気分一致曲の検出", *Journal of Information*, 10(10):881-887, Oct. 2007
- (121) Z. Chen, S. Ohara, J. Cao, F. Vialatte, F. A. Lenz, and A. Cichocki, "Statistical modeling and analysis of laser-evoked potentials of electrocorticogram recordings from awake humans," *Computational Intelligence and Neuroscience*, Volume 2007, Article ID 10479, 24 pages, doi:10.1155/2007/10479, May 2007.

Conference Papers (Reviewed)

- (120) Junko Murakami, Shin-ichi Ito, Yasue Mitsukura, Jianting Cao and Minoru Fukumi “Detection of the human-activity using the FCM”, 2007 International Conference on Control, Automation and Systems, pp. 1883-1886, Korea, Oct. 2007.
- (119) Shin-ichi Ito, Yasue Mitsukura, Minoru Fukumi and Jianting Cao “Detecting method of music to match the user’s mood in prefrontal cortex EEG activity using the GA”, 2007 International Conference on Control, Automation and Systems, pp. 2142-2145, Korea, Oct. 2007.
- (118) Shin-ichi Ito, Yasue Mitsukura, Minoru Fukumi, Jianting Cao : ” Method for Detecting Music to Match the User’s Mood in Prefrontal Cortex Electroencephalogram Activity Based on Individual Characteristics ”. Proc. of SMC, pp. 2640-2644, Oct. 2007.
- (117) Eriko Yokomatsu, Shin-ichi Ito, Yasue Mitsukura, Jianting Cao, Minoru Fukumi: “A Design of the Preference Acquisition Detection System “. Proc. of SICE 2007, pp. 2804-2807, Sept. 2007.
- (116) Junko Murakami, Shin-ichi Ito, Yasue Mitsukura, Jianting Cao, Minoru Fukumi: ” A Design of the EEG feature detection and condition classification ”. Proc. of SICE 2007, pp. 2798-2804, Sept. 2007.
- (115) Zha Chen and Jianting Cao: ”An empirical quantitative EEG analysis for evaluating clinical brain death”. Proceedings of the 2007 IEEE Engineering in Medicine and Biology 29th Annual Conference. Lyon, France, pp.3880-3883, Aug. 2007.
- (114) Eriko Yokomatsu, Shin-ichi Ito, Yasue Mitsukura, Jianting Cao, and Minoru Fukumi: ”Preference Acquisition by Using Olfactory Stimulus and EEG”, in Proceedings of 2007 RISP International Workshop on Nonlinear Circuits and Signal Processing (NCSP’07), pp.381-384, March 2007.
- (113) Junko Murakami, Shin-ichi Ito, Yasue Mitsukura, Jianting Cao and Minoru Fukumi: ”Classification of Conditions by the EEG”, in Proceedings of 2007 RISP International Workshop on Nonlinear Circuits and Signal Processing (NCSP’07), pp.271-300, March 2007.
- (112) Huabin Tang and Jianting Cao: “EEG Measurement and Analysis for the Drowse Task”, in Proceedings of 2007 RISP International Workshop on Nonlinear Circuits and Signal Processing (NCSP’07), pp.301-304, March 2007.
- (111) Mo Chen, Tomasz M. Rutkowski, Beth Jelfsy, George Souretisy, Jianting Cao and Danilo Mandic: “Assessment of Nonlinearity in Brain Electrical Activity: A DVV Approach” in Proceedings of 2007 RISP International Workshop on Nonlinear Circuits and Signal Processing (NCSP’07), pp.461-464, March 2007.
- (110) Juhong Yang, Yoshio Konno and Jianting Cao: ”Analysis of Real-Measured EEG Data from Coma and Brain-Death Patients”, in Proceedings of 2007 RISP International Workshop on Nonlinear Circuits and Signal Processing (NCSP’07), pp.385-388, March 2007.
- (109) Konno, J. Cao, T. Takeda, H. Endo and M. Tanaka, “Visualization of brain dynamics based on robust approach of blind signal separation”, 2007 IEEE Workshop on Biomedical Applications for Digital Ecosystems, pp. 217-222, Feb. 2007.
- (108) Y. Konno, J. Cao, Y. Cao, F. Gu and M. Tanaka, “Analysis of EEG data based on the blind signal separation as the pre-test of the determination of brain death”, 2007 IEEE Workshop on Biomedical Applications for Digital Ecosystems, pp. 547-552, Feb. 2007.

Conference Papers (without review)

- (107) Junko Murakami, Shin-ichi Ito, Yasue Mitsukura, Jianting Cao and Minoru Fukumi, ‘The proposal of the EEG characteristic extraction method by using the FCM’, Malaysia-Japan International University of Technology (MJUT) Nov. 2007.

- (106) Eriko Yokomatus, Shin-ichi Ito, Yasue Mitsukura, Jianting Cao and Minoru Fukumi, "An individual preference detection system using the EEG", Malaysia-Japan International University of Technology (MJIUT) Nov. 2007.
- (105) Yohei Tomita, Koji Hatayama, Shin-ichi Ito, Yasue Mitsukura, Naoko Koda and Jianting Cao, "Analyzing the effects of animal assisted therapy by the EEG", Malaysia-Japan International University of Technology (MJIUT) Nov. 2007.
- (104) 齊藤佑樹, 田中聡久, 曹建庭, マンディッチ・ダニエロ "ヒルベルト-ホワンスペクトルによる準脳死患者の多チャンネル脳波解析" 第22回デジタル信号処理シンポジウム講演論文集, pp.155-160, 仙台, Nov. 2007.
- (103) 富田洋平, 伊藤伸一, 満倉靖恵, 甲田菜穂子, 曹建庭 "脳波を用いたアニマルセラピー効果の検証" 第22回デジタル信号処理シンポジウム講演論文集, pp.194-198, 仙台, Nov. 2007
- (102) 楊桔紅, 曹建庭, 満倉靖恵 "独立成分分析法による準脳死患者の脳波解析", 第22回デジタル信号処理シンポジウム講演論文集, pp.369-373, 仙台, Nov. 2007.
- (101) 齊藤佑樹 田中聡久 曹建庭 "経験的モード分解を用いた準脳死患者の脳波解析" 2007年電子情報通信学会春季全国大会講演論文集, March 2007.

2006

Journal Articles

- (100) Jianting Cao "Analysis of the quasi-brain-death EEG data based on a robust ICA approach", Springer-Verlag, ISBN 3-540-465421, Lecture Notes in Artificial Intelligence, Vol. 4253, No. 3, pp.1240-1247, Oct. 2006.

Conference Papers (Reviewed)

- (99) Jianting Cao, Liangyu Zhao and Andrzej Cichocki "Visualization of dynamic brain activities based on the single-trial MEG and EEG data analysis", Jun Wang et. al. (eds): Advances in Neural Networks, Lecture Notes in Computer Science, Vol. 3973. Springer-Verlag, Berlin Heidelberg, ISSN0302-9473, pp.531-540, June 2006.
- (98) Jianting Cao, Liangyu Zhao, Huashi Jin, Zhen Hong, Guoxian Zhu, Yue Zhang, Yang Cao and Fanji Gu "Flat EEG data analysis in the determination of brain death", in Proceedings of 2006 RISP International Workshop on Nonlinear Circuits and Signal Processing, pp. 191-194, Mar. 2006.

2005

Journal Articles

- (97) Yoshio Konno, Jianting Cao and Mamoru Tanaka, "A Scale-Free Approach of Noisy Blind Source Separation for Mobile Communications Environment," WSEAS Trans. on Communications. ISSN 1109-2742, Issue 12, Vol. 4. pp. 1443-1454, Dec. 2005.

Conference Papers (Reviewed)

- (96) Yoshio Konno, Jianting Cao and Mamoru Tanaka, "Multiuser Detection based on a Robust Approach of Principal-Factor Method with Determination of the Number of Sources," IEEE International Symposium on Communications and Information Technology 2005 (ISCIT2005), pp. 147-150. vol. 1.Beijing, China. Oct. 2005.
- (95) Yoshio Konno, Jianting Cao and Mamoru Tanaka, "A Robust Spatio-Temporal Processing for Multipath Environments with an Antenna Array," The 5th WSEAS International Conference on SIGNAL, SPEECH and IMAGE PROCESSING (SSIP '05), pp. 22-27.Corfu, Greece. Aug. 2005.
- (94) Yang Cao, Enhua Shen, Fanji Gu Zhijie Cai, Jiong Ruan Guoxin Zhu, Yue Zhang and Jianting Cao "High Order Complexity of Brain-death Patient's EEG Signals", in Proceedings of the 2nd Shanghai International Symposium on Nonlinear Science and Applications, (CDROM) June 2005.
- (93) Huashi Jin and Jianting Cao "Analysis of Single-Trial MEG Phantom Data", in Proceedings of the 2nd Shanghai International Symposium on Nonlinear Science and Applications, (CDROM) June 2005.
- (92) Liangyu Zhao, Jianting Cao, Tetsuya Hoya and Andrzej Cichocki: `` Analysis of Single-Trial EEG Data Using a Combined Robust Pre-Whitening Technique and ICA Approach ", in Proceedings of 2005 IEEE International Workshop on VLSI Design and Video Technology (IWVDVT 2005), IEEE Catalog Number: 05EX1030, ISBN: 0-7803-9005-9, pp.238-242, May 2005.
- (91) Yoshio Konno, Jianting Cao and Mamoru Tanaka,"A Novel Pre-Processing Technique of Blind Source Separation applying Q-mode Factor Analysis,"2005 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP05), ISBN 0-7803-8874-7, pp. 269-272, March 2005.

Conference Papers (without review)

- (90) 金化石, 曹建庭, 武田常広: `` Analysis of Single-Trial MEG Phantom Data ", 第 44 回日本生体医工学会大会, Vol. 43, ISSN 1347-443, p.400, Apr. 2005
- (89) Liangyu Zhao, Jianting Cao, Tetsuya Hoya and Andrzej Cichocki: `` Analysis of Dynamical Visual Evoked Potential EEG Data Using ICA Approach ", 第44回日本生体医工学会大会, Vol 43, ISSN 1347-443, p.428, Apr. 2005

2004

Journal Articles

- (88) 曹 建庭:『独立成分解析とその応用特集号(招待論文)』: ``単試行脳信号の独立成分解析による脳内活動情報可視化の試み'', システム制御情報学会誌, Vol.48, No.10, pp.409-414, Oct.. 2004.
- (87) Yuanqing Li, Andrzej Cichocki, Shun-ichi Amari, Sergei Shishkin, Jianting Cao and Fanji Gu : ``Sparse representation and its applications in blind source separation'', in Advance in Neural Information Processing System, Edts. Sebastian Thrun, Lawrence K. Saul, and Bernhard Scholkopf, The MIT Press, ISBN 0-262-20152-6, vol. 16, pp. 241-248, May, 2004.
- (86) 曹 建庭:『基礎シリーズ(招待論文): 第二回』: ``独立成分解析による脳信号処理'', 信号処理学会誌, Vol.8, No.2, pp.99-106, March. 2004.
- (85) 曹 建庭:『基礎シリーズ(招待論文): 第一回』: ``独立成分解析によるブラインド信号処理'', 信号処理学会誌, Vol. 8, No. 1, pp.13-19, Jan. 2004.

Conference Papers (Reviewed)

- (84) Yoshio Konno, Jianting Cao, Masayuki Yamauchi, and Mamoru Tanaka, "A Novel Pre-Whitening Technique Using Scale-Free Estimation for Noisy Blind Signal Separation," The 2004 International Symposium on Nonlinear Theory and its Applications (NOLTA2004), pp. 629-632. Nov. 2004.
- (83) Yoshio Konno, Jianting Cao, Tsunehiro Takeda, Hiroshi Endo, Mamoru Tanaka and Takayuki Arai, "Elimination of Brain Noise from MEG Data using ICA with robust pre-whitening," The 14th International Conference on Biomagnetism (BIOMAG2004), pp. 161-162, Aug. 2004.
- (82) Yoshio Konno, Jianting Cao, Takayuki Arai, Tsunehiro Takeda, Hiroshi Endo: "Independent source separation of MEG data and its evaluation", Proceedings of the 2004 RISP International Workshop on Nonlinear Circuits and Signal Proceedings, (NCSP-04), pp. 395-398, March 2004.

Conference Papers (without review)

- (81) 金化石, 曹建庭: ``単試行脳磁界(MEG)Phantom データの解析'', 第3回 21世紀連合シンポジウム-学技術と人間- 抄録集, pp.45-46, Nov. 2004
- (80) Liangyu Zhao, Jianting Cao, Tetsuya Hoya, Andrzej Cichocki: `` Analysis of Single-Trial Visual Evoked Potential EEG Data Using Independent Component Analysis Approach'', 埼玉工業大学若手研究フォーラム 2004 論文集, pp. 121-125, Oct. 2004
- (79) Jianting Cao, Liangyu Zhao, Enhua Shen, Yan Cao, Fanji Gu, Zhijie Cai and Jiong Ruan: `` Applying a Novel ICA Algorithm to Single-trial Flat EEG Analysis'', Technical Report of IEICE, NC2004-29, pp.7-12, June 2004.
- (78) 今野 義男, 曹 建庭, 田中 衛, 武田 常広, 遠藤 博史 "JADE, FastICA, InfoMAX アルゴリズムを用いた脳磁図データの解析," 日本生体磁気学会誌特別号 Vol. 17, No. 1 第 19 回 日本生体磁気学会論文集, pp. 132-133, Jun. 2004
- (77) 今野 義男, 曹 建庭, 荒井 隆行, 武田 常広, 遠藤 博史, "脳磁図(MEG)データからの磁場源分離と分離精度の評価," 第 43 回日本エム・イー学会大会論文集, p. 725, May 2004.

- (76) 建庭: ``ダイナミック脳活動の可視化", 埼玉工業大学ハイテクリサーチセンター2003 年度研究成果報告書, pp.63-66, March. 2004.

2003

Journal Articles

- (75) Yoshio Konno Jianting Cao, Takayuki Arai, Tsunehiro Takeda: `` Visualization of brain activities of single-trial and averaged multi-trials MEG data", IEICE Transactions on Fundamentals of Electronics, Communications Computer Sciences, vol. E86-A, No. 9, pp.2294-2302, Sept. 2003.
- (74) Jianting Cao, Noboru Murata, Shun-ichi Amari, Andrzej Cichocki and Tsunehiro Takeda: `` A robust approach to independent component analysis of signals with high-level noise measurements" , IEEE Trans. on Neural Networks, Vol.14, No.3, pp.631-645, June 2003.

Conference Papers (Reviewed)

- (73) Yoshio Konno Jianting Cao, Takayuki Arai, Tsunehiro Takeda: `` Detection of brain activities for averaged multiple-trials Magnetoencephalography data", in Proceedings of the Eighth Australian and New Zealand Intelligent Information Systems Conferences (ANZIIS-2003), Edts. Brian C. lovell, etc. vol. 1, ISBN 1-74107-039-2, pp.361-366, Dec. 2003.
- (72) Jianting Cao: ``Visualization of dynamic brain activities based on analysis of single-trial MEG data", in International Symposium on Nonlinear Science and Applications, Edts: Jiong Ruan, etc. Fudan University Press, CDROM, Nov. 2003.
- (71) Tetsuya Hoya, Gen Hori, Hovagim Bakardjian, Tomoaki Nishimura, Taiji Suzuki, Yoichi Miyawaki, Arao Funase and Jianting Cao : ``Classification of single trial EEG signals by a combined principal+independent component analysis and probabilistic neural network approach ", Fourth International Conference on Independent Component Analysis and Signal Separation (ICA-2003), Japan, pp. 197-202, April. 2003.

Conference Papers (without review)

- (70) 曹建庭: ``ダイナミック脳活動の可視化", 埼玉工業大学紀要, Vol. 13, pp.55-62, Dec. 2003.
- (69) 今野義男, 曹建庭, 荒井隆行, 武田常広, 遠藤博史: ``単一試行・多試行加算平均脳磁図の解析と磁場源推定精度の評価", 第6回情報論的学習理論ワークショップ, pp. 223 - 228, Nov. 2003
- (68) 今野義男, 曹建庭, 荒井隆行: ``脳磁界 (MEG)による擬似聴覚データの解析", 第1回埼玉工業大学若手研究フォーラム論文集, pp.173-176, Oct. 2003.

2002

Journal Articles

- (67) Jianting Cao, Noboru Murata, Shun-ichi Amari, Andrzej Cichocki and Tsunehiro Takeda: ``Independent component analysis for single-trial MEG data decomposition and single-dipole source localization", Neurocomputing, ELSEVIER, 49, pp.255-277, Dec. 2002.

- (66) 今野 義男, 曹 建庭, 武田 常広 ``脳磁場源の分解と位置推定'', 信号処理学会論文誌, Vol. 6, No. 6, pp.391-400, Nov. 2002

Conference Papers (Reviewed)

- (65) Yoshio Konno, Jianting Cao, Takayuki Arai and Andrzej Cichocki: ``Auditory evoked fields (AEF) like synthesized MEG data decomposition and localization'', Proceedings of 2002 International Symposium on Nonlinear Theory and its Applications (NOLTA-2002), Vol.1, pp. 379-382, China, Oct. 2002.

Conference Papers (without review)

- (64) 中川 亨, 吉田 明, 曹建庭, 田中 昌司 : ``時系列スパイクデータへの独立成分分析の応用'', 2002 年電子情報通信学会春季全国大会講演論文集, D-7-7, P.76, 東京, March 2002.
- (63) 今野 義男, 曹 建庭, 田中 昌司 : ``脳磁気データの独立成分解析'', 2002 年電子情報通信学会春季全国大会講演論文集, D-7-6, P.75, 東京, March 2002.
- (62) 植木 敦史, 曹 建庭, 服部 武 : ``干渉・雑音除去の新しい手法'', 2002年電子情報通信学会春季全国大会講演論文集, 東京, March 2002.

2001

Conference Papers (Reviewed)

- (61) Jianting Cao, Noboru Murata, Shun-ichi Amari, Andrzej Cichocki and Tsunehiro Takeda : ``A robust ICA approach for unaveraged single-trial auditory evoked fields data decomposition'', Third International Conference on Independent Component Analysis and Signal Separation (ICA-2001), vol. 1, pp.116-121, U.S.A, Dec. 2001.
- (60) Jianting Cao and Takeshi Hattori : ``A novel algorithm of spatial and temporal equalization for multiuser detection with an antenna array'', IEEE Semiannual Vehicular Technology Conference, Atlantic, vol.4, pp.452-456, U.S.A, Oct. 2001.
- (59) Akira Yoshida, Tooru Nakagawa and Jianting Cao and Shoji Tanaka : ``Independent component analysis for functional neuronal interactions'', in Neural Information Processing, Edts: Liming Zhang and Fanji Gu, ISBN 7-309-03012-5, Fudan University Press, vol. II, pp.1403-1408, Sept. 2001.
- (58) Jianting Cao : ``A robust approach for ICA with high-power noisy measurements and unknown number of sources'', in Neural Information Processing, Edts: Liming Zhang and Fanji Gu, ISBN 7-309-03012-5, Fudan University Press, vol. II, pp.1012-1017, Sept. 2001.

Conference Papers (without review)

- (57) 曹 建庭: ``聞き分け機能の実現に関する研究'', 立石科学技術振興財団助成研究成果集, pp.29-32, Sept. 2001.

2000

Journal Articles

- (56) Jianting Cao, Noboru Murata, Shun-ichi Amari, Andrzej Cichocki, Tsunehiro Takeda, Hiroshi Endo and Nobuyoshi Harada: "Single-trial magnetoencephalographic data decomposition and localization based on independent component analysis approaches", IEICE Transactions on Fundamentals of Electronics, Communications Computer Sciences, Vol. E83-A, No. 9, pp.1757-1766, Sept. 2000.
- (55) Jianting Cao, Noboru Murata and Andrew Cichocki : "Independent component analysis algorithm for online blind source separation and blind equalization systems", Journal of Signal Processing, Vol.4, No.2, pp.131-140, March 2000.
- (54) Jianting Cao, Andrew Cichocki and Shoji Tanaka: "Self-scaling and self-adaptive compact time-delay neural network for dynamical nonlinear and nonstationary system identification", Journal of Signal Processing, Vol.4, No.1, pp.37-43, Jan. 2000.

Conference Papers (Reviewed)

- (53) Jianting Cao, Noboru Murata, Shun-ichi Amari, Andrzej Cichocki, Tsunehiro Takeda, Hiroshi Endo and Nobuyoshi Harada: "Independent features analysis for MEG recorded auditory evoked fields task data", Proceedings of 2000 International Symposium on Nonlinear Theory and its Applications (NOLTA-2000), Vol.2, pp.257-260, Germany, Sept. 2000.
- (52) Jianting Cao and Andrzej Cichocki : "Independent features extraction from multivariable time series biomedical recordings", Proceedings of 2000 IEEE Asisa-Pacific Congress on Biomedical Engineering, Vol.1, pp.85-86, China, Sept. 2000.

Conference Papers (without review)

- (51) 高橋 幹雄, 曹 建庭, 田中 昌司 : "ノイズ画像の復元の一設計法", 2000 年電子情報通信学会秋季全国大会講演論文集, A-4-1, p.92, 名古屋, Oct. 2000.
- (50) 大平 秀堯, 曹 建庭, 田中 昌司 : "Bussgang 特性を利用した音声信号の分離", 2000 年電子情報通信学会秋季全国大会講演論文集, A-4-38, p.129, 名古屋, Oct. 2000.
- (49) Juhong Yang and Jianting Cao, "EEG data analysis for brain-death determination", 埼玉工業大学若手フォーラム第 5 回論文集, ISSN 1880-392X, pp. 143-146, June 2000.
- (48) 能勢 堯彦, 曹 建庭, 田中 衛 : "観測雑音存在下のブラインドセパレーション", 信学技報 NC99-87, pp.1-5, Feb. 2000.

1999

Journal Articles

- (47) 岡田 修平, 曹 建庭, 田中 昌司 : "可変バイアス入力をもつリカレントネットワークを用いた短期記憶モデル", 信号処理論文誌, Vol.3, No.6, pp.435-442, Nov. 1999.

- (46) Jianting Cao and Noboru Murata: "A stable and robust ICA algorithm based on t-distribution and generalized Gaussian distribution models", in Neural Networks for Signal Processing IX, IEEE Press, ISBN 0-7803-5673-X, pp.283-292, Aug. 1999.

Conference Papers (Reviewed)

- (45) Jianting Cao, Noboru Murata, Shun-ichi Amari, Andrzej Cichocki, Tsunehiro Taketa, Hiroshi Endo and Nobuyoshi Harada: "Independent source separation and localization for single-trial Magnetoencephalographic data", Proceedings of 1999 International Symposium on Nonlinear Theory and its Applications (NOLTA-99), Vol.2, pp.719-722. USA, Nov. 1999.
- (44) Ruck Thawonmas and Jianting Cao: "Robust independent component analysis algorithms for projection pursuit", 1999 IEEE Systems, Man, and Cybernetics Conference (SMC'99), vol. III, pp. 917-921, Oct., 1999.
- (43) Andrzej Cichocki, Jianting Cao, Shun-ichi Amari, Noboru Murata, Tsunehiro Taketa and Hiroshi Endo: "Enhancement and blind identification of MEG signals using independent component analysis", in Recent Advances in Biomagnetism, Tohoku University Press, ISBN 4-925085-19-0, pp.169-172, Feb. 1999.

Conference Papers (without review)

- (42) 曹 建庭, 村田 昇 : "独立成分解析アルゴリズム", 日本神経回路学会第9回全国大会, pp.179-180, Sept. 1999.
- (41) Liqing Zhang, Andrzej Cichocki, Jianting Cao and Shun-ichi Amari : "Semiparametric approach to blind deconvolution", Technical Report of IEICE Neural Computation, Vol. 99-131, pp.99-106, June 1999.
- (40) 岡田 修平, 曹 建庭, 田中 昌司 : "リカレントネットワークを用いた短期記憶モデルにおける記憶維持", 信学技報 NC99-2, pp.85-92, Feb. 1999.

1998

Journal Articles

- (39) Andrzej Cichocki and Jianting Cao : "A self-adaptive neural network for on-line blind separation of convolved sources", in Topics on Nondestructive Evaluation Series, Edts. B. B. Djordjevic and H. D. Reis, Vol. 3, The American Society for Nondestructive Evaluation Testing, ISBN 1-57117-074-X, pp.207-212, Aug. 1998.

Conference Papers (Reviewed)

- (38) Jianting Cao, Noboru Murata, Shun-ichi Amari, Andrzej Cichocki and Tsunehiro Taketa : "MEG data analysis based on ICA approach with pre- & post-processing techniques", Proceedings of 1998 International Symposium on Nonlinear Theory and its Applications (NOLTA-98), Vol. 1, pp.287-290, Switzerland, Sept. 1998.

Conference Papers (without review)

- (37) 能勢 堯彦, 曹 建庭, 田中 衛 : "PCA 前処理によるブラインドセパレーション", 1998 年

電子情報通信学会秋季全国大会講演論文集, 東京, Oct. 1998.

1997

Journal Articles

- (36) Andrzej Cichocki, Shun-ichi Amari and Jianting Cao : ``Neural network models for blind separation of time delayed and convolved signals", IEICE Transactions on Fundamentals of Electronics, Communications Computer Sciences, Vol. E80-A, No. 9, pp.1595-1603, Sept. 1997.
- (35) Jianting Cao and Takashi Yahagi : ``Parallel nonlinear adaptive digital filters using recurrent neural networks", Electronics and Communications in Japan, A John Wiley & Sons, SCRIPTA TECCHNICA, INC., Part 3, Vol. 80, No. 3, pp.83-93, March 1997.

Conference Papers (Reviewed)

- (34) Jianting Cao and Andrzej Cichocki : ``Blind source separation algorithm based on 4th-order self- and cross-cumulants criterion applied for EEG data analysis", Proceedings of 1997 International Symposium on Nonlinear Theory and its Applications (NOLTA-97), Vol. 2, pp.1005-1008, Hawaii, U.S.A., Dec. 1997.
- (33) Andrzej Cichocki, Jianting Cao and Ireneusz Sabala : ``On-line adaptive algorithms for blind equalization of multi-channel systems", Progress in Connectionist-Based Information Systems, Eds. N. Kasabov, Springer, pp.649-652, Nov. 1997.

Conference Papers (without review)

- (32) Jianting Cao and Andrzej Cichocki : ``On-line blind sources separation algorithms for SIMO blind equalization systems", Proceedings of 12th Digital Signal Processing Symposium, pp.351-356, Hiroshima, Japan, Nov. 1997.

1996

Journal Articles

- (31) 曹 建庭, 谷萩 隆嗣 : ``リカレントニューラルネットワークを用いた並列形非線形適応デジタルフィルタ", 電子情報通信学会論文誌(A), Vol. J79-A, No. 4, pp.868-877, April 1996.
- (30) Takashi Yahagi, Jianting Cao and Jianming Lu: ``A design method for parallel nonlinear adaptive digital filters using neural networks", Electronics and Communications in Japan, A John Wiley & Sons, SCRIPTA TECCHNICA, INC., Part 3, Vol. 79, No. 1, pp.22-33, Jan. 1996.

Conference Papers (Reviewed)

- (29) Jianting Cao, Shun-ichi Amari and Andrzej Cichocki : ``Self-scaling and self-adaptive neural networks for on-line nonlinear dynamical systems identification", Proceedings of 1996

International Symposium on Multi-Technology Information Processing (ISMIP-96), pp.499-504, Taiwan, Dec. 1996.

- (28) Andrzej Cichocki, Shun-ichi Amari and Jianting Cao : ``Blind separation of delayed and convolved signals with self-adaptive learning rate", Proceedings of 1996 International Symposium on Nonlinear Theory and its Applications (NOLTA-96), pp.229-232, Kochi, Japan, Oct. 1996.
- (27) Jianting Cao and Andrzej Cichocki : ``A simplified architecture for nonlinear recurrent neural filter", Progress in Neural Information Processing, Springer, Edts. Shun-ichi Amari, et al, Vol. 1, pp.514-519, Sept. 1996.

Conference Papers (without review)

- (26) Jianting Cao and Andrzej Cichocki : ``Adaptive multilayer perceptrons with automatic gain scaling", Technical Report of IEICE, NC96-11, pp.9-14, June 1996.
- (25) Jianting Cao and Takashi Yahagi: ``A simplified method for parallel recurrent neural digital filter", Proceedings of 1996 Spring IEICE Conference, Part 1, p.151, Tokyo, Mar. 1996.

1995

Journal Articles

- (24) 曹 建庭, 谷萩 隆嗣 : ``時間領域における多チャネル適応 IIR デジタルフィルタの一設計法", 電子情報通信学会論文誌(A), Vol. J78-A, No. 10, pp.1306-1315, Oct. 1995.
- (23) 谷萩 隆嗣, 曹 建庭, 呂 建明 : ``ニューラルネットワークを用いた並列形非線形適応デジタルフィルタの一設計法", 電子情報通信学会論文誌(A), Vol. J78-A, No. 6, pp.659-668, June 1995.
- (22) Jianming Lu, Takashi Yahagi and Jianting Cao : ``Estimation of ARMAX systems and strictly positive real condition", IEICE Transactions on Fundamentals of Electronics, Communications Computer Sciences, Vol. E78-A, No. 5, May 1995.
- (21) Jianting Cao, Takashi Yahagi and Jianming Lu: ``Parallel adaptive infinite impulse response digital filters using Kalman filter", Electronics and Communications in Japan, A John Wiley & Sons, SCRIPTA TECCHNICA, INC., Part 3, Vol. 78, No. 2, pp.101-112, Feb. 1995.

Conference Papers (Reviewed)

- (20) Jianting Cao and Takashi Yahagi: `` Nonlinear adaptive digital filters using parallel neural networks", Proceedings of 1995 IEEE International Conference on Neural Networks (ICNN-95), Vol. 2, pp.850-853, Perth, Australia, Nov. 1995.

Conference Papers (without review)

- (19) Jianting Cao and Takashi Yahagi : ``Parallel IIR acoustic echo cancellers using least-squares method", Proc. of 1995 Fall National Conference of IEICE, Vol. A-74, p.76, Tokyo, Sept. 1995.

- (18) 呂 建明, 曹 建庭, 谷萩 隆嗣 : ``非最小位相多入力多出力系の適応等化器の一方法", 1995 年電子情報通信学会春季全国大会講演論文集, Vol. A-217, p.217, 福岡, March 1995.
- (17) 曹 建庭, 谷萩 隆嗣, 呂 建明 : ``多チャネル適応 IIR フィルタの一設計法", 1995 年電子情報通信学会春季全国大会講演論文集, Vol. A-227, p.227, 福岡, March 1995.
- (16) 曹 建庭, 呂 建明, 谷萩 隆嗣 : ``非最小位相多入力多出力 ARMA システムのパラメータと入力の推定", 第 21 回知能システムシンポジウム講演論文集, pp.165-168, 東京, March 1995.

1994

Journal Articles

- (15) 曹 建庭, 谷萩 隆嗣, 呂 建明 : ``カルマンフィルタを利用した並列形適応 IIR デジタルフィルタ", 電子情報通信学会論文誌(A), Vol. J77-A, 12, pp.1640-1649, Dec. 1994.

Conference Papers (without review)

- (14) 曹 建庭, 谷萩 隆嗣, 呂 建明 : ``非再帰形多層ニューラルネットワークによる並列形非線形適応デジタルフィルタの一設計法", 第 9 回デジタル信号処理シンポジウム講演論文集, pp.349-354, 京都, Nov. 1994.
- (13) 谷萩 隆嗣, 曹 建庭 : ``ニューラルネットワークを用いた並列形 FIR フィルタの一設計法", 1994 年電子情報通信学会春季全国大会講演論文集, Vol. A-183, p.1-184, 横浜, March 1994.

1993

Conference Papers (without review)

- (12) 谷萩 隆嗣, 曹 建庭 : ``時間領域における並列形適応デジタルフィルタの特性の考察", 1993 年電子情報通信学会秋季全国大会講演論文集, Vol. A-97, p.1-99, 北海道, Sept. 1993.
- (11) 谷萩 隆嗣, 曹 建庭 : ``格子形フィルタを利用した適応 IIR フィルタの安定性の検討", 1993 年電子情報通信学会春季全国大会講演論文集, Vol. A-150, p.1-150, 名古屋, Mar. 1993.

1992

Conference Papers (without review)

- (10) 曹 建庭, 谷萩 隆嗣 : ``並列形 IIR 適応デジタルフィルタの一設計法", 第 7 回デジタル信号処理シンポジウム講演論文集, pp.173-177, 富士吉田, Nov. 1992.
- (9) 曹 建庭, 谷萩 隆嗣 : ``並列形 IIR カルマンフィルタを用いたエコーキャンセラの収束特性の改善", 1992 年電子情報通信学会秋季全国大会講演論文集, Vol. A-94, p.1-94, 東京,

Sept. 1992.

- (8) 曹 建庭, 谷萩 隆嗣, マルコ エヒケンス : ``並列形 IIR エコーキャンセラの一設計法'', 1992 年電子情報通信学会春季全国大会講演論文集, Vol. A-157, p.1-157, 東京, March 1992.

Book (Chapters)

- (7) D Ling Li, Yuki Saito, David Looney, Jianting Cao, Toshihisa Tanaka and Danilo P.Mandic: "Chapters 10: Data fusion via fission for the analysis of brain death" in Book [EVOLVING INTELLIGENT SYSTEMS: Methodology and Applications], Springer, pp.279-320, April 2010.
- (6) Jianting Cao and Zhe Chen: "Chapters 15: Advanced EEG Signal Processing in Brain Death Diagnosis" in Book [Signal Processing Techniques for Knowledge Extraction and Information Fusion] Editors : D.P. Mandic, M. et.al., pp.275-297, Springer. March 2008.
- (5) 曹 建庭: "**第12章** 単一試行脳磁界データの解析", 数理科学Senior & Graduate Courses ライブラリー18: 独立成分解析 - 多変量データ解析の新しい方法 甘利 俊一・村田 昇 共編著, サイエンス社, pp.85-94, Nov. 2002.
- (4) 曹 建庭 : "独立成分解析: MEG時系列データ解析への応用", Computer Today, ISSN 0298-3509, サイエンス社, Vol.17, No.4, pp.56-63, July 2000.
- (3) 曹 建庭, 甘利 俊一: "会話音声の分離の技術", エレクトロニクス誌, オーム社, ISSN 0421-3513, Vol.43, No.8, pp.60-64, Aug. 1998.
- (2) 曹 建庭, 甘利 俊一: "**第3章** ニューラネット, ブラインドセパレーション", 「脳科学の frontline -- 数理モデルを中心にして」 別冊「数理科学」, ISSN 0386-8257, サイエンス社, pp.40-47, Oct. 1997.
- (1) Keping Shi, Jianting Cao, Fuxiong Xiu, Jinhai Cui and Peijun Dai : "Computer Software in Drilling Engineering" [in Chinese], Marine Geological Survey Bureau Press, Shanghai, pp.1-197, 1987.