

Of Scientific Publications and Scientific Integrity

Cyrill Labbé – UGA – LIG

Scientific Methodology and (emPirical | exPerimental) Evaluation

December 4, 2025

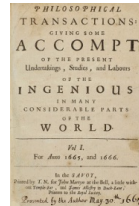
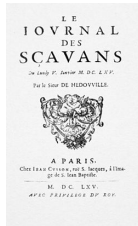
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Journals as a way to build Knowledge

A long story started in 1665

- Paris : *Journal des sçavans*.
- Londres : *Philosophical Transactions of the Royal Society*,



Aims:

- written by and for specialists.
- contribution to the scientific discussion.
- standing on the shoulders of giants: discovering truth by building on previous discoveries.

Example of a publication in 1944

[Avery et al., 1944]

STUDIES ON THE CHEMICAL NATURE OF THE SUBSTANCE INDUCING TRANSFORMATION OF PNEUMOCOCCAL TYPES

INDUCTION OF TRANSFORMATION BY A DESOXYRIBONUCLEIC ACID FRACTION ISOLATED FROM PNEUMOCOCCUS TYPE III

By OSWALD T. AVERY, M.D., COLIN M. MACLEOD, M.D., AND
MACLYN McCARTY,* M.D.

(From the Hospital of The Rockefeller Institute for Medical Research)

PLATE 1

(Received for publication, November 1, 1943)

Biologists have long attempted by chemical means to induce in higher organisms predictable and specific changes which thereafter could be transmitted in series as hereditary characters. Among microorganisms the most striking example of inheritable and specific alterations in cell structure and function that can be experimentally induced and are reproducible under well defined and adequately controlled conditions is the transformation of specific types of *Pneumococcus*. This phenomenon was first described by Griffith (1) who succeeded in transforming an attenuated and non-encapsulated (D)

Example of a publication in 1944

[Avery et al., 1944]

The original observations of Griffith were later confirmed by Neufeld and Levinthal (2), and by Baurhenn (3) abroad, and by Dawson (4) in this laboratory. Subse-

Another interpretation of the phenomenon has been suggested by Stanley (28) who has drawn the analogy between the activity of the transforming agent and that of a virus. On the other hand, Murphy (29) has compared the causative agents of fowl tumors with the transforming principle of *Pneumococcus*. He has suggested that both these groups of agents be termed "transmissible mutagens" in order to differentiate them from the virus group. Whatever may prove to be the correct interpretation, these differences in viewpoint indi-

BIBLIOGRAPHY

1. Griffith, F., *J. Hyg.*, Cambridge, Eng., 1928, **27**, 113.
2. Neufeld, F., and Levinthal, W., *Z. Immunitätsforsch.*, 1928, **55**, 324.
3. Baurhenn, W., *Centr. Bakt., 1. Abt., Orig.*, 1932, **126**, 68.
4. Dawson, M. H., *J. Exp. Med.*, 1930, **51**, 123.
5. Dawson, M. H., and Sia, R. H. P., *J. Exp. Med.*, 1931, **54**, 681.
6. Alloway, J. L., *J. Exp. Med.*, 1932, **55**, 91; 1933, **57**, 265.
7. Berry, G. P., and Dedrick, H. M., *J. Bact.*, 1936, **31**, 50.

Example of a publication Jan. 2022

[Miller and Wang, 2022]

Ostrich eggshell beads reveal 50,000-year-old social network in Africa

<https://doi.org/10.1038/s41586-021-04227-2>
Jennifer M. Miller^{1,2,3,4} & Yiming V. Wang^{1,5,6}

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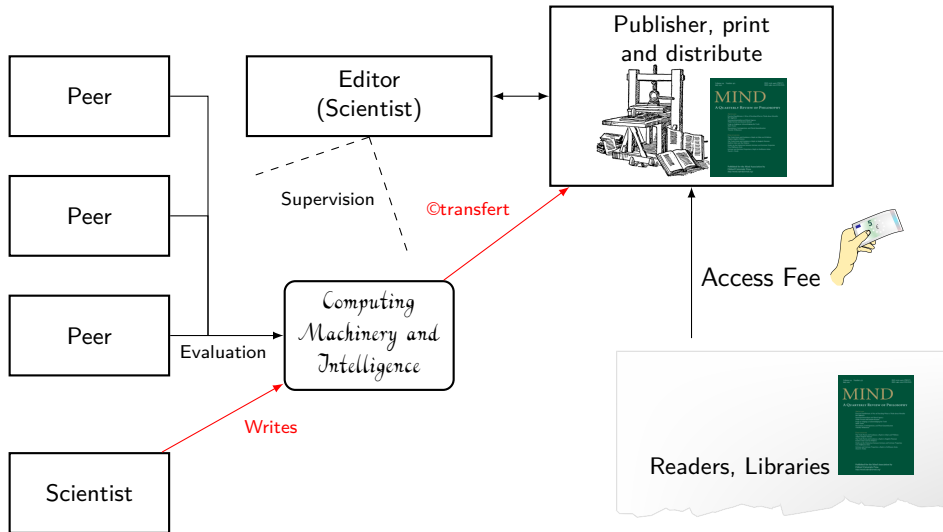
Open access

 Check for updates

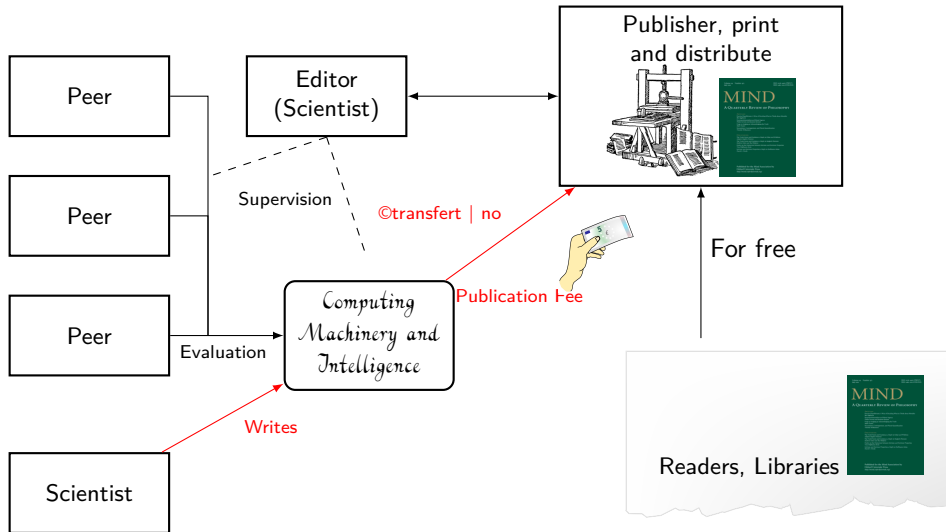
Humans evolved in a patchwork of semi-connected populations across Africa^{1,2}; understanding when and how these groups connected is critical to interpreting our present-day biological and cultural diversity. Genetic analyses reveal that eastern and southern African lineages diverged sometime in the Pleistocene epoch, approximately 350–70 thousand years ago (ka)^{3,4}; however, little is known about the

27. Collins, B., Wojcieszak, M., Nowell, A., Hodgskiss, T. & Ames, C. J. H. Beads and bead residues as windows to past behaviours and taphonomy: a case study from Grassridge Rockshelter, eastern Cape, South Africa. *Archaeol. Anthropol. Sci.* **12**, 192 (2020).
28. Ziegler, M. et al. Development of Middle Stone Age innovation linked to rapid climate change. *Nat. Commun.* **4**, 1905 (2013).
29. Tierney, J. E. et al. Northern hemisphere controls on tropical southeast African climate during the past 60,000 years. *Science* **322**, 252–255 (2008).
30. Wang, Y. V. et al. Northern and southern hemisphere controls on seasonal sea surface temperatures in the Indian Ocean during the last deglaciation. *Paleoceanography* **28**, 619–632 (2013).
31. Ecker, M., Botha-Brink, J., Lee-Thorp, J. A., Pluz, A. & Horwitz, L. K. In *Changing Climates, Ecosystems and Environments Within Arid Southern Africa and Adjoining Region* vol. 33 (ed. Runge, J.) 95–115 (CRC Press, 2015).
32. Harrison, T. & Masuya, C. P. Fossil *Struthionid* eggshells from Laetoli, Tanzania: taxonomic and biostratigraphic significance. *J. Afr. Earth. Sci.* **41**, 303–315 (2005).
33. Cooper, R. G. et al. The wild ostrich (*Struthio camelus*): a review. *Trop. Anim. Health Prod.* **41**, 1669–1678 (2009).
41. Schlebusch, C. M. et al. Khoe-San genomes reveal unique variation and confirm the deepest population divergence in *Homo sapiens*. *Mol. Biol. Evol.* **37**, 2944–2954 (2020).
42. Ziemer, F. A., Kapsch, M.-L., Klockmann, M. & Mikolajewicz, U. Heinrich events show two-stage climate response in transient glacial simulations. *Clim. Past* **15**, 153–168 (2019).
43. van der Lubbe, H. J. L., Frank, M., Tjallingii, R. & Schneider, R. R. Neodymium isotope constraints on provenance, dispersal, and climate-driven supply of Zambesi sediments along the Mozambique Margin during the past ~45,000 years. *Geochim. Geophys. Geosyst.* **17**, 181–198 (2016).
44. Mackay, A., Stewart, B. A. & Chase, B. M. Coalescence and fragmentation in the Late Pleistocene archaeology of southernmost Africa. *J. Hum. Evol.* **72**, 26–51 (2014).
45. Bousman, C. B. & Brink, J. S. The emergence, spread, and termination of the Early Later Stone Age event in South Africa and southern Namibia. *Quat. Int.* **495**, 116–135 (2018).
46. Lyons, R. P. et al. Continuous 1.3-million-year record of East African hydroclimate, and implications for patterns of evolution and biodiversity. *Proc. Natl. Acad. Sci. USA* **112**, 15568–15573 (2015).
47. Wang, Y. V. et al. What does leaf wax δD from a mixed C3/C4 vegetation region tell us? *Geochim. Cosmochim. Acta* **111**, 128–139 (2013).

Publication process



Publication : Gold Open Access





Overlay Journal : les épi-journaux [épi-sciences.org](https://episciences.org)

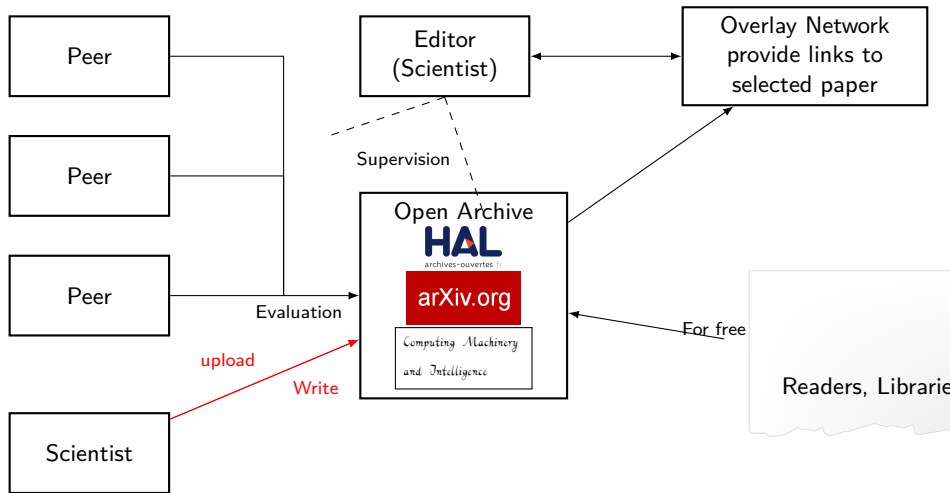


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Where?

Possible choices

- ① Journal, international / national
- ② Conference International / national
- ③ Workshop, Symposium,... (with or without proceedings)
- ④ Report – Preprint [HAL](#), [arXiv](#)

Ranking

- Commission
- Classement national [Brésil](#) / [Australie](#)
- Classement international

Different process

Journals

- Regular submission
- Call for papers numéro spécial,
- Evaluation Accepted, Minor revisions, Major revisions, Rejected
- Version finale

Conferences

- Call for papers, Instructions to authors
- Evaluation, Rebutal
- Acceptation/Refus

How to choose

Co-author ship \Rightarrow team discussion

multi-critères

- Vitesse de diffusion (rapport de recherche)
- Recrutement (conférence nationale)
- Reconnaissance (Journal)
- ...

Beware plagiarism!

- for ever

Notice of Violation of IEEE Publication Principles

"Efficient Implementation of QRD-RLS Algorithm using Hardware-Software Co-design"
by Napur Lodha, Nivesh Rai, Aarth Krishnamurthy, Hrishikesh Venkataraman
in the 2009 IEEE International Symposium on Parallel & Distributed Processing (IPDPS 2009),
2009, pp. 1 – 4.

After careful and considered review of the content and authorship of this paper by a duly constituted expert committee, this paper has been found to be in violation of IEEE's Publication Principles.

This paper contains significant portions of original text from the paper cited below. The original text was reused with insufficient attribution (including appropriate references to the original author(s) and/or paper title) and without permission from all coauthors.

Due to the nature of this violation, reasonable effort should be made to remove all past references to this paper, and future references should be made to the following article:

"Hardware-Software Co-design of QRD-RLS Algorithm with Microblaze Soft Core Processor"
by Napur Lodha, Nivesh Rai, Rahul Dubey, Hrishikesh Venkataraman
in the Third International Conference on Information Systems, Technology and Management (ICISTM-09), 2009, pp. 197 – 207.

Information Systems for science

Increasing number of information sources:

- Publishers repositories
- Open archive and dedicated social networks

Various characteristics and goals:

- free vs toll acces, Peer review vs non-Peer review
- Spreading knowledge / State of the art / Scientometrics

Scientific publications are at the heart of the system:

- Ideally: Knowledge diffusion.
- In practice: (Ac)Counting unit.



Ranking Publications, Journals, Scientists and Univ.

Librarian

What are the must-buys for my readers?

Scientist

Where shall I submit my research?

Research Administration

Who shall I hire? Who deserve a promotion?

Students

Where to study? With whom? In which country? Where shall I submit my research?

Government

Who deserve investment? What for? Which scientific field?

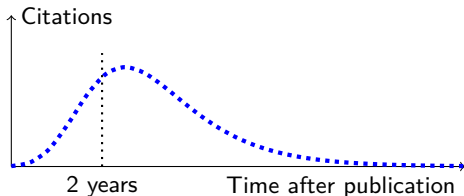
Publisher

Which journal? At what price?

Ranking scientists and journals: examples

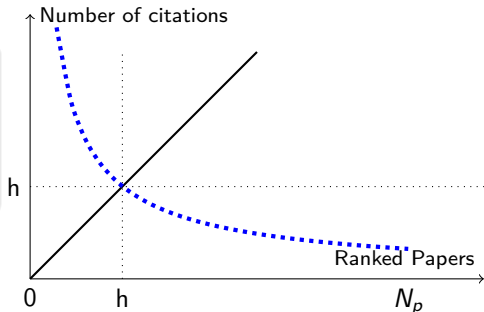
Definition (Impact Factor)

Average number of citations to papers published by the journal over the last two years. Computed since 1975.



Definition (h-index [Hirsch, 2005])

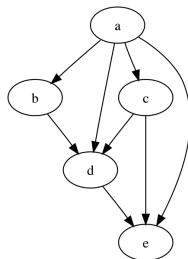
A scientist has index h if h of his or her N_p papers have at least h citations each and the other $(N_p - h)$ papers have $\leq h$ citations each.



Other Funny Numbers.

Citation Graph. ¶

- Paper that cites other papers
- Google Scholar



Other index

- $h5$ -index, g -index, h_m -index, a -index, hg -index, ar -index...

Co-authors graph



- "Erdős number" the collaborative distance between an author and P. Erdős.
- "Dijkstra number" the collaborative distance between an author and E. W. Dijkstra.



ARWU

Academic Ranking of World Universities (Shanghai ranking) since 2003

Table from Wikipedia:

Criterion	Indicator	Weighting	Source
Quality of education	(1) Alumni as Nobel laureates & Fields Medalists	10%	Official websites of Nobel Laureates & Fields Medalists
Quality of faculty	(2) Staff as Nobel Laureates & Fields Medalists.	20%	Official websites of Nobel Laureates & Fields Medalists
	(3) Highly cited researchers in 21 broad subject categories	20%	Thomson Reuters' survey of highly cited researchers
Research output	(4) Papers in Nature and Science.	20%	Citation index
	(5) Papers indexed in Science Citation Index (...)	20%	Citation index
Per capita performance	(6) Per capita academic performance of an institution	10%	—

You are the Dean:

What should you do to improve your ranking?

Quantitative rules.

2015 (not true any more): En France...

- *Publiant* : au moins 1 publication par an, ou 2 publications de rang A sur la période.
- *Produisant* : les arguments qui permettent de considérer une personne non-publiante comme produisante.

... elsewhere

- "at least one international publication per year"
- Rules for defence (MS Thesis, PhD thesis)

Bonus for publication – AEF info – Dépêche n°588621 – 04/10/2018

Exemples de primes à la publication d'un article en business school (en euros, rémunération nette, chiffres 2018) :

	Primes versées par 8 Business schools françaises classées par le <i>Financial Times</i>							
Étoiles des revues	BS 1	BS 2	BS 3	BS 4	BS 5	BS 6	BS 7	BS 8
*	1 500	1 000	500	350	-	1 000	1 500	800
**	3 000	2 000	2 000	750	2 500	2 000	4 500	1 500
***	4 500	5 000	10 000	4 000	5 000	3 000	7 500	5 000
****	6 000	10 000	15 000	12 000	10 000	5 000	12 000	10 000
Prime moyenne	3 750	4 500	6 875	4 275	4 375	2 750	6 375	4 325

Funding rules: SIGAPS [Gingras and Khelifaoui, 2021]

SIGAPS (Système d'Interrogation, de Gestion et d'Analyse des Publications Scientifiques). Gouvernemental funding for French Univ. Hospital according to SIGAPS Points.

Journals ranking according to impact factor

Points are given to publications:

Mark	Rank	points
A	top 10%, ($< 10\%$)	8
B	$10\% < \dots < 25\%$	6
C	$25\% < \dots < 50\%$	4
D	$50\% < \dots < 75\%$	3
E	$> 75\%$	2
NC	in PubMed but not in WoS	1

Per author according to position

Publication point to be multiplied by:

factor	author position
4	First and Last authors
3	Second author
2	Third and before last authors
1	others

Point value

In 2017 1 point is worth 648 €per year for 4 years.

Exercise

How much will the gouv. give to your hospital if are first author of a *Nature* publication?

Funding rules: SIGAPS [Gingras and Khelifaoui, 2021]

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How much will the gouv. give to your hospital if are first author of a *Nature* publication? $8 \cdot 4 \cdot 648 \cdot 4 = 82\,944$ €

Information Systems for science – 3 types of scientometrics services

Scopus vs Web of Science

- Fee based – Run by Private companies
- selected venues – Peer reviewed only
- Homemade databases of curated meta-data
- Coverage problem



Google Scholar

- Scrapping the web
- Access for Free



New comers: Dimensions.ai – OpenAlex

- Open meta-data provided by Crossref
- Fee based tool
- Provide curation and counting



Citation Indexes for Science

[Garfield, 1955]

In this paper I propose a bibliographic system for science literature that can eliminate the uncritical citation of fraudulent, incomplete, or obsolete data by making it possible for the conscientious scholar to be aware of criticisms of earlier papers.

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R. K. Merton letter to E. Garfield, August 3, 1974, RKMP 168.5 – reported by [Csiszar, 2020]

Watch out for goal displacement: Whenever an indicator comes to be used in the reward system of an organization or institutional domain, there develop tendencies to manipulate the indicator so that it no longer indicates what it once did.

Citation Indexes for Science

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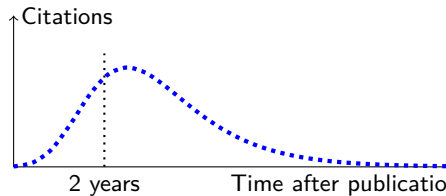
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Watch out for goal displacement: Whenever an indicator comes to be used in the reward system of an organization or institutional domain, there develop tendencies to manipulate the indicator so that it no longer indicates what it once did.

Computed yearly since 1975: *Impact Factor*

Year y : Average number of citations received that year to papers published by the journal over the last two years ($y - 1, y - 2$).



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E. Garfield letter to R. K. Merton, August 19, 1974, RKMP 168.5 – reported by [Csiszar, 2020]

If it should turn out that over the next 10 to 20 years goal displacement does occur with the Science Citation Index, then we will simply have to abandon its uses as an indicator of quality, etc.

Let's try

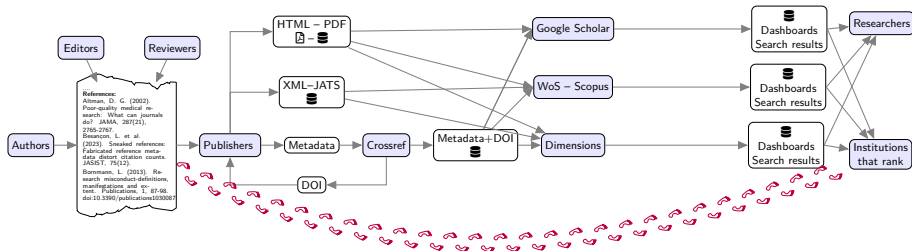
Compare 3 systems

- **Google Scholar:** <https://scholar.google.com>
- **Web of Science:** <https://access.clarivate.com>
- **Dimensions.ai:** <https://www.dimensions.ai>

Information Systems for science

Scientific publications are at the heart science:

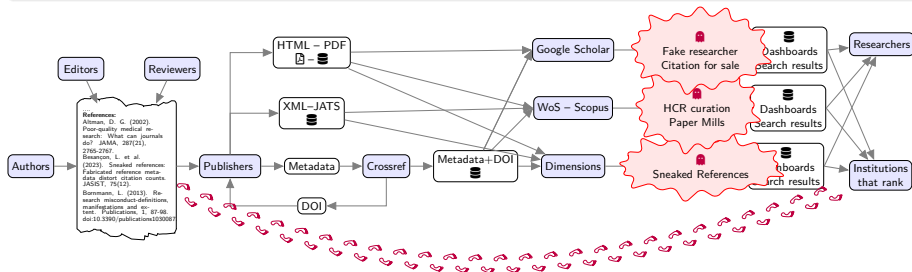
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Information Systems for science

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Paper Mills – Review Mills

China's Publication Bazaar: [Hvistendahl, 2013]

Authorship for sale \$1600 à \$26600

Citation to buy in GS [Ibrahim et al., 2024]

sold in bulk for either 300 USD per 50 citations or 500 USD per 100 citations

Review Mills :[Oviedo-García, 2024]

Template usage in peer review reports at MDPI:

*pid_mal15144828*reviewer_5	*pid_mal15207053*reviewer_1	*pid_mal15238616*reviewer_3	*pid_mal16010188*reviewer_3	*pid_mal16072780*reviewer_1	*pid_mal16124233*reviewer_1
The manuscript entitled "Changes in synthetic soda ash industry and its consequence for environment" presented study using comprehensive literature review approach. The influence of different parameters was studied and analyzed. The manuscript lacks clarity and needs much improvement before further processing. It seems like this paper is directly made from thesis without putting the additional efforts required for writing manuscripts. This reviewer recommends minor editing and resubmits for re-review. Comments: The English writing of the manuscript needs improvement. Therefore, it could benefit greatly from professional editing to improve technical writing and English. Please mention your study limits and suggest some future research topics. In References, the sources are written in different styles. Please update the reference list. It is necessary to bring in accordance with the requirements of the magazine for the design of References. If possible, indicate DOI. The literature can be expanded by studying some of these papers. Prediction of compressive strength of rice husk ash concrete through different machine learning processes. Comprehensive strength prediction of rice husk ash using multi-physical genetic expression programming.	This paper presents "Bubble evolution under the action of chemical admixture and its effects on concrete properties". The topic is novel and the authors described the topic very well. However, in order to proceed for publication, following major comments should be incorporated. The English writing of the manuscript needs improvement. Therefore, it could benefit greatly from professional editing to improve technical writing and English. Please mention your study limits and suggest some future research topics. In References, the sources are written in different styles. Please update the reference list. It is necessary to bring in accordance with the requirements of the magazine for the design of References. If possible, indicate DOI. The literature can be expanded by studying some of these papers. Prediction of compressive strength of rice husk ash concrete through different machine learning processes. Comprehensive strength prediction of rice husk ash using multi-physical genetic expression programming.	The manuscript entitled "Study on Rheological Properties, Modification Mechanism and Optimization Method of Waste PP/SBS Composite Modified Asphalt" presented experimental study. The influence of different parameters was studied and analyzed. The manuscript lacks clarity and needs much improvement before further processing. It seems like this paper is directly made from thesis without putting the additional efforts required for writing manuscripts. This reviewer recommends major editing and resubmits for re-review. Comments: The English writing of the manuscript needs improvement. Therefore, it could benefit greatly from professional editing to improve technical writing and English. Please mention your study limits and suggest some future research topics. In References, the sources are written in different styles. Please update the reference list. It is necessary to bring in accordance with the requirements of the magazine for the design of References. If possible, indicate DOI. The literature can be expanded by studying some of these papers. Prediction of Marshall Flow and	The manuscript entitled "Laboratory characterization of sustainable Thin Asphalt Overlay mixes with recycled aggregates" presented experimental and statistical study. The influence of different parameters was studied and analyzed. This reviewer recommends major editing and resubmits for re-review. Comments: The English writing of the manuscript needs improvement. Therefore, it could benefit greatly from professional editing to improve technical writing and English. Please mention your study limits and suggest some future research topics. In References, the sources are written in different styles. Please update the reference list. It is necessary to bring in accordance with the requirements of the magazine for the design of References. If possible, indicate DOI. The literature can be expanded by studying some of these papers. Predicting Marshall Flow and Marshall Stability of Asphalt Pavements Using Multi-Expression Programming. Evaluation of Moisture Damage Potential in Hot Mix Asphalt Using	The manuscript entitled "Study on the mechanism of modification of construction waste to solidified silt" presented experimental study. The influence of different parameters was studied and analyzed. However, there seems to be little to no novelty in this study. This reviewer recommends major editing and resubmits for re-review. Comments: The English writing of the manuscript needs improvement. Therefore, it could benefit greatly from professional editing to improve technical writing and English. Please mention your study limits and suggest some future research topics. In References, the sources are written in different styles. Please update the reference list. It is necessary to bring in accordance with the requirements of the magazine for the design of References. If possible, indicate DOI. Please use some innovative keywords. Please mention your study limits in the abstract. The literature can be expanded by studying some of these papers. Predictive modeling of swell-strength of expansive soils using artificial intelligence approaches: ANN, ANFIS and GEP Predictive modeling for sustainable high performance	The manuscript entitled "Experiment study on the strength properties and hydration products of cement mortar with hybrid recycled powders" presented experimental study. The influence of different parameters was studied and analyzed. However, there seems to be little to no novelty in this study. This reviewer recommends major editing and resubmits for re-review. Comments: The English writing of the manuscript needs improvement. Therefore, it could benefit greatly from professional editing to improve technical writing and English. Please mention your study limits and suggest some future research topics. In References, the sources are written in different styles. Please update the reference list. It is necessary to bring in accordance with the requirements of the magazine for the design of References. If possible, indicate DOI. Please use some innovative keywords. Please mention your study limits in the abstract. The literature can be expanded by studying some of these papers. Effect of recycled coarse aggregate and bagasse ash on two-stage concrete • Life cycle impact

Gaming the metrics: Who and Why?

A. Librarian

What are the must-buys for my readers?

B. Scientist

Where shall I submit my research?

C. Research Administration

Who shall I hire? Who deserve a promotion?

D. Students

Where to study? With whom? In which country? Where shall I submit my research?

E. Government

Who deserve investment? What for? Which scientific field?

F. Publisher

Which journal? At what price?

Who wants to game the metrics?

A, B, C, D, E or F ?

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<https://cloud.univ-grenoble-alpes.fr/s/3Ro6LpMbP6fckFH>

