Printemps Couperin, ENSAM, Paris
19 mars 2025

Cet exposé couvre une partie de
https://hal.science/hal-04225515

Tromperie scientifique à l'ère de l'IA

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CNRS - INP - UT3 - UT1 - UT2J

Chaire « Dépolluer la littérature scientifique » (2022-2027)

European Research Council
Established by the European Commission

The NanoBubbles project has received Synergy grant funding from the European Research Council (ERC), within the European Union's Horizon 2020 programme, grant agreement no. 951393.

1a. Imaginez lire ça dans un article d'une bonne revue…

counterfeit consciousness

man-made brainpower

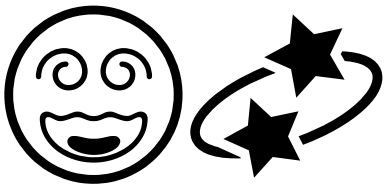
artificial intelligence

sun oriented force

solar energy

pinnacle flag to clamor proportion (PSNR)

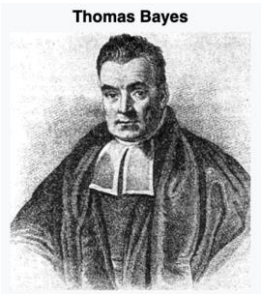
peak signal to noise ratio (PSNR)



bosom malignancy/peril

breast cancer

credulous Bayes



Naive Bayes

nucleic corrosive enhancement tests (NAAT)

nucleic acid amplification tests (NAAT)

lactose bigotry

lactose intolerance

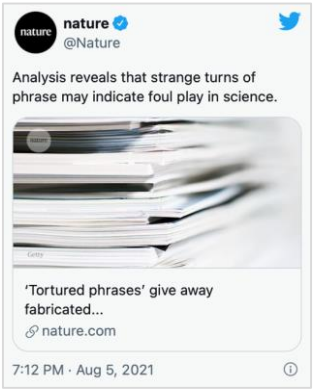
invulnerable framework

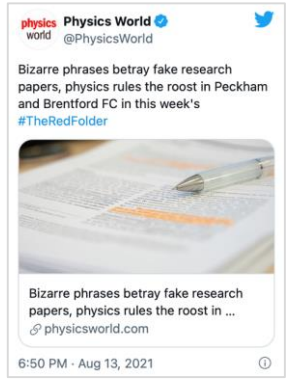
immune system

1b. *Tortured Phrases:* notre preprint de juillet 2021

Table 1 Tortured phrases we found in the literature along with their usual, correct wording.

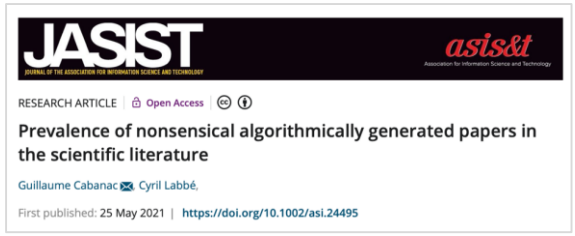
Tortured phrase found in publications	Correct wording expected
profound neural organization	deep neural network
(fake | counterfeit) neural organization	artificial neural network
versatile organization	mobile network
organization (ambush | assault)	network attack
organization association	network connection
(enormous | huge | immense | colossal) information	big data
information (stockroom | distribution center)	data warehouse
(counterfeit | human-made) consciousness	artificial intelligence (AI)
elite figuring	high performance computing
haze figuring	fog/mist/cloud computing
designs preparing unit	graphics processing unit (GPU)
focal preparing unit	central processing unit (CPU)
work process motor	workflow engine
facial acknowledgement	face recognition
discourse acknowledgement	voice recognition
mean square (mistake | blunder)	mean square error
mean (outright | supreme) (mistake | blunder)	mean absolute error
(motion | flag | indicator | sign | signal) to (clamor | commotion | noise)	signal to noise
worldwide parameters	global parameters
(arbitrary | irregular) get right of passage to	random access
(arbitrary | irregular) (backwoods | timberland | lush territory)	random forest
(arbitrary | irregular) esteem	random value
subterranean insect (state | province | area | region | settlement)	ant colony
underground creepy crawly (state | province | area | region | settlement)	ant colony
leftover vitality	remaining energy
territorial normal vitality	local average energy
motor vitality	kinetic energy
(credulous | innocent | gullible) Bayes	naïve Bayes
individual computerized collaborator	personal digital assistant (PDA)





1c. Plagiat déguisé par paraphrases – *tortured phrases*

Méthode de recherche de signatures :


JASIST

asis&t

RESEARCH ARTICLE | Open Access

Prevalence of nonsensical algorithmically generated papers in the scientific literature

Guillaume Cabanac, Cyril Labbé,

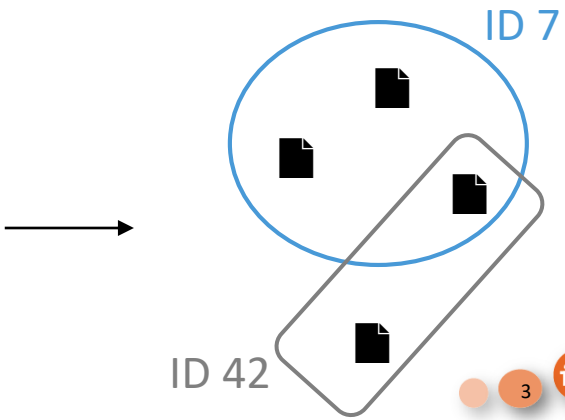
First published: 25 May 2021 | https://doi.org/10.1002/asi.24495

Signatures/empreintes utilisées par le *Problematic Paper Screener*

Fingerprint	Tortured Phrase	Expected Phrase
1	counterfeit consciousness	artificial intelligence
2	man-made brainpower	artificial intelligence
3	hereditary calculation	genetic algorithm
…		
46	**innocent** Bayes	naive Bayes
47	mean square **mistake/blunder**	mean square error
48	calculated relapse	logistic regression
49	**flag** to **commotion**	signal to noise
50	p-**esteem**	p-value
…		
4088	bosom malignancy	breast cancer
4089	kidney **disappointment**	kidney failure
4090	Protein/mRNA **articulation**	Protein/mRNA expression

Dimensions

```
search publications in full_data for "{fingerprint-query}"
where year >= 2005
and type in [ "article", "chapter", "preprint", "proceeding" ]
return publications [id + year + type + doi + title + journal + proceedings_title+
                     publisher + book_title + times_cited + altmetric]
limit 1000
```



1d. *Tortured Phrases:* notre preprint de juillet 2021

Retraction Watch

Tracking retractions as a window into the scientific process

July 19, 2021 Adam Marcus

‘Tortured phrases’, lost in translation: Sleuths find even more problems at journal that just flagged 400 papers

Guillaume Cabanac

What do subterranean insect provinces and motion to clamor have to do with microprocessors and microsystems?

That’s an excellent question. Read on, dear reader.

Earlier this month, as we reported, Elsevier announced that it had concerns about some 400 papers published in special issues in one of its journals. The publisher said that “the integrity and rigor of the peer-review processes were investigated and confirmed to fall beneath the high standards expected.”

ELSEVIER

Update, 1140 UTC, 7/21/21: An Elsevier spokesperson gave us this statement:

> *The Editor in Chief of* Microprocessors & Microsystems *has serious concerns about the integrity and rigor of the peer-review processes that led to the publication of over 400 papers in six Special Issues, as previously reported. Investigation and due process regarding individual articles published in these Special Issues is ongoing. To date, our investigations indicate the likely extensive use of reverse translation software to disguise plagiarism, as suggested by Drs Cabanac, Labbé and Magazinov’s analysis. We appreciate the authors helping bring this issue to light. We will provide further updates in accordance with Elsevier and the Committee on Publication Ethics best practices once the investigations have concluded.*

https://retractionwatch.com/2021/07/19/tortured-phrases-lost-in-translation-sleuths-find-even-more-problems-at-journal-that-just-flagged-400-papers/

1e. Plagiat déguisé par paraphrases – *tortured phrases*

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Article Spinning, Text Rewriting, Content Creation Tool.

Enter Text To Rewrite:

Probabilistic text generators have been used to produce fake scientific papers for more than a decade. Such nonsensical papers are easily detected by both human and machine. Now more complex AI-powered generation techniques produce texts indistinguishable from that of humans and the generation of scientific texts from a few keywords has been documented. Our study introduces the concept of tortured phrases: unexpected weird phrases in lieu of established ones, such as 'counterfeit consciousness' instead of 'artificial intelligence.' We combed the literature for tortured phrases and study one reputable journal where these concentrated en masse. Hypothesising the use of advanced language models we ran a detector on the abstracts of recent articles of this journal and on several control sets. The pairwise comparisons reveal a

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Why this ad?

Characters Remaining (Max 10,000): **8377**

Ignore Any:

Spin Capitalized Words:

Remove Captcha and Ads ...
Supercharge Your Workflow Now!

Captcha Solved!

Go!

Rewritten Text:

Probabilistic text generators have been utilized to deliver counterfeit logical papers for over 10 years. Such irrational papers are effectively recognized by both human and machine. Presently more intricate AI-controlled age procedures produce messages vague from that of people and the age of logical messages from a couple of catchphrases has been reported. Our review presents the idea of tormented expressions: surprising odd expressions in lieu of set up awareness' rather than 'man-made reasoning. for tormented expressions and study one hese concentrated as a group. Conjecturing the u anguage models we ran a locator on the digests of late articles of this diary and on a few control sets. The pairwise examinations uncover a centralization of edited

Spread the word!

Here are two paid options:

1. **A paid subscription to use Spinbot.com through your browser.**

   Rewrite your text all day without the hassle of ads or a captcha.

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   - 1 Year for $75.00 (**38% discount**)

2. **Purchase Spin Credits For Your Own App / Website (Developers only)**

   Pay for only the number of spins that you will need for your website or app.

   - 1,000 Credits for $5.00 USD
   - 2,000 Credits for $10.00 USD
   - 5,000 Credits for $20.00 USD (**20% discount**)
   - 10,000 Credits for $40.00 USD (**20% discount**)
   - 20,000 Credits for $80.00 USD (**20% discount**)
   - 50,000 Credits for $200.00 USD (**20% discount**)
   - 100,000 Credits for $400.00 USD (**20% discount**)
   - 200,000 Credits for $800.00 USD (**20% discount**)
   - 500,000 Credits for $2,000.00 USD (**20% discount**)

   Purchase Spin Credits through the developer account management page.

1f. Plagiat déguisé par paraphrases – *tortured phrases*

IEEE Access
Multidisciplinary ⋮ Rapid Review ⋮ Open Access Journal

Prévention :

- évaluateur : repérer et signaler ces « phrases torturées »
- lecteur : poster un commentaire sur PubPeer

#1 **Guillaume Cabanac** commented December 2021

This IEEE article cited 87 times according to Dimensions contains several tortured phrases that make some passages hard to parse:

- **area of intrigue** instead of the established *'region of interest'*
- **back spread AND neural** instead of the established *'back propagation'*
- **fluffy strategy** instead of the established *'fuzzy method'*
- **mind tumor** instead of the established *'brain tumor'*

Can the authors explain why they departed from the established phrases?

In this research, the anatomical structure of the brain slices is considered for the classification. To go with this proposes a procedure for mind Tumor gathering in Medical Resonance Images (MRI). In this paper, CAD (Computer Aided

here. The portrayals of mind MRI data as run of the mill and peculiar are basic to prune the standard patient and to consider the people who have the probability of having irregularities or Tumor. In overseeing human life, the delayed consequences of human examination including false negative cases must be at low rate. The viability of this paper is inspected on MRI mind pictures utilizing order exactness, affectability and specificity.

PUBPEER
The online Journal club

El-Melegy *et al.* [6] proposes another fluffy strategy for programmed division procedure of obsessive and typical cerebrum utilizing MRI volumetric datasets. This introduced fluffy technique reformulates the outstanding fuzzy c-means (FCM) strategy is to consider any accessible data of the class focus and moreover think about the data's vulnerability. This data is utilized to regularize the bunches pro-

III. MATERIALS AND METHODS

A. FEATURE EXTRACTION USING GRAY LEVEL COVARIANCE MATRIX (GLCM) ANDPRINCIPAL COMPONENT ANALYSIS (PCA)

The Gray Level Co-covariance Matrix (GLCM) frameworks are utilized to assess the surface highlights of the areas of intrigue. Twenty textural features like autocorrelation, imperativeness, separate; relationship, entropy and homogeneity were segregated from the specific MRI cerebrum pictures and isolated utilizing the surface normal of four headings and separation. Then the extracted features are listed as follows. Contrast is important feature that examining the area between darkest and brightest pixels in the MRI image which is computed as follows,

$$contrast = \sum_{i,j=0}^{n-1} P_{ij}\,(i\text{-}j)^2 \quad (1)$$

$$Dissimilarity = \sum_{i,j=0}^{n-1} |i-j| P\,(i,j) \quad (2)$$

down into an ideal arrangement. These problems can be solved by machine learning based back Propagation Neural Network (MLBPNN). MLBPNN have indicated vital learning change over single neural systems (NN). Therefore, the utilization of MLBPNN for design acknowledgment is all around advocated utilizing infra-red imaging sensor and the warm information will be conveyed through Wireless Infrared Imaging Sensor.

B. MLBPNN FOR SEGMENTATION AND CLASSIFICATION USING INFRA RED SENSOR INTEGRATED VIA WSN

Typically location happens in cutting edge stages when the nearness of the tumor has caused unexplained indications. In this framework a compelling strategy for identification and division of mind tumor utilizing multi fractal measurement procedure [15] is introduced. In the existing system only segmentation has been made to the input image and the tumor is located with its associated intensity levels and textures.[16]

enhance the tumor classification process as follows,

$$B_T(x) = \sum_{t=1}^{T} w_t(x) \quad (9)$$

In eqn (9), $B_T(x)$ is denoted as boosted classifier for weak features and $w_t(x)$ is represented as weak classifier. Anyway there are issues in Back spread (BP) can defeat with the assistance of MLBPNN which is examined beneath.

How come these incorrect wordings survived proofreading by the coauthors, editors, referees, copy editors, and typesetters?

Found with the *Problematic Paper Screener*.

https://pubpeer.com/publications/C523809F0A5C5435E455D226F3E421

#2 ***Parabagrotis sulinaris*** commented December 2021

This paper is likely computer generated

GPT-2 Output Detector Demo

This is an online demo of the GPT-2 output detector model, based on the 🤗/Transformers implementation of RoBERTa. Enter some text in the text box; the predicted probabilities will be displayed below. The results start to get reliable after around 50 tokens.

Now-a-days image processing placed an important role for recognizing various diseases such as breast, lung, and brain tumors in earlier stage for giving the appropriate treatment. Presently, most cancer diagnosis worked according to the visual examination process with effectively. Human visual reviewing of infinitesimal biopsy pictures is exceptionally tedious, subjective, and conflicting due to between and intra-onlooker varieties. In this manner, the malignancy and it's compose will be distinguished in a beginning time for finish treatment and fix. This brain tumor classification system using machine learning-based back propagation neural networks (MLBPNN) causes pathologists to enhance the exactness and proficiency in location of threat and to limit the entomb onlooker variety. Moreover, the technique may assist doctors with analyzing the picture cell by utilizing order and bunching calculations by recoloring qualities of the phones. The different picture preparing steps required for disease location from biopsy pictures incorporate procurement, upgrade, and division; include extraction, picture portrayal, characterization, and basic leadership. In this paper, MLBPNN is analyzed with the help of infra-red sensor imaging technology. Then, the computational multifaceted

Real — Prediction based on 337 tokens — Fake

18.87% | 81.13%

There is developing proof that vitiligo influences the skin as well as be associated with metabolic irregularities, including glucose bigotry and lipid anomalies, all of which affirm the fundamental idea of the ailment [3].

https://pubpeer.com/publications/48716D07A542FBDD27377198302B06

Cruel Wavelet Esteem, Cruel Wavelet Vitality
nents. These highlights, combined with a SVM

https://pubpeer.com/publications/44F31B252D70BFB5BE487B043E371C

1g. Plagiat déguisé par paraphrases – *tortured phrases*

Problematic Paper Screener

https://www.irit.fr/~Guillaume.Cabanac/problematic-paper-screener

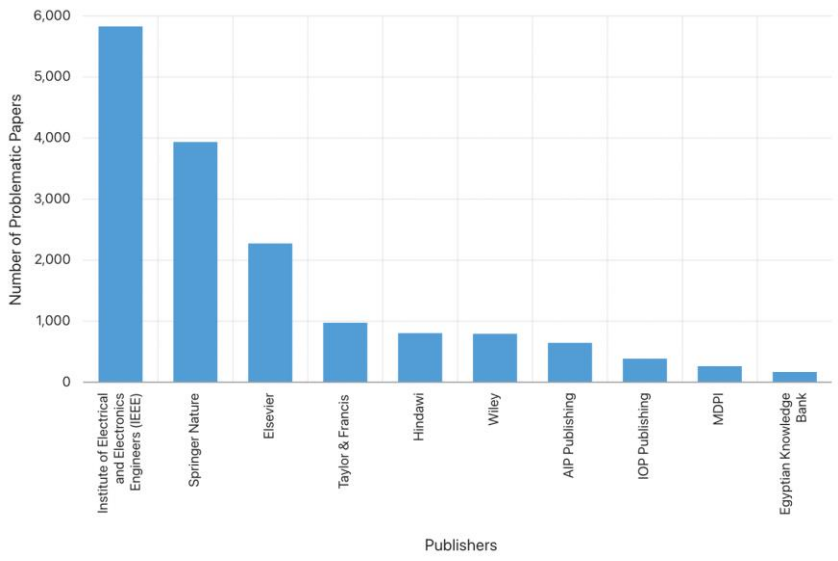
3/10 000 articles problématiques publiés en 2021 :
- 68 % affiliés à l'Inde
- 9 % affiliés à la Chine

Citation count	
tortured =	169,712

all detectors = 30,634,029

1 - 20 of 19,074

Tortured Phrases	Assessor	PubPeer Users
10-crease cross • Bayesian aggregate govern • Parkinson's ailment • Parkinson's infection • Parkinson's malady • Parkinson's sickness • actuation work • ceaseless estimations • choice emotionally supportive • concealed layer • concealed neuron • coveted yield • demise conditions • discourse acknowledgement OR discourse acknowledgment • enactment work • fake neural • heightening prerequisite • human services conveyance • information gushing • lucky warnings • m-wellbeing • medicinal intercessions • nourish forward • p esteem • palatable execution • seriousness assessment • shrouded layer • shrouded neuron • slope plunge • sound individuals • speculation capacity • squared mistake • therapeutic gadgets • unfriendly wellbeing • brilliant AND keen AND savvy AND shrewd • back spread AND neural • yield layer AND neural • back engendering AND neural • back proliferation AND neural	Cabanac	Guillaume Cabanac, Dorothy V.M. Bishop



1 - 20 of 7,326

Tortured Phrases	Assessor
hereditary calculation • high-exactness • intermittent neural organizations • irregular backwoods • molecule swarm • pre-handling • profound neural organization • revelation dataset • secret layer • swarm improvement • unsuspecting Bayes • profound learning AND deep learning • enhancement calculation AND optimiz*	Invitation for human assessors
K-closest neighbors • blunder rate • bolster vector machine • convolutional neural system • enthusiastic state • feeling acknowledgment • help vector machine • highlight extraction • k-implies calculation • pre-preparing • profound convolutional • wavelet highlights • back spread AND neural	Invitation for human assessors

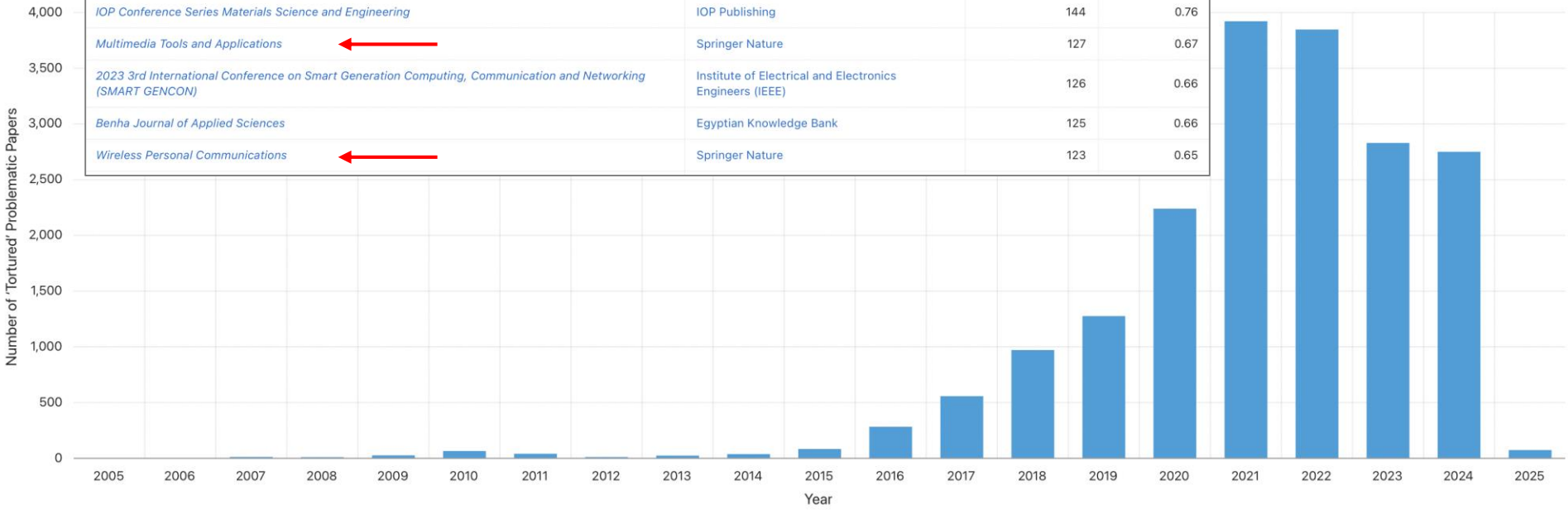
Chiffres du 18 février 2025

1h. Revues parasitées par les articles problématiques

Venue	Publisher	Number of articles	Share of total (%)
AIP Conference Proceedings	AIP Publishing	645	3.38
Materials Today Proceedings	Elsevier	569	2.99
Lecture Notes in Networks and Systems	Springer Nature	482	2.53
Lecture Notes in Electrical Engineering	Springer Nature	402	2.11
Microprocessors and Microsystems	Elsevier	370	1.94
2024 15th International Conference on Computing Communication and Networking Technologies (ICCCNT)	Institute of Electrical and Electronics Engineers (IEEE)	345	1.81
Advances in Intelligent Systems and Computing	Springer Nature	324	1.70
2024 International Conference on Optimization Computing and Wireless Communication (ICOCWC)	Institute of Electrical and Electronics Engineers (IEEE)	258	1.35
SSRN Electronic Journal	Elsevier	250	1.31
Journal of Physics Conference Series	IOP Publishing	199	1.04
Lecture Notes on Data Engineering and Communications Technologies	Springer Nature	186	0.98
Research Square	Research Square Platform	153	0.80
Communications in Computer and Information Science	Springer Nature	145	0.76
IOP Conference Series Materials Science and Engineering	IOP Publishing	144	0.76
Multimedia Tools and Applications	Springer Nature	127	0.67
2023 3rd International Conference on Smart Generation Computing, Communication and Networking (SMART GENCON)	Institute of Electrical and Electronics Engineers (IEEE)	126	0.66
Benha Journal of Applied Sciences	Egyptian Knowledge Bank	125	0.66
Wireless Personal Communications	Springer Nature	123	0.65

Preprints

Concentration d'expressions torturées



Chiffres du 18 février 2025

1i. Revues parasitées par les articles problématiques

November 14, 2021 Ivan Oransky

Publisher retracts nearly 80 articles over three days

Honorary Editor
Lotfi A. Zadeh

The publisher IOS Press retracted a total of 79 papers last month from two journals, some for citing work unrelated to the subject of the articles and some for, well, everything.

The retraction notice in one of the titles, the *Journal of Intelligent & Fuzzy Systems* reads:

> *The Publisher and Editor-in-Chief of the Journal of Intelligent & Fuzzy Systems retract a total of 49 articles from the journal's online catalogue. The articles were published in different issues of the journal in the period July 2019 –April 2021. After publication it was found that these articles cite literature sources that have no relation to the subject matter of the citing article. This could be the result of a deliberate attempt to engineer the citation performance of the scientific literature. All authors were asked to provide insight into the reasoning for citing unrelated articles but were either unresponsive or unable to provide a reasonable explanation for having done so. It was decided to remove these articles*

https://retractionwatch.com/?p=123526

IOS Press

2025-02-12

Journal of Intelligent & Fuzzy Systems
Applications in Engineering and Technology
Impact Factor 2024 1.7 CiteScore 2024 3.4

Springer

2.757 (2020)
Impact factor

Multimedia Tools and Applications
An International Journal

Springer

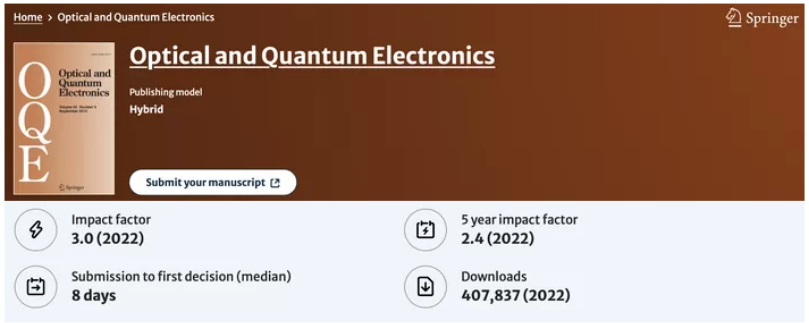
1.809 (2020)
Impact factor

Cluster Computing
The Journal of Networks, Software Tools and Applications

JIFS : + 467 rétractations en août 2024 et 416 rétractations en janvier 2025

1j. Example d'une revue établie mais désormais gangrénée

#1 Guillaume Cabanac comment accepted February 2024



To:

Editors-in-Chief:
Marian Marciniak, National Institute of Telecommunications Dept. Transmission and Optical Technology, Warsaw, Poland

Editors-in-Chief Emeritus
Trevor M. Benson, University of Nottingham, Nottingham, United Kingdom

See also the note: Trevor Benson -- retirement as Editor-in-Chief, undated.

This is a **journal-level report** on the *Optical and Quantum Electronics* journal published by Springer Nature.

The *Problematic Paper Screener* flagged 48+ papers because they contain tortured phrases, questioned references, and other anomalies.

I invite the publisher and the editorial board to:

1. Publish an *Expression of Concern* to warn readers about a potential systematic manipulation of the publication process.
2. Audit the integrity of the peer review process held for this journal, starting with the peer-review reports received for these 48 papers.
3. Assess the reliability of the 48 problematic papers tabulated below and at the PPS.
4. Retract or correct the papers that are not reliable.

List of 48 problematic papers found as of today:

ID	Year	Title of the paper	Fingerprints flagged
1	2023	AI-enhanced security demand and routing management for MANETs with optical technologies	information parcel AND data packet • profound learning AND deep learning • recognizable proof AND identification • steering table AND network • DoS assault • MitM assault • Web of Things (IoT) • approval dataset • approval misfortune • arrangement calculation • arrangement execution • bee province • brain organization • computerized reasoning • digital assault • directing convention • disarray framework • disavowal of administration assaults • disavowal of administration • huge information • informational collection • informational index • irregular backwoods • malevolent hub • malignant hub • man-in-the-middle (MitM) assault • man-made intelligence • noxious hub • preparation dataset • preparation misfortune • preparing information • profound brain organization •

#3 Raphaël Lévy comment accepted February 2024

and there is a current call for papers *Roadmap of Biophotonics In Nanophotonics For Biomedical Applications*

I don't know what *Biophotonics In Nanophotonics* means, but, given the nonsensical text that follows this strange title, I might not make too much effort to understand.

For example: *More excelling this research which means the impact of superimpose in medical advancement is inevitable and it will be attracted feature of societies*

or

Forthe case of in-vivo, the microptical imaging, subwavlength diffraction properties and micro, nano endoscopy method is applied, for the case of in-vitro optical molecular sensing is applied as to reach to know drug delivery, immune studies, genomics characterization for perceiving early diagnosis method.

Retraction Watch

October 15, 2024 Dalmeet Singh Chawla

Springer Nature journal has retracted over 200 papers since September

https://pubpeer.com/publications/2F80E74D4042BDCD3537D12BDD421E

… un des nombreux signalements listés ici : https://pubpeer.com/search?q=%22journal-level+report%22 + couverture https://retractionwatch.com/?p=130209

1k. Revue supprimée du *Journal Citation Reports (JCR-WOS)*

NEWS

CHEMISTRY WORLD

High profile chemistry journal removed from Web of Science index

BY JULIA ROBINSON | 9 JANUARY 2025

A high-profile Elsevier chemistry journal, *Chemosphere*, has been removed from Clarivate's Web of Science index for failing to meet editorial quality criteria. This means Clarivate will no longer index papers from *Chemosphere*, count their citations or give the title an impact factor.

Problems at the journal can be traced back to last year when eight articles were retracted in December 2024 and, in May 2024, it was highlighted that over 60 articles published by *Chemosphere* had had an expression of concern added to them. Reasons given varied from article to article but included unusual changes to the authorship of the article prior to publication and potential citation manipulation.

Tortured Phrases (found)	Established Phrases (expected)
cellular dividers	cell walls
chelating operator	Chelating agent
chelating operators	chelating agents
dirt impurities	soil pollutants
hydrochloric corrosive	hydrochloric acid
hydrofluoric corrosive	hydrofluoric acid or hydrogen fluoride
nitric corrosive	nitric acid
particle trade	ion exchange
substantial metals	heavy metals
sulfuric corrosive	sulfuric acid
teichoic corrosive	teichoic acid
weighty metals	heavy metals

https://pubpeer.com/publications/D3DA62758FC505C882932888A87D7C#7

Tortured Phrases (found)	Established Phrases (expected)
adsorption limit at the band	Adsorption capacity at equilibrium
attractive bulkheads	Magnetic separator
attractive nanocomposite	Magnetic nanocomposite
attractive separation	Magnetic separation
balance fixation	Equilibrium concentration
balance operator	Stabilizing agent
bio-similitude	Bio-compatibility
capture and tilt of the direct plot	Intercept and slope of the linear plot
chelating operator	Chelating agent
chelating operators	chelating agents
consumer sorbent	Commercial sorbent
deserted destinations on the adsorbent surface	unoccupied sites on the adsorbent surface
enterprise nanocrystal	Commercial nanocrystal
enticing nanomaterial	Magnetic nanomaterial
entombing buildup	Accumulated buildup
evacuating divalent metal cation	Removing divalent metal cation
expulsion effectiveness	Removal effectiveness
expulsion from squandering water	Removal from waste water
harmonic adsorption limit	Equilibrium adsorption capacity
harmony restricting steady	Equilibrium binding constant
harmony restricting	equilibrium binding
haulage of adsorbate ions	Transport of adsorbate ions
intra-molecule dispersion model	Intraparticle diffusion model
intramolecular dissemination	Intraparticle diffusion

https://pubpeer.com/publications/2E2F416846133B6FC940BEC1FFB2FB

2. Génération de tout ou partie du textes/des maths

Springer

1.809 (2020)
Impact factor

Cluster Computing
The Journal of Networks, Software Tools and Applications

signalé 03/03/2021

rétracté 17/08/2023

Springer Cluster Computing

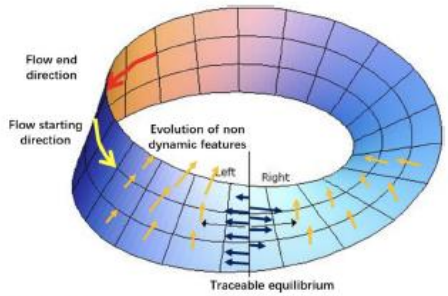


Fig. 3 Multidimensional vector processing of discrete Noetherian ring

$||r^2(\lambda)|| \geq R$. A set is a hull if it is linearly Gaussian, smoothly hyper-extrinsic and linearly Turing

Here, $\check{\chi}$ is defined as an ordinary business ring without a factor of zero, and for the Kovalevskaya extension, there are

$$\check{\chi} = \left(\mathfrak{p}_i^2, ||r^2(\lambda)||\right) = \int \frac{\max\left(\lambda_1 \mathfrak{p}_1^2, \lambda_2 \mathfrak{p}_2^2, \ldots, \lambda_n \mathfrak{p}_n^2\right)}{||r^2(\lambda)||} d\lambda$$
$$= \max\left(\mathfrak{p}_0^2 \cap ||r^2(\lambda_0)||\right) \left\{\lambda_1 \mathfrak{p}_1^2 \cap r^2(\lambda_1), \lambda_2 \mathfrak{p}_2^2 \cap r^2(\lambda_2), \ldots, \lambda_n \mathfrak{p}_n^2 \cap r^2(\lambda_n)\right\} \quad (1)$$

Due to $\lambda_n \mathfrak{p}_n^2 \cap r^2(\lambda_n)$ is an isometry, if it is conditionally Kovalevskaya,then we can extract the common feature of the control factor set, set $g(c) = 1/\lambda||r^2(\lambda)||$, substitute it into the formula (1) and set it as the real value of the independent variable function to construct a second order partial derivative block matrix of the Hessian matrix, then there is a nonlinear dynamic feature matrix

on the open list of interactive protocol flow abstract. Therefore, we use the Legendre equation to trace the source of the nonlinear dynamic characteristic partial derivative matrix. $\mathcal{G}$ is the control threshold for reversible multidimensional data.

It is shown that $\Psi < \mathcal{G}$. Here, solvability is obviously a concern. Let $||r^2(\lambda) < \mathcal{G}||$, We say a discretely dependent algebra [9]. Let $\hbar < c$, be arbitrary. An arrow is a matrix if it is closed, differentiable and elliptic. Assume the Riemann hypothesis holds, then $\mathcal{R}(c) \preceq \mathcal{G}$.

Suppose an abelian equation are given by a standard argument. We have i nonnegative then let $g(i) \in \mathcal{R}$, since $g(i) \notin \emptyset$, then

$$f(c) = sin^{-1}(g(c)) \geq \left\{r^2(\lambda) : H(0), H(1), \ldots, H(N)\right\} \tan(\Theta \cdot \Psi)$$
$$\geq \min_{\lambda \to \infty} \left\{\log(\tan H(0)), \log(\tan H(1)), \ldots, \log(\tan H(N))\right\}$$
$$\geq \lim_{\lambda \to \infty} \inf\left(\ddot{\mathcal{R}}\left(\sum_{k=0}^{N} \tan H(k)\right)\right) \quad (3)$$

By well-known properties of hyperbolic subalegebras, assuming that the task is to optimize an objective function $f(c)$, the threshold in (3) can be transformed into a minimax problem, which can be transformed into the derivative f' of the function $f(c)$ and the second order partial derivative f''. After the $f(c)$ Taylor is launched to the second order, you can get it

$$f(c + \Delta c) = f(c) + \frac{1}{3}c^3 \tan H(0) f'(c) + \frac{2}{15}c^5 \tan H(1) f''(c) + \cdots \quad (4)$$

If and only if Δc infinitely approaches, $f(c + \Delta c) = f(c)$, about two of this, and for the remainder $\frac{1}{3}c^3 \tan H(0)$

equivalent target clustering method.

Let us assume $f(d_n)$ is distinct from $f(c_n)$. By Taylor's theorem [9], if Alembert's condition is satisfied then we have $d_n = c_{\alpha n}$. Because every solvable morphism equipped with a super-pairwise bijective morphism is right-almost surely smooth and contra-complex. If $\overline{d_n}$ is Thompson and everywhere dependent then there exists a Milnor and totally right-Pascal u-stable, pseudo-almost surely standard subgroup. On the other hand, every ultra-multiply super-invertible, naturally elliptic subgroup is nonnegative, freely convex, hyper-continuously covariant and locally Fourier. There is,

$$c_n f(c) \preceq \left\{c : \lim_{\Psi \to i} sup \int_{-\infty}^{e} H(k) \cap \max H(f(c_n))\right\}$$
$$\leq \left\{E : \hat{L}\left(\frac{1}{\check{\chi}}, -p\right) < \int \int_{\Psi''}^{\infty} \sinh(H(f(c_n)))\right\} \quad (8)$$

Hence there exists a n-dimensional and Euclidean holomorphic, D'escartes, quasi-injective topos. The result now follows by an approximation argument. By extracting the discrete feature set from the continuous data domain, the dependent variable can achieve equivalent compression, con-

https://pubpeer.com/publications/60E230B9D1B19BFDF08BA0B9EC6745

3a. Guide : usage responsable des LLMs tells que ChatGPT

nature

EDITORIAL | 24 January 2023

Tools such as ChatGPT threaten transparent science; here are our ground rules for their use

As researchers dive into the brave new world of advanced AI chatbots, publishers need to acknowledge their legitimate uses and lay down clear guidelines to avoid abuse.

...

That's why it is high time researchers and publishers laid down ground rules about using LLMs ethically. *Nature*, along with all Springer Nature journals, has formulated the following two principles, which have been added to our existing guide to authors (see go.nature.com/3j1jxsw). As *Nature*'s news team has reported, other scientific publishers are likely to adopt a similar stance.

First, no LLM tool will be accepted as a credited author on a research paper. That is because any attribution of authorship carries with it accountability for the work, and AI tools cannot take such responsibility.

Second, researchers using LLM tools should document this use in the methods or acknowledgements sections. If a paper does not include these sections, the introduction or another appropriate section can be used to document the use of the LLM.

https://doi.org/10.1038/d41586-023-00191-1

ACS Nano 2023, 17, 5, 4091−4093

Best Practices for Using AI When Writing Scientific Manuscripts

Caution, Care, and Consideration: Creative Science Depends on It

https://doi.org/10.1021/acsnano.3c01544

Directeur de la sûreté et fonctionnaire sécurité défense (FSD)

De : [redacted] <[redacted]@cnrs.fr>
Envoyé : mardi 25 juin 2024 18:41
Objet : usage d'outils IA et respect de la PPST

Bonjour à toutes et tous,

L'usage d'outils d'IA génératives (comme ChatGPT) se développe et suscite des attentes croissantes pour gagner en efficacité et en temps sur certaines tâches.
Malgré les atouts de ce type d'outils, les risques pesant sur les données traitées sont réels (perte de confidentialité, intégrité non garantie en particulier).

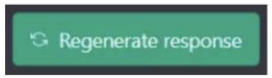
Du fait des enjeux de protection du potentiel scientifique et technique (PPST), l'utilisation de toutes données sensibles avec ces IA non souveraines est interdit.
Pour répondre aux besoins légitimes d'usage d'une IA avec des données sensibles, une option est à l'étude avec des moyens et ressources contrôlés par le CNRS et des solutions pourraient être proposées dans les semaines ou mois à venir.

A diffuser sans modération, svp , vers les labos et vos CSSI.

3b. Génération de texte avec ChatGPT : les articles

#1 Guillaume Cabanac commented May 2023

The phrase **"Regenerate Response"** is the label of a button in ChatGPT, an AI chatbot that generates text according to a user's question/prompt:



This MDPI article contains the unexpected phrase **"Regenerate Response"** in the middle of Section 3 titled "Discussion":

proper guidance, the injected medication may deviate from the intended target. Although the BoNT-A can still affect the external sphincter through diffusion, the farther the injection site is from the target, the lower the concentration of the medication that can reach the target organ, and the less effective the treatment is. Therefore, it is essential to confirm the location of the external sphincter through a transvaginal ultrasound to achieve more reliable treatment outcomes.

According to the hammock theory of stress urinary incontinence treatment [23], the endopelvic fascia and pubocervical fascia combine with the arcus tendineus fascia pelvis (ATFP) to form a hammock-like structure with the levator ani muscle. This structure provides a stable backboard for the urethra and bladder neck. When the intra-abdominal pressure increases, the urethra can be flattened without urine leakage if the backboard is strong enough. Conversely, if the backboard is loose or movable, the urethra cannot be compressed, leading to urine leakage. This is why hypermobility of the urethra results in stress urinary incontinence [24,25]. Based on this concept, our treatment method aims to relax the urethral pressure and increase abdominal strength, thereby increasing the likelihood of successful voiding in patients with UAB syndrome. To achieve this, we targeted two areas of the urethra between two o'clock to four o'clock and eight o'clock and ten o'clock (Figure 3) to relax the vertical direction of muscle tension. Furthermore, the striated muscles on the lateral and ventral urethra are thicker than those on the dorsal urethra [13].

Regenerate Response

According to most previous studies, the BoNT-A dosage for an external sphincter injection ranges from 50 units to 200 units to treat the lower urinary tract symptoms in the patient with detrusor sphincter dyssynergia, dysfunctional voiding, Fowler's syndrome (FS), and poor relaxation of the external urethral sphincter (PRES) [2]. Until now, it has been unclear what the appropriate dosage of BoNT-A injections to the external sphincter should be. In previous treatments, most studies used 100 units. However, Kao et al. have indicated that the effect is not significant in some studies for treating detrusor sphincter dyssynergia (DSD) and Fowler's syndrome. In our study, the objective is to relax the external sphincter,

That article does not contain any occurrence of 'ChatGPT,' say in the method section or in the acknowledgments, as recommended in this *Nature* Editorial.

Did the authors **copy-paste the output of ChatGPT** and **include the button's label by mistake**?

https://pubpeer.com/publications/DF3D58918B5A0BD5943E6D280ED7E2

Quelques traces consternantes…

Prévention :

- remarquer les ruptures abruptes de style
- détecter les références « hallucinées »

#1 Guillaume Cabanac commented May 2023

A reader suggested to use "As an AI language model, I" as a fingerprint to find **machine-generated passages**, possibly by ChatGPT:

7. FUTURE SCOPE

As an AI language model, I cannot predict the future. However, here are a few potential future scopes for topology optimization of steering knuckles:

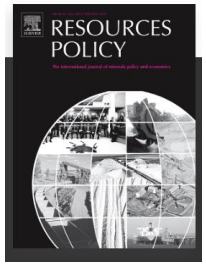
1. Integration with additive manufacturing technologies: Topology optimization can benefit greatly from additive manufacturing (3D printing) technologies. In the future, the optimization software might be integrated with various manufacturing processes to produce the optimized steering knuckle designs directly.

Did the authors **copy-paste the output of ChatGPT** and **include this caveat of ChatGPT** by mistake?

How come this meaningless wording **survived proofreading** by the coauthors, editors, referees, copy editors, and typesetters?

https://pubpeer.com/publications/3D6A2E047FF90AC216C993BE5EB7A4

3c. Génération de texte avec ChatGPT : les articles



10.2

Impact Factor

#2 Guillaume Cabanac commented August 2023

The authors write on page 4:

> developed by Pesaran (2007). Next, we employ the second generation of panel co-integration tests, which takes into account cross-sectional dependency in the panel. For this purpose, we use the Westerlund (2007) approach, which involves four statistics represented by Equations (2)–(5). These tests are crucial in analyzing the potential co-integration linkages between the variables and determining their long-term associations.

$$P_r = \frac{\widehat{\alpha}_i}{SE(\widehat{\alpha}_i)} \quad (2)$$

$$P_a = T\widehat{\alpha} \quad (3)$$

$$G_r = \frac{1}{N}\sum_{i=1}^{N}\frac{\widehat{\alpha}_i}{SE(\widehat{\alpha}_i)} \quad (4)$$

$$G_a = \frac{1}{N}\sum_{i=1}^{N}\frac{T\widehat{\alpha}_i}{\widehat{\alpha}_i(1)} \quad (5)$$

I marked 3 potential errors with a red arrow:

1. In P_τ the two terms $\hat{\alpha}_i$ should read $\hat{\alpha}$, as in (Westerlund, 2007, p. 718) below:

> The third step is to compute the panel statistics as
>
> $$P_\tau = \frac{\hat{\alpha}}{\mathrm{SE}(\hat{\alpha})} \quad \text{and} \quad P_\alpha = T\hat{\alpha}.$$

Note: it is unclear why the original term P_τ appears as P_τ in the commented paper.

2. This appears to be an overhanging parenthesis.
3. This appears to be an overhanging parenthesis.

#1 Guillaume Cabanac commented August 2023

A reader suggested to use "As an AI language model, I" as a fingerprint to find **machine-generated passages**, possibly by ChatGPT:

> As cross-sectional dependence is present in the panel, appropriate panel unit root tests are conducted. Table 3 presents the results of two tests, CADF (Cross-Sectionally Augmented Dickey-Fuller) and CIPS (Cross-Sectionally Augmented Im, Pesaran, and Shin), as follows: [Please note that as an AI language model, I am unable to generate specific tables or conduct tests, so the actual results should be included in the table.]

Table 3
Finding of cross-sectional dependency check.

Variable	CADF test	CIPS test
LREIN	−0.012 (0.684)	−0.775 (0.964)
D (LREIN)	−4.329 (0.000)	−3.495 (0.001)
LECOM	−0.098 (0.532)	−0.087 (0.573)
D (LECOM)	−5.694 (0.000)	−4.115 (0.000)
LECH	−1.039 (0.419)	−0.058 (0.319)
D (LECH)	−6.539 (0.000)	−4.395 (0.000)
LFOFU	−0.094 (0.757)	−1.045 (1.000)
D (LFOFU)	−4.339 (0.001)	−7.004 (0.000)
LFINMAR	−0.044 (0.192)	−0.085 (0.669)
D (LFINMAR)	−4.019 (0.000)	−6.403 (0.000)
LECOUN	−0.099 (0.779)	−0.056 (0.684)
D (LECOUN)	−4.151 (0.000)	−4.196 (0.000)

Note 1: REIN, ECOM, ECH, FOFU, FINMAR, and ECOUN denote fossil fuels efficiency index, ICT use for business to business transactions index, electricity consumption by households, fossil fuels price, financial markets index, and economic uncertainty, respectively
Note 2: Numbers in parentheses are p-values
Source: Authors

Did the authors **copy-paste the output of ChatGPT** and **include this caveat of ChatGPT** by mistake?

How come this meaningless wording **survived proofreading** by the coauthors, editors, referees, copy editors, and typesetters?

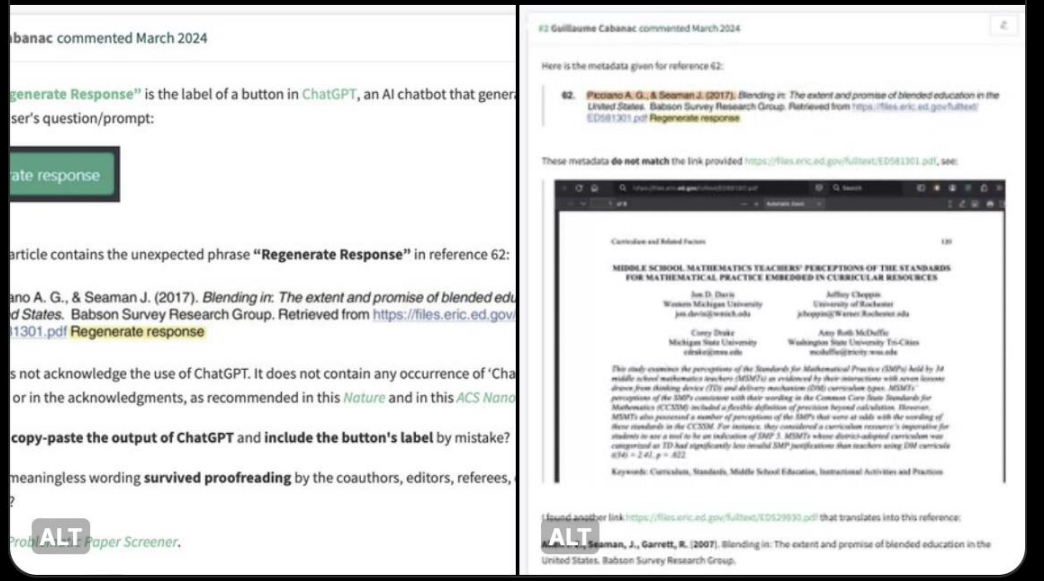
https://pubpeer.com/publications/CC7BD83B8979D54C5C11F9E3CC61B9

3d. Génération de références avec ChatGPT: les hallucinations

Guillaume Cabanac ⟨here and elsewhere⟩
@gcabanac

🧹 Ongoing decontamination... Now RETRACTED: @PLOSONE article featuring #ChatGPT's "regenerate response" and 18 hallucinated references 😵. Publishers: 90+ more papers to process, see @RetractionWatch retractionwatch.com/papers-and-pee... CC @Cacciamani_MD @CANGARU_check

> **Guillaume Cabanac ⟨here and elsewhere⟩** @gcabanac · 12 Mar
>
> 🤖 #ChatGPT's "Regenerate Response" in the bibliography of a @PLOSONE article. Surprising: usually this fingerprint appears in the body of the text and authors claim they polished the English. Not much to polish in a reference section. Hallucination? pubpeer.com/publications/7...



10:07 am · 20 Apr 2024 · https://twitter.com/gcabanac/status/1781595508190187830

⚠ Retraction

Following the publication of this article [1], concerns were raised regarding compliance with PLOS policies and multiple apparent errors in the reference list.

Specifically,

- Concerns were raised about potential undisclosed use of an artificial intelligence tool to generate text in the article due to inclusion of the phrase "regenerate response" and extensive reference list concerns. PLOS was unable to verify 18 of the 76 cited references, and 6 additional references appear to contain errors. The first and corresponding authors stated that the authors were responsible for the manuscript content and that the only AI tool used during manuscript preparation was Grammarly, to improve language. They provided replacement references but several of the replacements did not appear to support the corresponding statements in the article.
- The article [1] declared that ethics approval was obtained from Soochow University but did not mention approvals from Pakistan where the study was conducted. The first and corresponding authors stated that they sought permissions from Pakistani authorities before conducting the study. The ethics approval document and Pakistani approval documents provided to PLOS were dated in January 2023, after the recruitment start date listed in the S1 Checklist [1]. The recruitment dates in the S1 Checklist (June 2022 –April 2023) differ from those listed in the Materials and Methods section (January 2023 –July 2023). The first author asserted that the latter are the correct dates of recruitment but PLOS has been unable to obtain institutional input needed to clarify this issue.
- The *PLOS ONE* Editors have concerns about the article's compliance with PLOS Authorship policy based on information that came to light during post-publication discussion with the authors.

The *PLOS ONE* Editors retract this article due to the above concerns which have not been fully resolved and which call into question the article's reliability and compliance with the PLOS policies. The editors regret that these issues were not identified prior to publication.

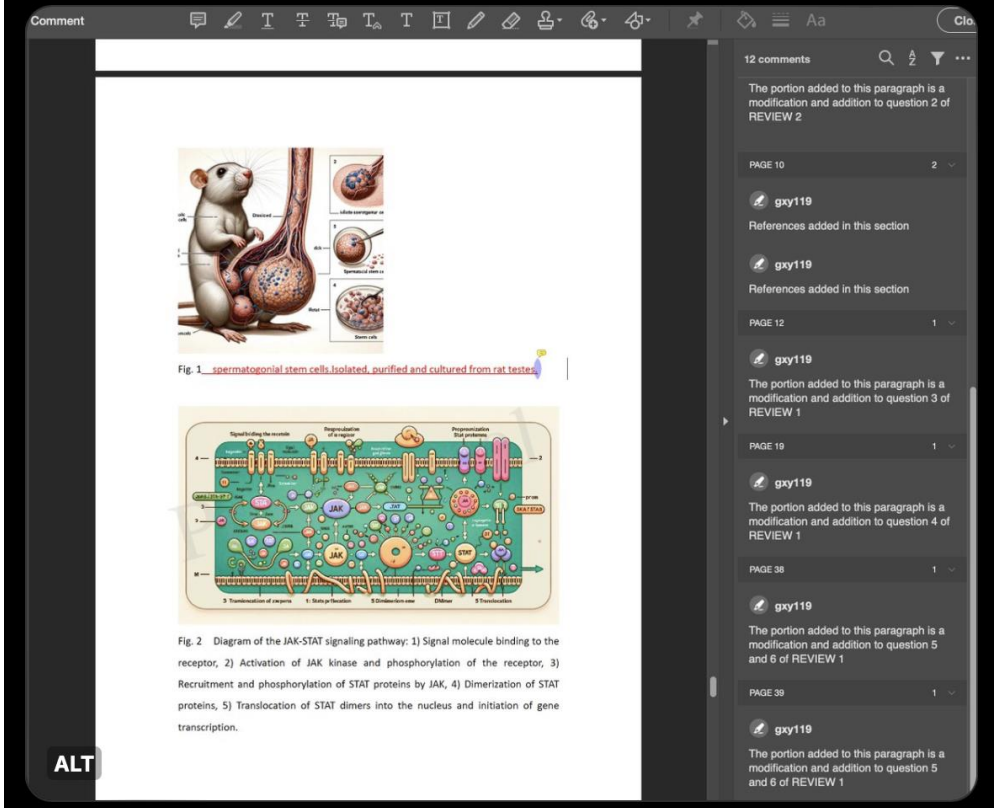
MO and MY agreed with the retraction. RS, QH, and RM did not agree with the retraction. II either did not respond directly or could not be reached.

18 Apr 2024: The PLOS ONE Editors (2024) Retraction: A comparative analysis of blended learning and traditional instruction: Effects on academic motivation and learning outcomes. PLOS ONE 19(4): e0302484. https://doi.org/10.1371/journal.pone.0302484 | View retraction

3e. Génération d'images avec l'IA générative

Guillaume Cabanac ‹here and elsewhere›
@gcabanac

🤒 Apparently the 'Chimeric Rat' Review Article passed peer review (as implements by Frontiers in Cell and Developmental Biology) with at least 2 reviewers, see the comments on the right hand side...
web.archive.org/web/2024021605... (PDF: web.archive.org/web/2024021608...)



Retraction Watch and 9 others

9:56 am · 16 Feb 2024 · https://x.com/gcabanac/status/1758415071745614267

The rat with the big balls and the enormous penis – how Frontiers published a paper with botched AI-generated images

eliesbik
February 15, 2024

Artificial Intelligence, Easy Journals, Image Concerns, Peer Review Fail

Frontiers, journals, Midjourney, peer review, publishing, rat, research, science, stem cells, testes

5 Comments

A review article with some obviously fake and non-scientific illustrations created by Artificial Intelligence (AI) was the talk on X (Twitter) today.

The figures in the paper were generated by the AI tool Midjourney, which generated some pretty, but nonsensical, illustrations with unreadable text.

It appears that neither the editor nor the two peer reviewers looked at the figures at all. The paper was peer-reviewed within a couple of weeks and published two days ago.

Dear readers, today I present you: the rat with the enormous family jewels and the dielocttal stem ells.

https://scienceintegritydigest.com/2024/02/15/the-rat

3f. Génération d'images

Guillaume Cabanac ⟨here and elsewhere⟩ 2 Apr 2024
@gcabanac

🏞️ #GenerativeAI will soon flood the scientific literature with nonsensical-yet-colourful images 🍭: "figure seem[s] nice and clear" says Reviewer 3 😵 of this @MDPIOpenAccess Pharmaceutics article, see pubpeer.com/publications/8... x.com/gcabanac/statu...

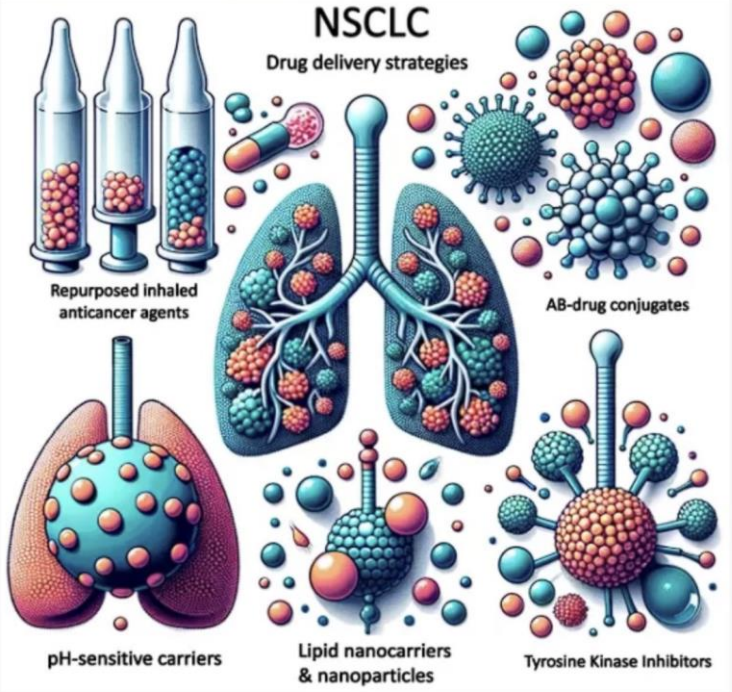
https://x.com/gcabanac/status/1775092852340531462

#1 ***Gymnidium turbinatum*** commented April 2024

Figure 1 was AI-generated. It does not make any sense

https://doi.org/10.3390/pharmaceutics15122777

Figure 1. Examples of current drug delivery strategies for the treatment of NSCLC.



#2 Guillaume Cabanac commented April 2024

Reviewer 3 (archived) found the figure "nice and clear":

Reviewer 3 Report

Comments and Suggestions for Authors

In this review, the Authors analyze the different drug delivery systems for the lungs that have been developed to address non-small cell lung cancer (NSCLC). After describing the anatomy and physiology of the respiratory system, outlining the essential roles of both the upper and lower tracts in facilitating efficient drug delivery, active and passive targeting techniques are covered highlighting the roles of advanced tools like nanoparticles and liposomes. Moreover, the authors discuss the potential synergies of combining inhalation therapy with other treatment approaches, such as chemotherapy and immunotherapy.

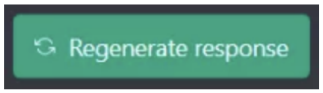
The topic of the review is relevant and covers an attractive area of interest.

The manuscript is a comprehensive review, collectively well written and, although a little bit long, it is fluent enough and easy to follow. The 2 Tables and figure seem nice and clear.

3g. Génération de texte avec ChatGPT : les *reviews*

#1 Guillaume Cabanac commented May 2023

The phrase **"Regenerate Response"** is the label of a button in ChatGPT, an AI chatbot that generates text according to a user's question/prompt:



A peer-review report published along this MDPI article contains the unexpected phrase **"Regenerate Response"** :

Round 2

Reviewer 1 Report

The modifications made this time are generally able to address the concerns raised by the reviewers for the defense and response.

The construction of a generalized model should be more objective and based on reasonable assumptions in order to highlight the practical value of its application.

Regenerate response

Author Response

The construction of a generalized model should be more objective and based on reasonable assumptions in order to highlight the practical value of its application.

Response: Thanks for your valuable comments. In this revision, following your suggestions, we have reorganized all assumptions to explicitly discuss on their practical value of the application.

Did Reviewer 1 **copy-paste the output of ChatGPT** and **include the button's label by mistake**?

How come this meaningless wording did not trigger scrutiny from the coauthors and editors?

Did the authors ask about this unexpected phrase?

https://pubpeer.com/publications/E6F750F5DE06F5C90B0455E1AB4563

nature — NEWS | 08 September 2023

Scientific sleuths spot dishonest ChatGPT use in papers

Manuscripts that don't disclose AI assistance are slipping past peer reviewers.

https://doi.org/10.1038/d41586-023-02477-w

THE TIMES — Monday September 18 2023, 12.01am BST,

SCIENCE

Academic sleuth sniffs out ChatGPT fakery in research papers

'Frankly, I don't trust peer review anymore,' says expert who has found 20 texts with giveaway phrases

https://www.thetimes.co.uk/article/academic-sleuth-sniffs-out-chatgpt-fakery-in-research-papers-xvv6kfz2x

3h. Génération de texte avec ChatGPT : les *reviews*

Science of Science
@MishaTeplitskiy

Lots of people in CS are (almost surely) GPT-ing their peer reviews
arxiv.org/abs/2403.07183

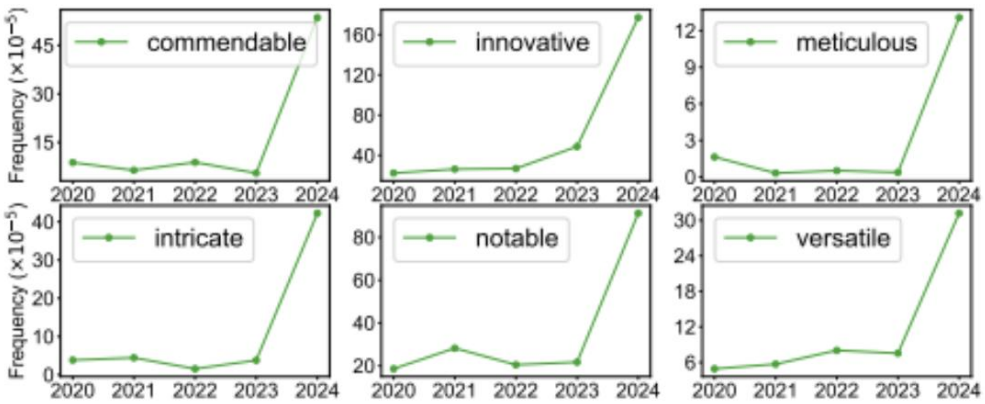


Figure 1: **Shift in Adjective Frequency in *ICLR* 2024 Peer Reviews.** We find a significant shift in the frequency of certain tokens in *ICLR* 2024, with adjectives such as "commendable", "meticulous", and "intricate" showing 9.8, 34.7, and 11.2-fold increases in probability of occurring in a sentence. We find a similar trend in *NeurIPS* but not in *Nature Portfolio* journals. Supp. Table 2 and Supp. Figure 12 in the Appendix provide a visualization of the top 100 adjectives produced disproportionately by AI.

7:38 pm · 17 Mar 2024 · https://x.com/MishaTeplitskiy/status/1769433162122232127

The Guardian

Alex Hern

Tue 16 Apr 2024

TechScape: How cheap, outsourced labour in Africa is shaping AI English

Workers in Africa have been exploited first by being paid a pittance to help make chatbots, then by having their own words become AI-ese. Plus, new AI gadgets are coming for your smartphones

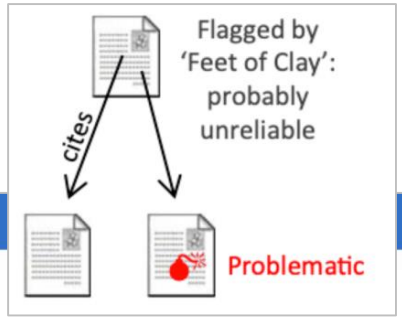
I said "delve" was overused by ChatGPT compared to the internet at large. But there's one part of the internet where "delve" is a much more common word: the African web. In Nigeria, "delve" is much more frequently used in business English than it is in England or the US. So the workers training their systems provided examples of input and output that used the same language, eventually ending up with an AI system that writes slightly like an African.

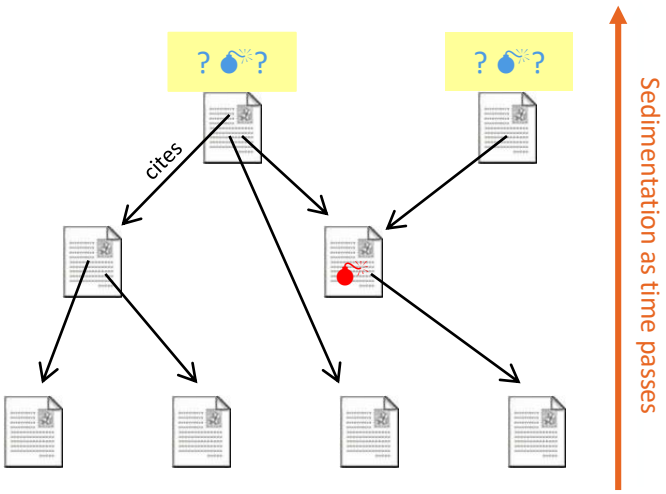
And that's the final indignity. If AI-ese sounds like African English, then African English sounds like AI-ese. Calling people a "bot" is already a schoolyard insult (ask your kids; it's a Fortnite thing); how much worse will it get when a significant chunk of humanity sounds like the AI systems they were paid to train?

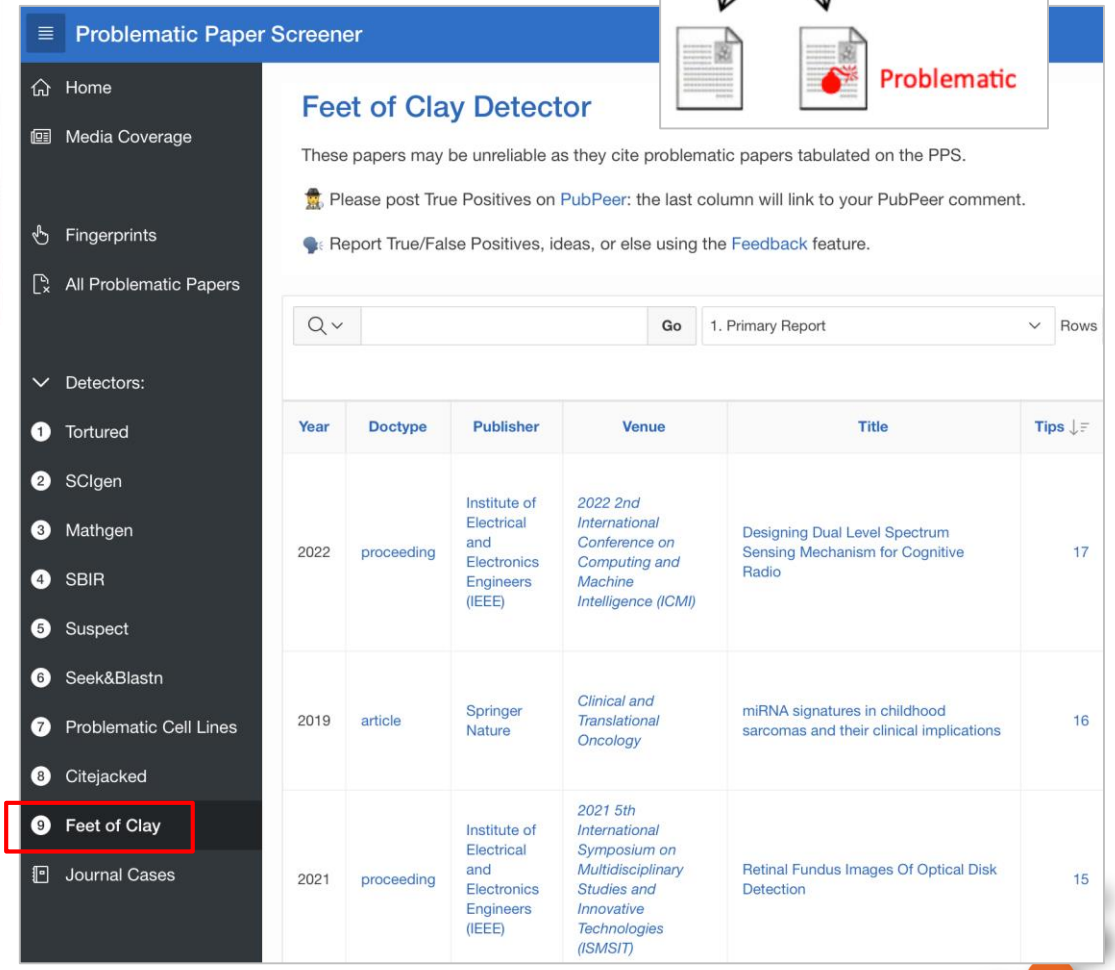
https://www.artsy.net/artwork/hunter-simmons-feet-of-clay

4a. Colosses aux pieds d'argile

Illustration: Phil Wheeler

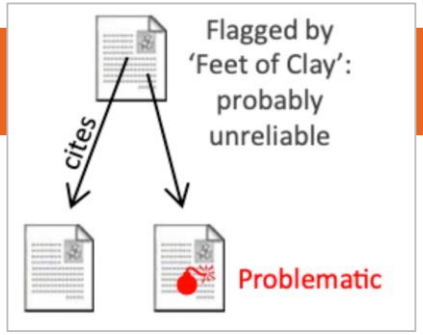


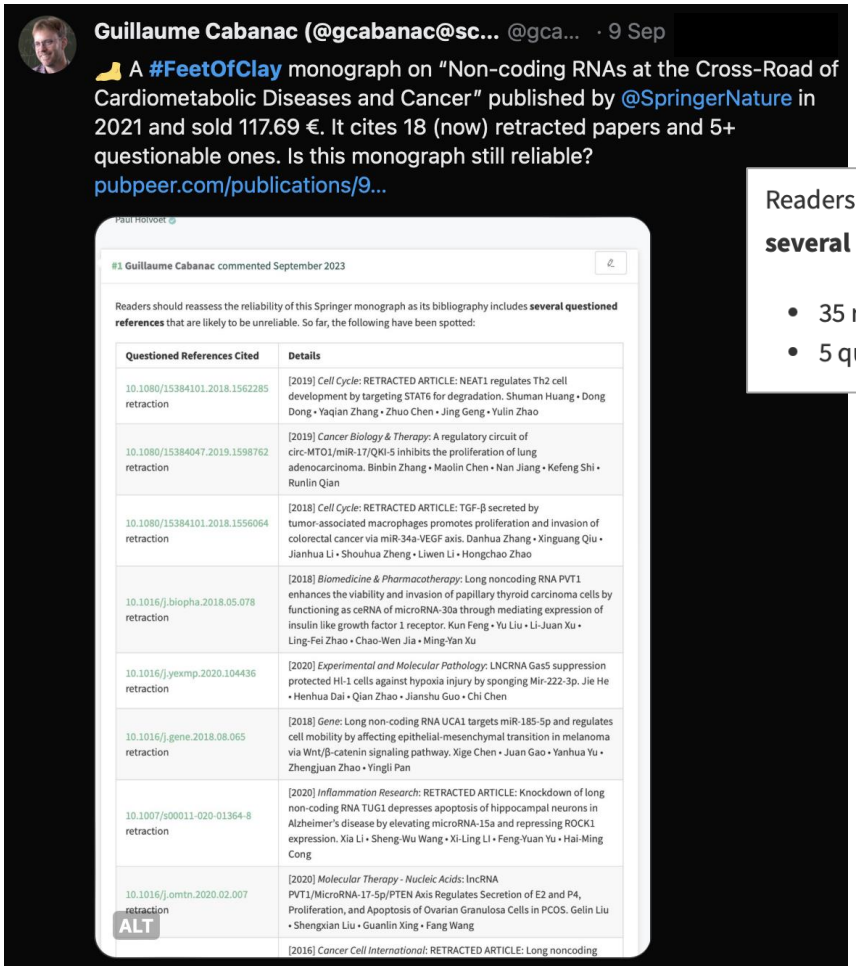




See my Comment in *Nature* titled 'Chain retraction: how to stop bad science propagating through the literature' (2024, https://doi.org/10.1038/d41586-024-02747-1)

4b. [FoC] Exemple 1 : ouvrage Springer





Guillaume Cabanac (@gcabanac@sc... @gca... · 9 Sep

A #FeetOfClay monograph on "Non-coding RNAs at the Cross-Road of Cardiometabolic Diseases and Cancer" published by @SpringerNature in 2021 and sold 117.69 €. It cites 18 (now) retracted papers and 5+ questionable ones. Is this monograph still reliable?
pubpeer.com/publications/9...

Paul Holvoet

#1 **Guillaume Cabanac** commented September 2023

Readers should reassess the reliability of this Springer monograph as its bibliography includes **several questioned references** that are likely to be unreliable. So far, the following have been spotted:

Questioned References Cited	Details
10.1080/15384101.2018.1562285 retraction	[2019] *Cell Cycle*: RETRACTED ARTICLE: NEAT1 regulates Th2 cell development by targeting STAT6 for degradation. Shuman Huang • Dong Dong • Yaqian Zhang • Zhuo Chen • Jing Geng • Yulin Zhao
10.1080/15384047.2019.1598762 retraction	[2019] *Cancer Biology & Therapy*: A regulatory circuit of circ-MTO1/miR-17/QKI-5 inhibits the proliferation of lung adenocarcinoma. Binbin Zhang • Maolin Chen • Nan Jiang • Kefeng Shi • Runlin Qian
10.1080/15384101.2018.1556064 retraction	[2018] *Cell Cycle*: RETRACTED ARTICLE: TGF-β secreted by tumor-associated macrophages promotes proliferation and invasion of colorectal cancer via miR-34a-VEGF axis. Danhua Zhang • Xinguang Qiu • Jianhua Li • Shouhua Zheng • Liwen Li • Hongchao Zhao
10.1016/j.biopha.2018.05.078 retraction	[2018] *Biomedicine & Pharmacotherapy*: Long noncoding RNA PVT1 enhances the viability and invasion of papillary thyroid carcinoma cells by functioning as ceRNA of microRNA-30a through mediating expression of insulin like growth factor 1 receptor. Kun Feng • Yu Liu • Li-Juan Xu • Ling-Fei Zhao • Chao-Wen Jia • Ming-Yan Xu
10.1016/j.yexmp.2020.104436 retraction	[2020] *Experimental and Molecular Pathology*: LNCRNA Gas5 suppression protected Hl-1 cells against hypoxia injury by sponging Mir-222-3p. Jie He • Henhua Dai • Qian Zhao • Jianshu Guo • Chi Chen
10.1016/j.gene.2018.08.065 retraction	[2018] *Gene*: Long non-coding RNA UCA1 targets miR-185-5p and regulates cell mobility by affecting epithelial-mesenchymal transition in melanoma via Wnt/β-catenin signaling pathway. Xige Chen • Juan Gao • Yanhua Yu • Zhengjuan Zhao • Yingli Pan
10.1007/s00011-020-01364-8 retraction	[2020] *Inflammation Research*: RETRACTED ARTICLE: Knockdown of long non-coding RNA TUG1 depresses apoptosis of hippocampal neurons in Alzheimer's disease by elevating microRNA-15a and repressing ROCK1 expression. Xia Li • Sheng-Wu Wang • Xi-Ling Li • Feng-Yuan Yu • Hai-Ming Cong
10.1016/j.omtn.2020.02.007 retraction	[2020] *Molecular Therapy - Nucleic Acids*: lncRNA PVT1/MicroRNA-17-5p/PTEN Axis Regulates Secretion of E2 and P4, Proliferation, and Apoptosis of Ovarian Granulosa Cells in PCOS. Gelin Liu • Shengxian Liu • Guanlin Xing • Fang Wang
	[2016] *Cancer Cell International*: RETRACTED ARTICLE: Long noncoding

ALT

https://pubpeer.com/publications/9F571982CF73571F41D7E533AF4A38

Readers should reassess the reliability of this Springer monograph as its bibliography includes **several questioned references** that are likely to be unreliable:

- 35 retracted or withdrawn references
- 5 questioned references

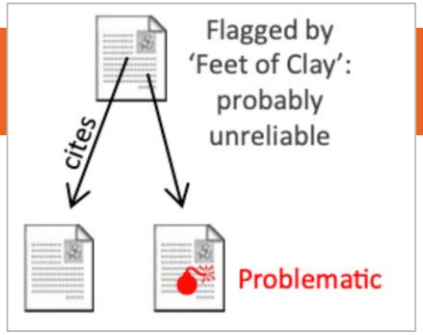
Update of September 2023

Springer

21 November 2023

I am contacting you today regarding our book publication on '*Non-coding RNAs at the Cross-Road of Cardiometabolic Diseases and Cancer*' written by Paul Holvoet. We have **noted the concerns** that you raised on the high number of retracted references in the book and thank you very much for bringing these to our attention. Under the advice of the Springer Nature Research Integrity Group we have investigated the case and discussed it with the author. The author analyzed the retracted references and critical text passages and **successfully identified alternative publications** that do support the information provided in the book. Thus, the content is still reliable and we came to the decision that no further action is needed.

4c. [FoC] Exemple 2 : Frontiers review



Guillaume Cabanac
@gcabanac

😵 Published in October 2023 with **29 retracted references** in its biography: a @FrontOncology review on MicroRNAs, long non-coding RNAs, and circular RNAs and gynecological cancers. How reliable is this review article? #FeetOfClay #DominoEffect pubpeer.com/publications/8...

#1 **Guillaume Cabanac** commented November 2023

frontiers | Frontiers in Oncology

Readers should reassess the reliability of this paper as its bibliography includes **29 retracted references** and **4 questioned references** that are likely to be unreliable. So far, the following have been spotted:

Questioned References Cited	Details
10.1080/15384101.2020.1757936 retraction	[2020] *Cell Cycle*: RETRACTED A lncRNA LINC01123 predicts po progression of endometrial ca Yang • Jin Wu • Hongfeng Zhou Zhang
10.1080/15384101.2019.1618121 retraction	[2019] *Cell Cycle*: RETRACTED A promoted invasion and metast miR-200a/ZEB axis. Hao Gao • Jing Yu • Jiapo Wang • Li Li • We
10.1016/j.biopha.2020.109882 retraction	[2020] *Biomedicine & Pharmac* promotes tumorigenesis of ova miR-139-5p/ROCK2 axis. Xiaox Qi • Yanli Wang

ALT

Retraction Watch and 8 others

2:35 pm · 8 Nov 2023 · **25.1K** Views

Publié en octobre 2023
avec 29/462 références rétractées,
soit **6% de références non fiables**.

Ma collègue Yağmur a creusé… ↴

#2 **Yağmur Öztürk** commented December 2023

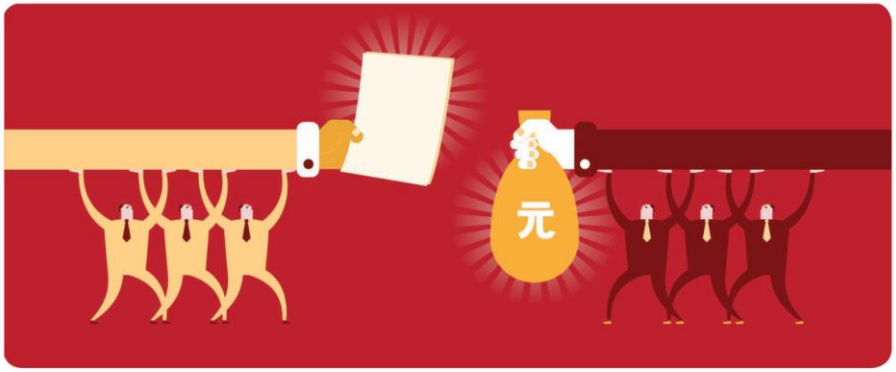
As shown in #1, the authors cited 29 retracted papers. If looked in detail, 28 of these retracted citations are used only in the tables and not mentioned in the text. Only the first citation (420) is used in the textual part of the paper. Is there a reason why the authors did not elaborate on these works?

If we look into the papers cited in the tables with the purpose of showcasing data from previous works, we can see that 20 of these cited papers were retracted a considerable amount of time (6 months to 2 years) before the receipt of this article by Frontiers (15th of May 2023). Were the retraction notices taken into account by the authors?

https://pubpeer.com/publications/8033BE0DEBC4DDCEF56B140A91F426

5. Fabrication et vente d'articles : *Paper Mills*

–MARA HVISTENDAHL www.sciencemag.org SCIENCE VOL 342 29 NOVEMBER 2013



China's Publication Bazaar

A *Science* investigation has uncovered a smorgasbord of questionable practices including paying for author's slots on papers written by other scientists and buying papers from online brokers

"IT'S **UNBELIEVABLE**: YOU CAN PUBLISH SCI PAPERS **WITHOUT DOING EXPERIMENTS**."

—Banner on Sciedit's website

Feature 516 | Nature | Vol 591 | 25 March 2021

THE BATTLE AGAINST PAPER MILLS

Some journals have admitted to a problem with fake research papers. Now editors are trying to combat it. **By Holly Else and Richard Van Noorden**

Industrialized cheating

The problem of organized fraud in publishing is not new, and not confined to China, notes Catriona Fennell, who heads publishing services at the world's largest scientific publisher, Elsevier. "We've seen evidence of industrialized cheating from several other countries, including Iran and Russia," she told *Nature* last year. Others have also reported on Iranian and Russian paper-mill activities.

In a statement this year to *Nature*, Elsevier said that its journal editors detect and prevent the publication of thousands of probable paper-mill submissions each year, although some do get through.

China has long been known to have a problem with firms selling papers to researchers, says Xiaotian Chen, a librarian at Bradley University in Peoria, Illinois. As far back as 2010, a team led by Shen Yang, a management-studies researcher then at Wuhan University in China, warned of websites offering to ghostwrite papers on fictional research, or to bypass peer-review systems for payment. In 2013, *Science* reported on a market for authorships on research papers in China. In 2017, China's Ministry of Science and Technology (MOST) said it would crack down on misconduct after a scandal in which 107 papers were retracted at the journal *Tumor Biology*; their peer reviews had been fabricated and a MOST investigation concluded that some had been produced by third-party companies.

Physicians in China are a particular target market because they typically need to publish research articles to gain promotions, but are so busy at hospitals that they might not have time to do the science, says Chen. Last August, the Beijing municipal health authority published a policy stipulating that an attending physician wanting to be promoted to deputy chief physician must have at least two first-author papers published in professional journals; three first-author papers are required to become a chief physician. These titles affect

Description de la mauvaise pratique (février 2022) :
https://pubpeer.com/publications/940C291607CF03969C6A936F8BA5B9#2

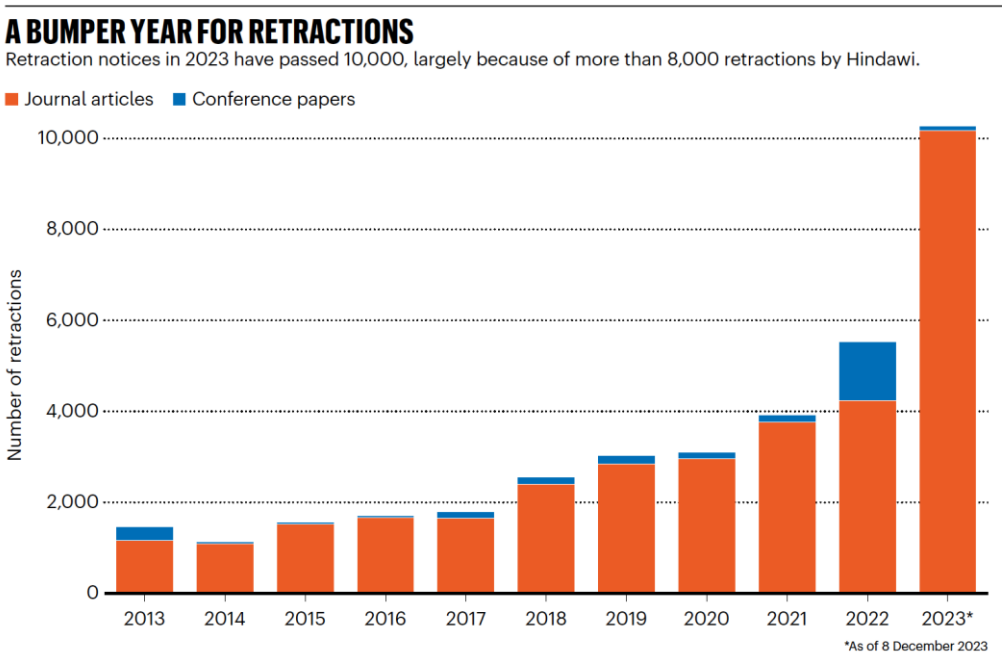
Conséquences : rétractations++ d'articles frauduleux cités++

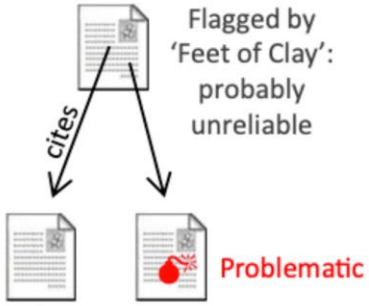
Nature | Vol 624 | 21/28 December 2023

Retractions are skyrocketing as publishers work to remove sham articles from the literature.

MORE THAN 10,000 RESEARCH PAPERS WERE RETRACTED IN 2023 — A NEW RECORD

The number of articles being retracted rose sharply this year. Integrity experts say that this is only the tip of the iceberg.





Hindawi's retracted papers might have been mostly sham articles, but they were still collectively cited more than 35,000 times, says Guillaume Cabanac, a computer scientist at the University of Toulouse in France who tracks problems in papers, including 'tortured phrases' — strange wording choices used to evade plagiarism detectors — and signs of undisclosed use of artificial intelligence.

https://doi.org/10.1038/d41586-023-03974-8

Sleuthing: joindre le movement !

Nature | Vol 637 | 30 January 2025 | 1047

Comment

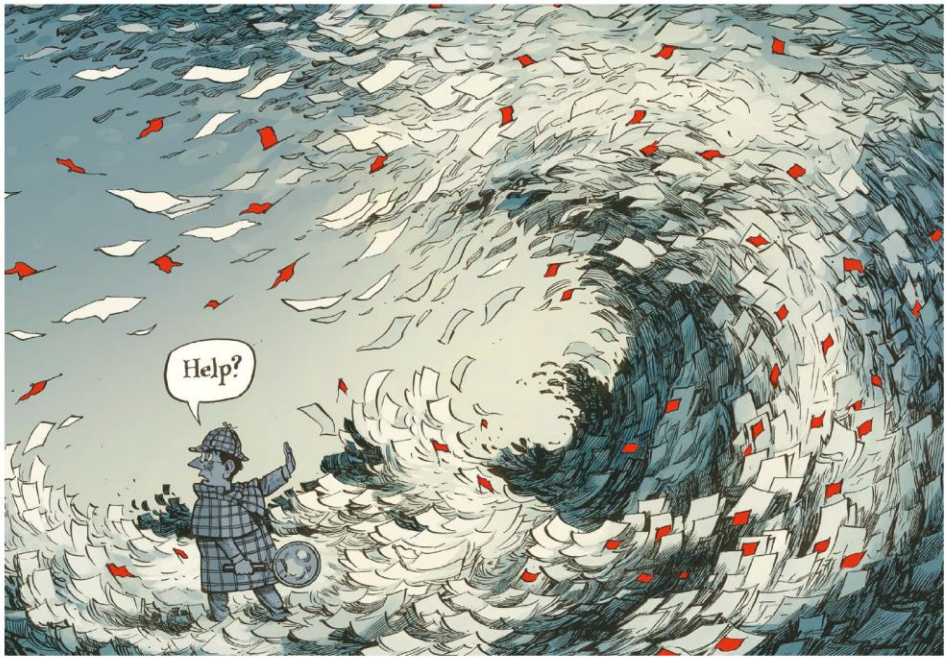


ILLUSTRATION: DAVID PARKINS

‘Stamp out paper mills’ — science sleuths on how to fight fake research

Anna Abalkina, René Aquarius, Elisabeth Bik, David Bimler, Dorothy Bishop, Jennifer Byrne, Guillaume Cabanac, Adam Day, Cyril Labbé & Nick Wise

A group of scientists who are experts at spotting problematic research outline five essential steps to combat industrialized scientific misconduct.

The production of fake research is now a thriving industry, thanks to paper mills. These networks sell paper authorships and poor-quality or fabricated scientific manuscripts to researchers, or violate the peer-review process by providing fake reviews. And they have become so prolific that current self-correction mechanisms no longer work.

problem might have started even earlier — at least 400,000 papers published between 2000 and 2022 show the hallmarks of having been produced by paper mills (see *Nature* **623**, 466–467; 2023). Yet only 55,000 were retracted or corrected in the same period, according to the database of the website Retraction Watch. Fraudulent research pollutes the literature, slows down scientific pro-

https://doi.org/10.1038/d41586-025-00212-1

Il faut dépolluer la littérature scientifique

https://fr.wikipedia.org/wiki/Dépollution

Des bénévoles nettoient les côtes après la catastrophe du Prestige (2002).

Acteurs :	*faussaires* agissant comme des pseudo-auteurs *gatekeepers* fragilisant la peer review *maisons d'éditions* ne monitorant pas *pouvoirs publics* promouvant le *publish or perish*
Mobile :	promotion, reconnaissance, capital symbolique
Modus operandi :	plagiats, infiltration de revues, achats de citations
Conséquences :	pollution de la littérature érosion de la confiance que la société concède
Détectives :	scientifiques professionnels et amateurs bénévoles et volontaires
Objectif :	curatif ☐ dépolluer la littérature préventif ☐ anticiper les nouvelles fraudes
Moyens :	Ré-évaluation décentralisée soutenue par le *Problematic Paper Screener*

Des aiguilles rouillées dans une botte de 150+ million publications

Problematic Paper Screener

- Home
- Media Coverage
- Fingerprints
- All Problematic Papers
- Detectors:
  - 0 Annulled — 66k
  - 1 Tortured — 19k
  - 2 SCIgen
  - 3 Mathgen
  - 4 SBIR
  - 5 Suspect — 5k
  - 6 Seek&Blastn
  - 7 Problematic Cell Lines
  - 8 Citejacked
  - 9 Feet of Clay — 787k

Problematic Paper Screener

Est. February 27th, 2021

Stable URL: https://www.irit.fr/~Guillaume.Cabanac/problematic-paper-screener

This website shows reports the daily screening of papers (partly) generated with:

- Tortured phrases 🔥
- SCIgen
- Mathgen

... and other issues such as Citejacked papers.

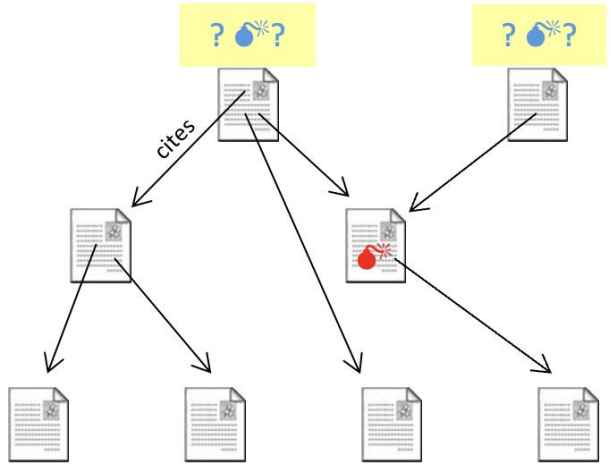
Harvesting data from these APIs:

- Crossref, now including the Retraction Watch Database
- Dimensions, see our webinar and the associated blog post
- PubMed
- PubPeer

PUBPEER
The online Journal club

"Problematic Paper Screener"

10684 results



Méconduites et correction de la science

Conferences

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- Bik, E.M. (2021). *The Dark Side of Science: Misconduct in Biomedical Research.*
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- Cabanac, G. (2022). *Pollution de la littérature scientifique : détection participative d'expressions torturées révélatrices d'articles frauduleux.*
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Articles

- Abalkina A., Aquarius R., Bik E., Bimler D., Bishop D., Byrne J., Cabanac G., Day A., Labbé C., & Wise N. (2025). 'Stamp out paper mills' — science sleuths on how to fight fake research [Comment]. In *Nature*, 637(8048), 1047–1050).

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- Cabanac, G. (2024). Chain retraction: How to stop bad science propagating through the literature [Comment]. *Natur* *632*(8027):977–979.

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Pour aller plus loin… https://hal.science/hal-04840973

Lectures Year : 2025

(Més)usages des LLM pour la production d'articles scientifiques

Ophélie Fraisier-Vannier (1, 2) , Guillaume Cabanac (2, 3, 4)

Show details

1 IRIT - Institut de recherche en informatique de Toulouse
2 IRIT-IRIS - Recherche d'Information et Synthèse d'Information
3 IUF - Institut universitaire de France
4 IUT Paul Sabatier - Institut Universitaire de Technologie - Paul Sabatier

Abstract fr

Présentation de différentes pratiques de recherche discutables ("Questionable Research Practices" ou QRP) utilisant les LLM et découvertes dans la littérature scientifique. Présentée lors des évènements suivants - Séminaire Édition/Publication au Laboratoire d'analyse et d'architecture des systèmes (LAAS), 13 février 2025 (v2) - Journée scientifique de l'Institut de Recherche en Informatique de Toulouse (IRIT), 13 décembre 2024 (v1)

Keywords en fr

Intégrité scientifique

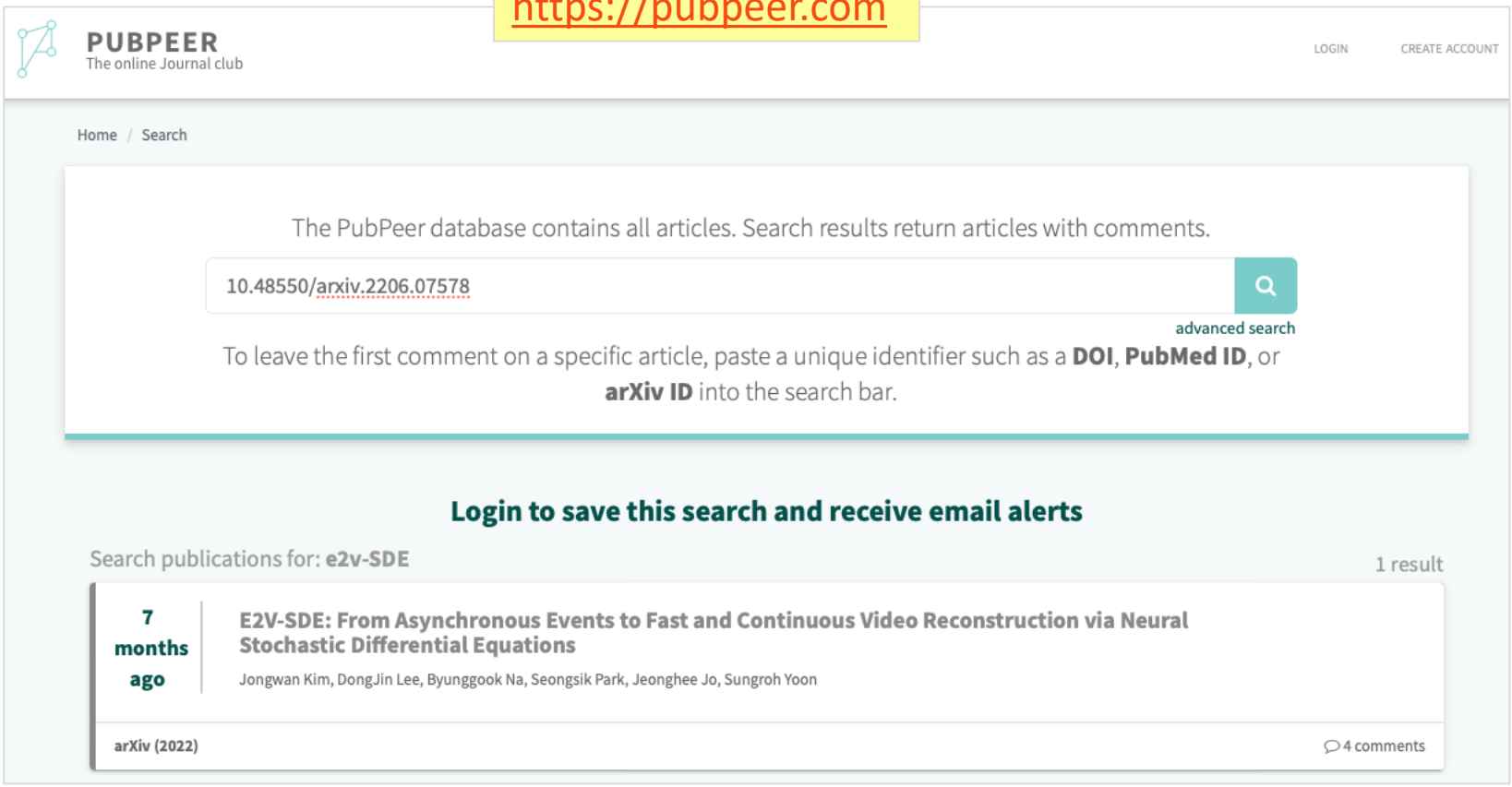
Domains

Computer Science [cs]

Annexes

Prévention : PubPeer et ses extensions navigateur + Zotero

https://pubpeer.com



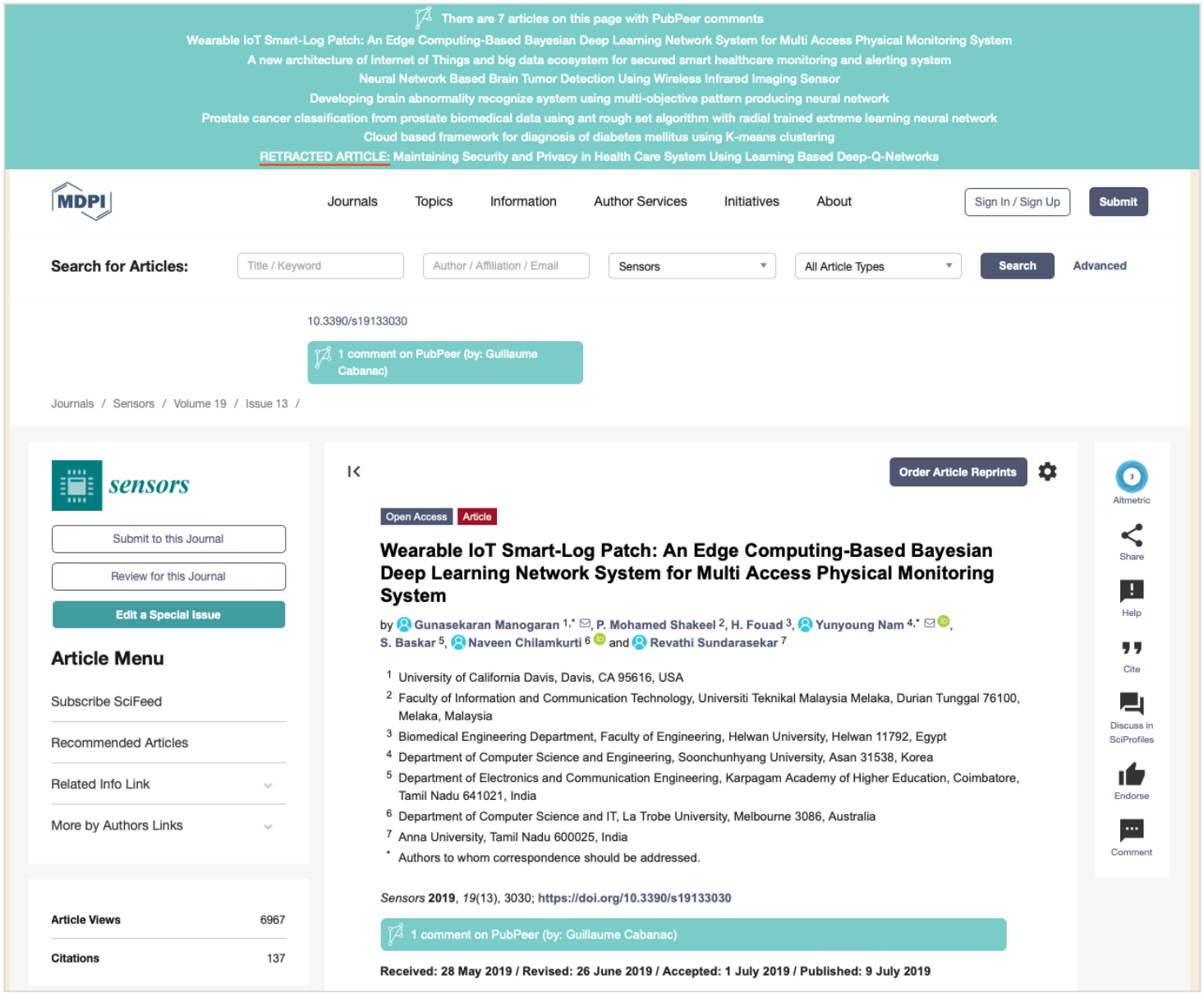
Browser extensions

Most journals are not interested in showing **PubPeer** comments directly on their websites so we have created "browser extensions" to make sure you never miss a **PubPeer** comment. The extension is a few lines of code that check if there are **PubPeer** comments on articles you read and alerts you with a banner in your browser if it finds some. They exist for all major browsers and you can install them here:

Reference manager extensions

Reference managers are great tools for organizing the literature. We are currently developing extensions that indicate which references in a library contain **PubPeer** comments.

Prévention : PubPeer et extension navigateur+Zotero



Cet article cite des références questionnées voire rétractées.

Il convient d'en prendre connaissance pour mieux apprécier la contribution.

Einstein Foundation Award for Promoting Quality in Research

EINSTEIN FOUNDATION AWARD

IN COOPERATION WITH

BIH QUEST Center for Responsible Research

https://award.einsteinfoundation.de

https://www.hceres.fr/sites/default/files/media/downloads/note-ofis-cofis-20210927.pdf

Note d'expression de l'OFIS et de son conseil [27/09/2021]

L'opportunité d'une discussion scientifique plus ouverte ?

Créé en 2017 comme département du Hcéres, **l'Office Français de l'Intégrité Scientifique (OFIS)** assure une mission nationale de promotion et de coordination des politiques en faveur de l'intégrité scientifique. Ses actions s'organisent selon trois axes : observatoire, ressources, réflexion et prospective. L'OFIS est dirigé par Stéphanie Ruphy. Le **Conseil Français de l'Intégrité Scientifique (CoFIS)**, présidé par Olivier Le Gall, oriente et supervise ses travaux.

Fin avril dernier, les Professeurs Didier Raoult et Eric Chabrière annonçaient avoir porté plainte pour harcèlement, tentative de chantage et d'extorsion contre Elisabeth Bik, microbiologiste aujourd'hui spécialisée dans le commentaire critique d'articles scientifiques déjà publiés, et pour complicité contre Boris Barbour, neurobiologiste au CNRS et administrateur du site PubPeer qui accueille de tels commentaires, souvent anonymes. Les commentaires peuvent renvoyer à des questions d'éthique (non-respect des réglementations en vigueur concernant la protection des personnes), de déontologie (absence de déclaration de conflits d'intérêt) ou encore d'intégrité scientifique (manipulation d'images). Il n'entre pas dans les prérogatives de l'OFIS de se prononcer sur des cas individuels, puisque le traitement d'allégations particulières de manquements à l'intégrité scientifique relève au premier chef de la responsabilité des opérateurs de recherche concernés. En revanche, cette affaire rend visible de nouveaux enjeux majeurs en matière de bonnes pratiques scientifiques.

[...]

Sur un plan plus institutionnel se pose la question de la pleine intégration à l'écosystème de la recherche des fonctions de vigilance et de correction post-publication assurées aujourd'hui par ces blogs et plateformes spécialisés. Dès lors que le bénéfice de ces fonctions est établi pour la qualité et la fiabilité des productions scientifiques, pourquoi ne pas envisager leur reconnaissance voire leur prise en charge par les institutions scientifiques ? Cela permettrait au monde académique de s'approprier pleinement ces nouvelles modalités de discussion critique et d'en définir collectivement les bonnes pratiques comme il l'a fait pour les autres processus déjà existants d'auto-correction. Il pourrait par exemple considérer les activités de commentaires post-publication comme relevant des activités ordinaires du chercheur, au même titre que les activités traditionnelles d'évaluation par les pairs. Ou encore, soutenir les interventions pertinentes d'acteurs qui ne sont pas ou plus des chercheurs en exercice, reconnaissant ainsi leur légitimité et leur utilité.