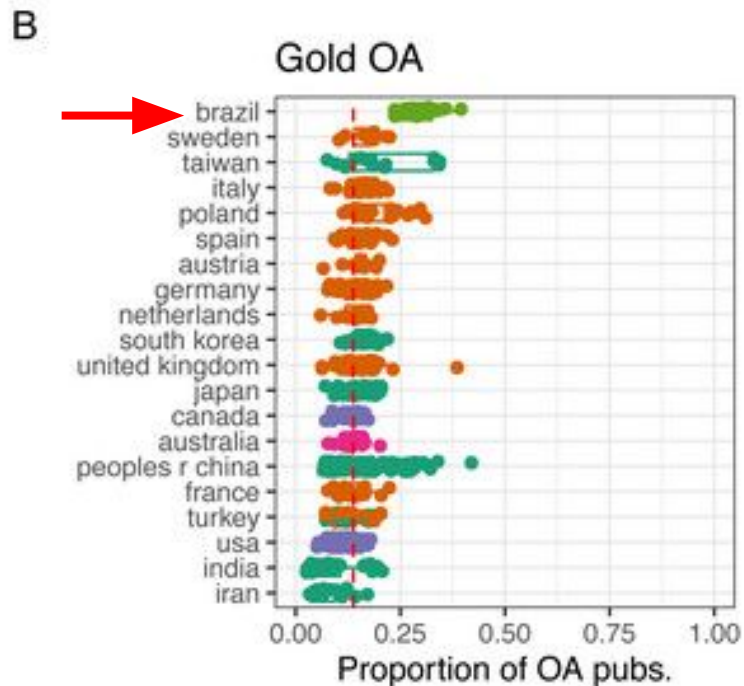
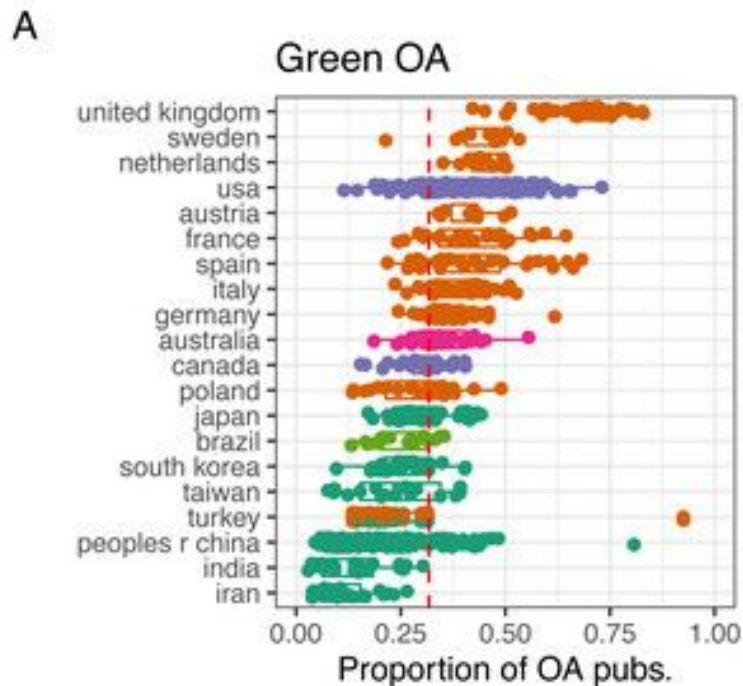


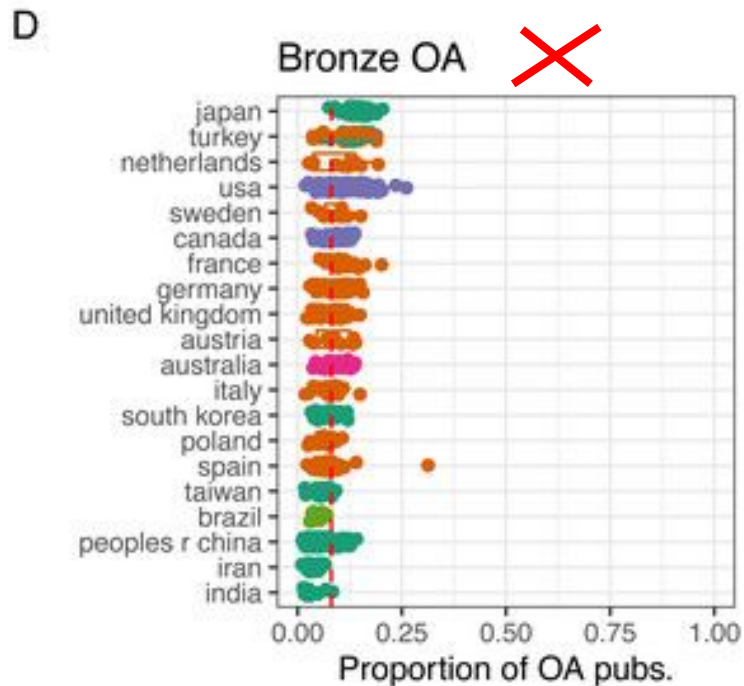
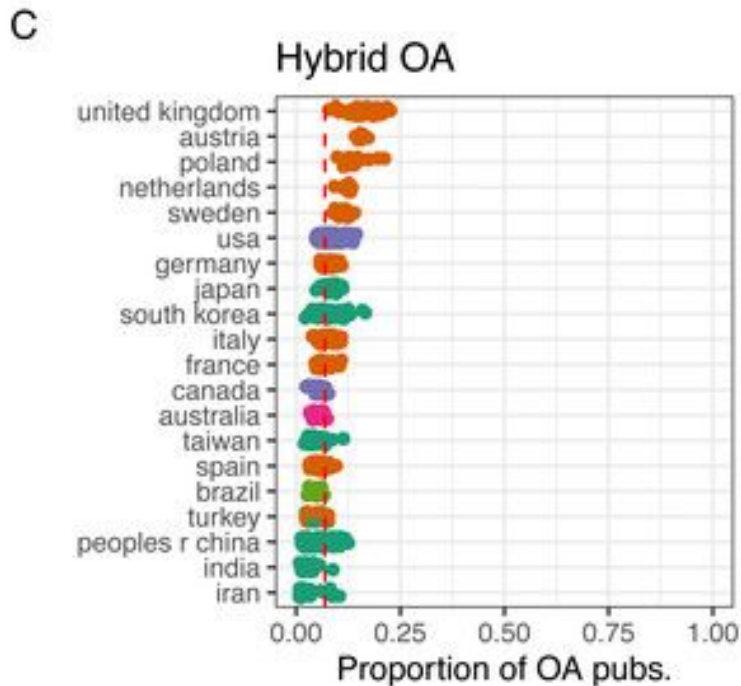


La irrupción del **Acceso Abierto** en los  
procesos de **comunicación científica**

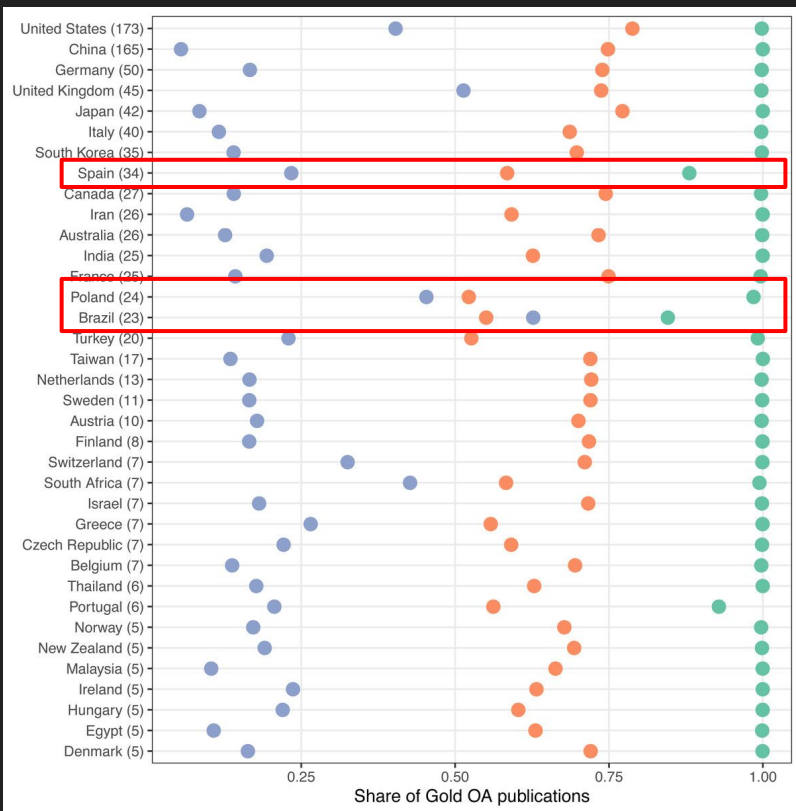
# Estado actual del OA en el mundo



# Estado actual del OA en el mundo



# Estado actual del OA en el mundo



**Verde:** Publicaciones escritas en inglés

**Azul:** Publicaciones en revistas nacionales

**Naranja:** Publicaciones en revistas APC

Robinson-Garcia, N., Costas, R., & Leeuwen, T. N. van. (2020). Open Access uptake by universities worldwide. PeerJ, 8, e9410.  
<https://doi.org/10.7717/peerj.9410>

# El Acceso Abierto como solución a....

- Un sistema de comunicación **lento e ineficiente**
- Problemas de **accesibilidad** a la literatura científica
- Problemas de **reproducibilidad**
- La **duplicidad** de esfuerzos
- **Opacidad** en los procesos de publicación

# Pero no resuelve otros problemas...

- **Exceso de publicaciones** irrelevantes o duplicadas
- **Agotamiento** del sistema de revisión por pares
- **Credibilidad** social de la ciencia
- **Prácticas** de investigación **cuestionables**
- **Desinformación** y *fake news*

Es más, algunos se acentúan y se crean otros...

- Irrupción de **revistas depredadoras**
- **Falta de financiación** para publicar
- **Mayor presión para los revisores** (plazos, apertura de informes)
- **Presión** por publicar y **sesgos** de publicación
- Ausencia de o **fallas en los filtros** de publicación

# 4 retos del Acceso Abierto

Situaciones y retos que se plantea el sistema de comunicación científica con respecto al OA y una interpretación alternativa



# La calidad de las publicaciones

1

Scientometrics (2021) 126:1897–1921  
<https://doi.org/10.1007/s11192-020-03852-4>

**Predatory publishing in Scopus: evidence on cross-country differences**

Vít Macháček<sup>1,2</sup> · Martin Srholec<sup>1</sup>

Received: 29 June 2019 / Accepted: 24 December 2020 / Published online: 7 February 2021  
 © Akadémiai Kiadó, Budapest, Hungary 2021

**Abstract**  
 Predatory publishing represents a major challenge to scholarly communication. This paper maps the infiltration of journals suspected of predatory practices into the citation database Scopus and examines cross-country differences in the propensity of scholars to publish in such journals. Using the names of “potential, possible, or probable” predatory journals and publishers on Beall’s lists, we derived the ISSNs of 3,297 journals from Ulrichsweb and searched Scopus with them. 324 of journals that appear both in Beall’s lists and Scopus with 164 thousand articles published over 2015–2017 were identified. Analysis of data for 172 countries in 4 fields of research indicates that there is a remarkable heterogeneity. In the most affected countries, including Kazakhstan and Indonesia, around 17% of articles fall into the predatory category, while some other countries have no predatory articles whatsoever. Countries with large research sectors at the medium level of economic development, especially in Asia and North America, tend to be most susceptible to predatory publishing. Arab, oil-rich and/or emerging countries also appear to be particularly vulnerable. Policymakers and stakeholders in these and other developing countries need to pay more attention to the quality of research evaluation.

**Keywords** Predatory journals · Beall’s list · Open access · Academic misconduct · Research system · Research policy

Vít Macháček and Martin Srholec contributed equally to this work.

**Supplementary information** The online version contains supplementary material available at (<https://doi.org/10.1007/s11192-020-03852-4>).

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Springer

## WORLD VIEW A personal take on events

JEFFREY BEALL

### Predatory publishers are corrupting open access

*Journals that exploit the author-pays model damage scholarly publishing and promote unethical behaviour by scientists, argues Jeffrey Beall.*

Category	Substantial peer review	Superficial peer review	No peer review
Papers submitted (304 total)	121	167	16
Papers rejected (98 total)	64	12	22
Papers accepted (157 total)	47	28	82

Peer review reviewed. Few journals did substantial review that identified the paper’s flaws.

### Predatory journals: no definition, no defence

promise was doubtful and its validity unlikely to have been vetted.

Predatory journals are a global threat. They accept articles for publication – along with authors’ fees – without performing promised quality checks for issues such as plagiarism or ethical approval. Naive readers are not the only

# Why Most Published Research Findings Are False

John P. A. Ioannidis

## Summary

There is increasing concern that most current published research findings are false. The probability that a research claim is true may depend on study power and bias, the number of other studies on the same question, and, importantly, the ratio of true to no relationships among the relationships probed in each scientific field. In this framework, a research finding is less likely to be true when the studies conducted in a field are smaller; when effect sizes are smaller; when there is a

factors that influence this problem and some corollaries thereof.

## Modeling the Framework for False Positive Findings

Several methodologists have pointed out [9–11] that the high rate of nonreplication (lack of confirmation) of research discoveries is a consequence of the convenient, yet **ill-founded strategy of claiming conclusive research findings solely on the basis of a single study**, assessed by formal statistical significance, typically

is characteristic of the field and can vary a lot depending on whether the field targets highly likely relationships or searches for only one or a few true relationships among thousands and millions of hypotheses that may be postulated. Let us also consider, for computational simplicity, circumscribed fields where either there is only one true relationship (among many that can be hypothesized) or the power is similar to find any of the several existing true relationships. The pre-study probability of a relationship

~~miracle cures and wild claims.~~

In my view, we must look at the massive expansion of online publications (most of which are OA journals) as **a disruptive technology, resulting in overworked and fatigued reviewers. Quality will suffer — across the board — unless something is done.** ■

Ioannidis, J. P. A. (2005). Why Most Published Research Findings Are False. PLOS Medicine, 2(8), e124. <https://doi.org/10.1371/journal.pmed.1004085>

Arns, M. (2014). Open access is tiring out peer reviewers. Nature, 515(7528), Article 7528. <https://doi.org/10.1038/515467a>

## **Discussion and conclusions**

This paper has explored various issues relating to the methodology used in bibliometric analyses published in the journal Sustainability in 2019 and 2020, showing that **many of the papers published lack the methodological rigour** that would normally be required. In

Considering these shortcomings, 181 of the 204 studies analysed (88.7%) **have one or more methodological limitations** which **hinder or prevent their reproducibility**. This shows that there is considerable room for improvement in the methodological quality of the bibliometric



# Posibles explicaciones

## Preserving credibility of open access journals

In their Editorial “Public access is not equal access” (9 September, p. 1361), S. Parikh *et al.* explain how the open access model can compound inequities (1, 2) by charging article processing fees that early-career scientists and scientists in underfunded disciplines, teams, or regions (1) are unable to afford. They also acknowledge the **perverse incentives of a business model based on volume of articles published**, which has led to the proliferation of open access journals, many of which are predatory, and risks diluting the scientific literature (1, 3). However, they do not address another unintended consequence of open access policies:

notified that another team in a different hospital had submitted and published the same report. In two separate instances, a journal made the mistake of duplicate publication of an article. In general, it seems **the main reason underlying these retractions and withdrawals is the rush to quickly publish the COVID-19-related articles**, whether by the authors or the journal editors and review teams. The publishing parties must keep in mind that swiftly published but erroneous data is not helpful for the medical community in their ongoing battle with COVID-19. What we actually need (possibly more than any

continued growth in non-OA publications.

**That gold OA is predicted to grow at a much faster rate than green OA further suggests adaptations are being made by scholarly publishers to protect viable scholarly publishing models without ‘losing out’ to the demands and needs of scientists and attentive publics during the COVID-19 pandemic.** However, caution is warranted based on findings that most preprints are eventually published as journal articles (Fraser

Zhong, B., & Liu, X. (2022). Preserving credibility of open access journals. *Science*, 378(6617), 257–257. <https://doi.org/10.1126/science.ade8966>

Soltani, P., & Patini, R. (2020). Retracted COVID-19 articles: A side-effect of the hot race to publication. *Scientometrics*, 125(1), 819–822. <https://doi.org/10.1007/s11192-020-03661-9>

Nane, G. F., Robinson-Garcia, N., van Schalkwyk, F., & Torres-Salinas, D. (2022). COVID-19 and the scientific publishing system: Growth, open access and scientific fields. *Scientometrics*. <https://doi.org/10.1007/s11192-022-04536-x>

# Posibles explicaciones

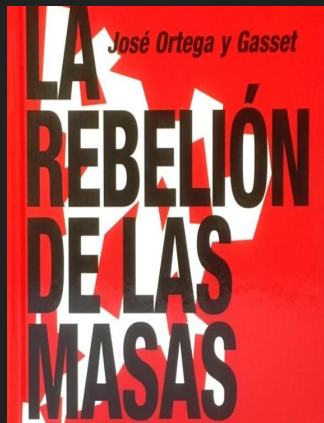
points strongly to the major influence being the changing context in which the sector is operating. Increased system-wide and institutional performance evaluation based on aggregate output measures appears to be altering researchers' publication habits. The indications are that there is an increasing emphasis on refereed

Butler, L. (2003). Explaining Australia's increased share of ISI publications—The effects of a funding formula based on publication counts. *Research Policy*, 32(1), 143–155.  
[https://doi.org/10.1016/S0048-7333\(02\)0007-0](https://doi.org/10.1016/S0048-7333(02)0007-0)

Las evidencias empíricas que demuestran una relación de causa-efecto entre los incentivos de nuestro sistema de evaluación y los cambios en los comportamientos de publicación en España son de dos tipos. En primer lugar,

López-Cózar, E. D., & Martín-Martín, A. [Detectando patrones anómalos de publicación científica en España: Más sobre el impacto del sistema de evaluación científica.](#)

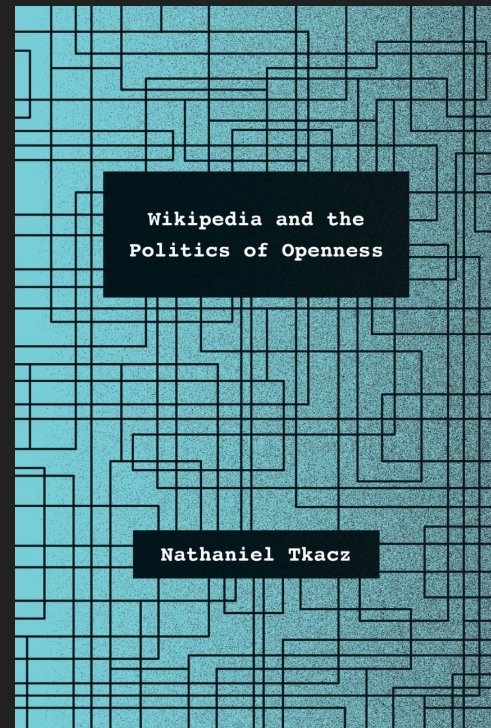
# Una explicación **alternativa** o **complementaria**



Apertura

Democratización

Masificación





# Una explicación **alternativa** o **complementaria**



*In our time... books have emerged in lavish numbers. A book that once would've belonged only to the rich - nay, to a king - can now be seen under a modest roof... There is nothing nowadays that our children... fail to know*


Sebastian Brant, 1500

Citado en [Bergstrom & West, 2020](#), p. 19




# La cantidad de publicaciones

# 2



 **Alvaro Cabezas**  
@acabezas

Cookie-cutter bibliometrics (aka La "churrera" bibliométrica) [scholar.google.es/scholar?hl=es&...](https://scholar.google.es/scholar?hl=es&...)

16:48   

Académico

[HTML] Forty years of the *European Journal of Operational Research*: A bibliometric overview  
**S.Laepke, JM Merigó, JM Miranda, B.Sivakoti** - *European Journal of ...* - 2017 - Elsevier  
...The *European Journal of Operational Research* (EJOR) published its first *journal* over its lifetime by using bibliometric indicators. We discuss its performance compared to other *journals* ...  
☆ Citado por 260 Artículos relacionados 80

[HTML] Thirty years of the *Journal of Business & Industrial Marketing*: A bibliometric analysis  
**LM Valenzuela, JM Merigó, WJ Johnston** - *Journal of Business & ...* - 2017 - emerald.com  
...The aim of this study is to reveal the contribution that *Journal of Business & Industrial Marketing* has to scientific research and its most influential thematic work in B-to-B since its ...  
☆ Citado por 191 Artículos relacionados 80

Thirty Years of the *International Journal of Intelligent Systems*: A Bibliometric Review  
**JM Merigó, E Blanco-Mesa** - *International Journal ...* - 2017 - Wiley Online Library  
...of the *Journal* between 1980 and 2015. By doing so, we can see who is leading the *journal* and ... including the publication and citation structure of the *journal*, most-cited papers, the most ...  
☆ Citado por 146 Artículos relacionados 80

[HTML] A bibliometric overview of the *Journal of Business Research* between 1973 and 2014  
**JM Merigó, A Macías, N Roo-Torres** - *Journal of Business ...* - 2015 - Elsevier  
...*Journal* in business research dating back to 1973. This study analyzes all the publications in the *journal* ... of the main factors that affect the *journal*. This analysis includes key issues such ...  
☆ Citado por 346 Artículos relacionados 80

Fifty years of the *European Journal of Marketing*: a bibliometric analysis  
**EL Martínez-López, JM Merigó** - *European Journal of ...* - 2018 - emerald.com  
...This article is useful for any reader of this *journal* to understand questions such as papers' *European Journal of Marketing*-related scientific productivity in terms of, for instance ...  
☆ Citado por 381 Artículos relacionados 80

[HTML] Twenty years of the *Journal of Knowledge Management*: A bibliometric analysis  
**M.Gómez-Maldonado, JM Merigó, S Páez** - *Journal of Knowledge ...* - 2018 - emerald.com  
...trends in the *journal* in terms of papers, authors, institutions, countries, *journals* and keywords. This study is useful for obtaining a quick snapshot of what is happening in the *journal* ...  
☆ Citado por 214 Artículos relacionados 80

Twenty five years of the *Journal of Travel & Tourism Marketing*: a bibliometric ranking  
**O Martorell-Cunill, JM Merigó** - *Journal of Travel & ...* - 2018 - Taylor & Francis  
*Journal* has celebrated its twenty-five anniversary. For that reason, this study analyzes all the publications in the *journal* ... the main factors that affect the *journal*. This analysis includes key ...  
☆ Citado por 121 Artículos relacionados 80



# Modelo de negocio

## 1) Suscripción

Incentivo -> Calidad

## 2) Publicación

Incentivo -> Cantidad

## GOODHART'S LAW

WHEN A MEASURE BECOMES A TARGET,  
IT CEASES TO BE A GOOD MEASURE

IF YOU  
MEASURE  
PEOPLE ON...

NUMBER OF  
NAILS MADE

WEIGHT OF  
NAILS MADE

THEN YOU  
MIGHT GET

1000'S OF  
TINY NAILS

A FEW GIANT,  
HEAVY NAILS



sketchplanations

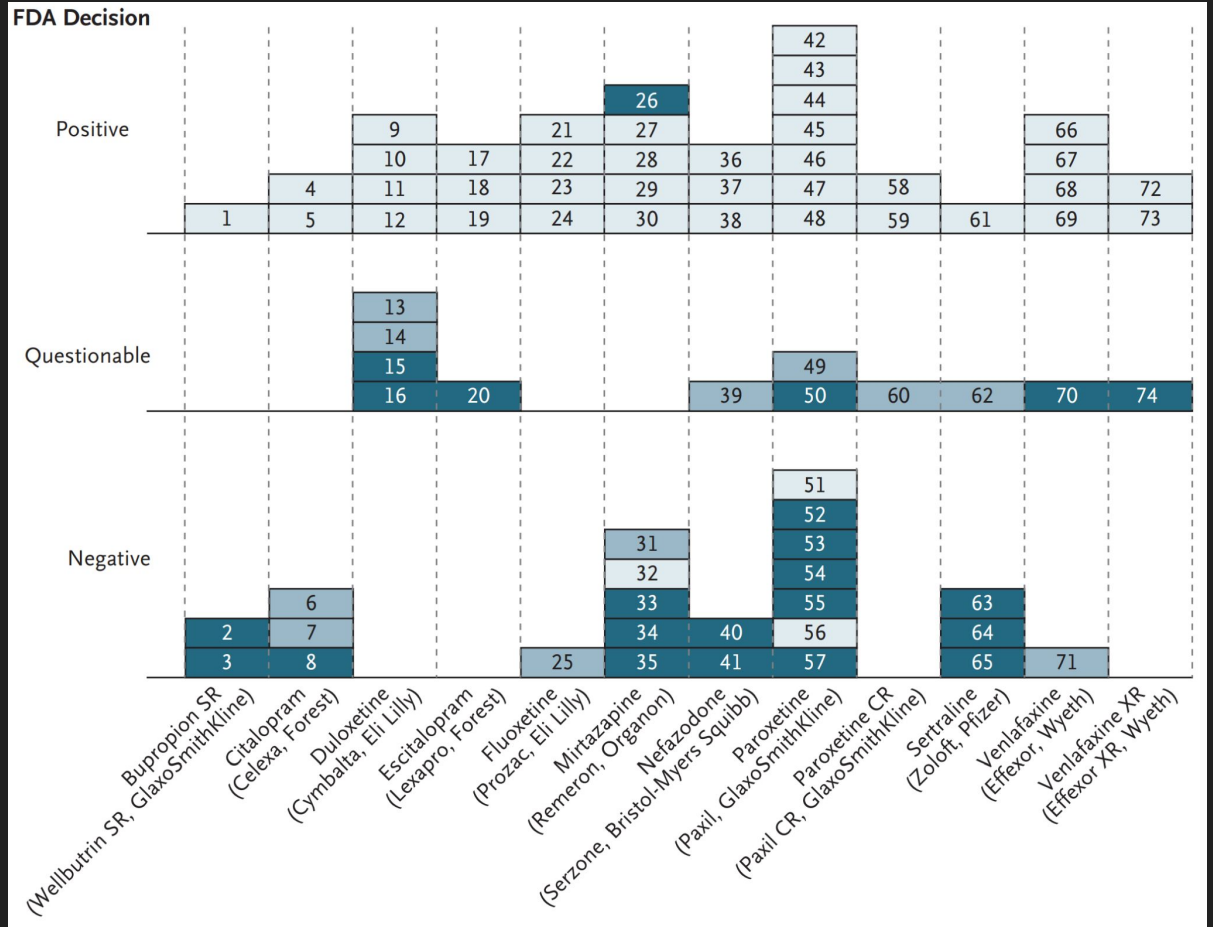
Todo esto mientras se produce un **sesgo positivo** en la publicación. La solución que se propone es **producir más información**

data sharing

open code

resultados negativos

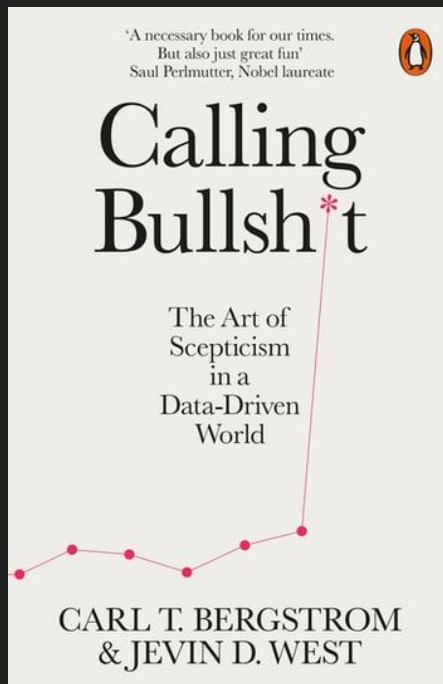
informes de revisión



Turner, E. H., Matthews, A. M., Linardatos, E., Tell, R. A., & Rosenthal, R. (2008). Selective Publication of Antidepressant Trials and Its Influence on Apparent Efficacy. *New England Journal of Medicine*, 358(3), 252–260. <https://doi.org/10.1056/NEJMsa065779>

# Un equilibrio difícil de mantener

- **Menos producción**
- **Mayor calidad**
- **Más transparencia**
- **Más documentación**
- **Menos filtros**



*Remember the mantra*  
**“think more, share less”**



# La credibilidad de la ciencia

3





## The rise and fall of gold OA

At the same time, the gold OA model began to proliferate and, along with this, the focus changed. For many journals, authors became publishers' customers, leaving readers as secondary players in the new OA equation. The fatal flaw of the gold OA model is the built-in conflict of interest: the

Beall, J. (2013). Predatory publishing is just one of the consequences of gold open access. *Learned Publishing*, 26(2), 79–84. <https://doi.org/10.1087/20130203>

West, J. D., & Bergstrom, C. T. (2021). Misinformation in and about science. *Proceedings of the National Academy of Sciences*, 118(15). <https://doi.org/10.1073/pnas.1912444117>

authors about its legitimacy. The publisher instead may be offering authors an opportunity to fool any bureaucracy or committee that assesses productivity by merely counting publications.

Yet more worrisome are the ways in which these publications mislead the public. Con artists publish fabricated or otherwise deceptive trials of snake oil therapies and use the publications in their sales pitches. The unapproved cancer treatment,



**Carl T. Bergstrom**  
@CT\_Bergstrom

We in the infectious disease epidemiology world spent decades preparing for a crisis like this, but were never imagining that we'd be fighting on two fronts, the virus on one and this sort of hyper-partisan disinformation on the other.

2:49 PM · Mar 26, 2020

### SCIENTIFIC PUBLISHING

## Silence greets requests to flag retracted studies

Authors and editors ignored warnings about citing noted fraudster, exposing a problem in scholarly publishing

# El fin de los filtros

Medidas como la expansión en cobertura de las bases de datos científicas (WoS y Scopus), traen consigo una **relajación en sus criterios de selección.**

Medidas como la promoción de preprints y apertura de procesos de investigación, son muy positivas para la comunidad científica, pero traen consigo **mayor confusión para lectores no familiarizados con el sistema científico.**

bioRxiv posts many COVID19-related papers. A reminder: they have not been formally peer-reviewed and should not guide health-related behavior or be reported in the press as conclusive.



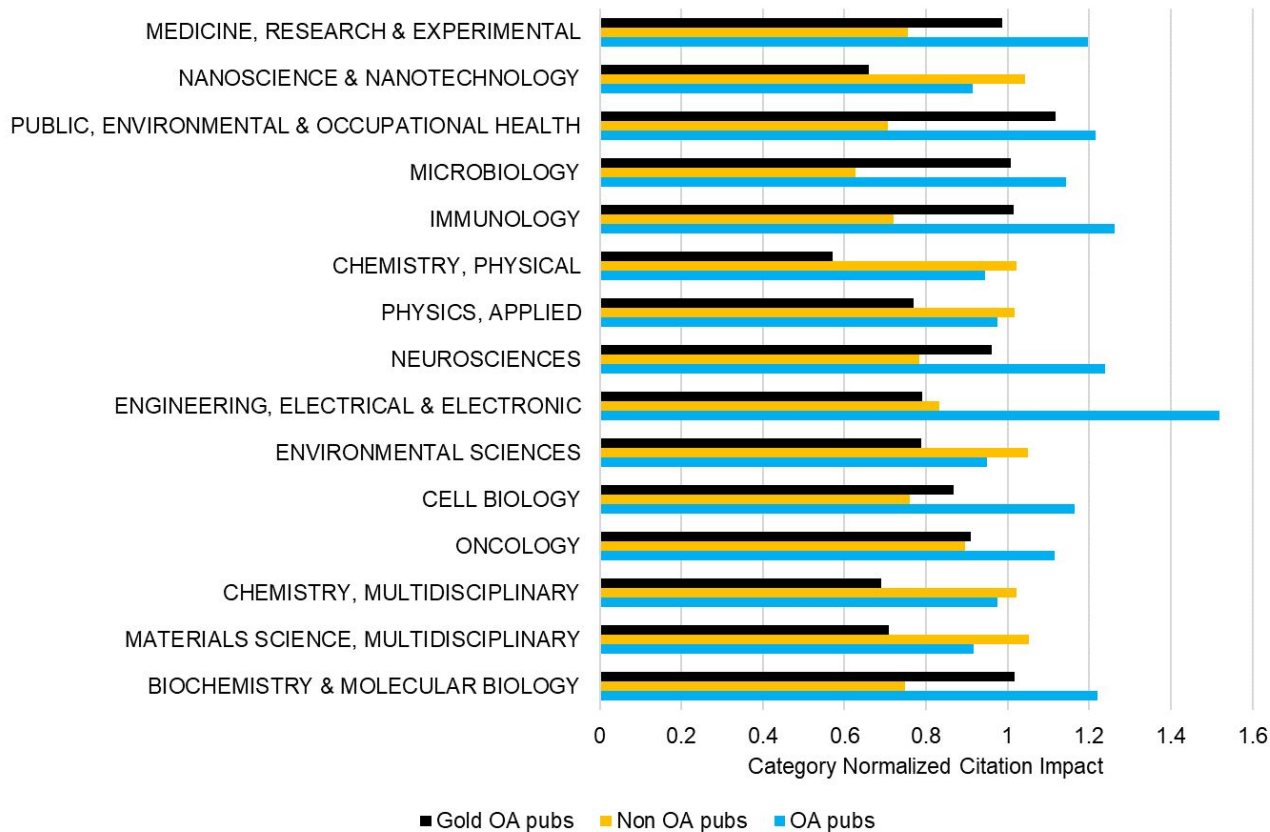
# Impacto social y científico

4



“  
Open science  
could  
become just  
the extension  
of privilege.”

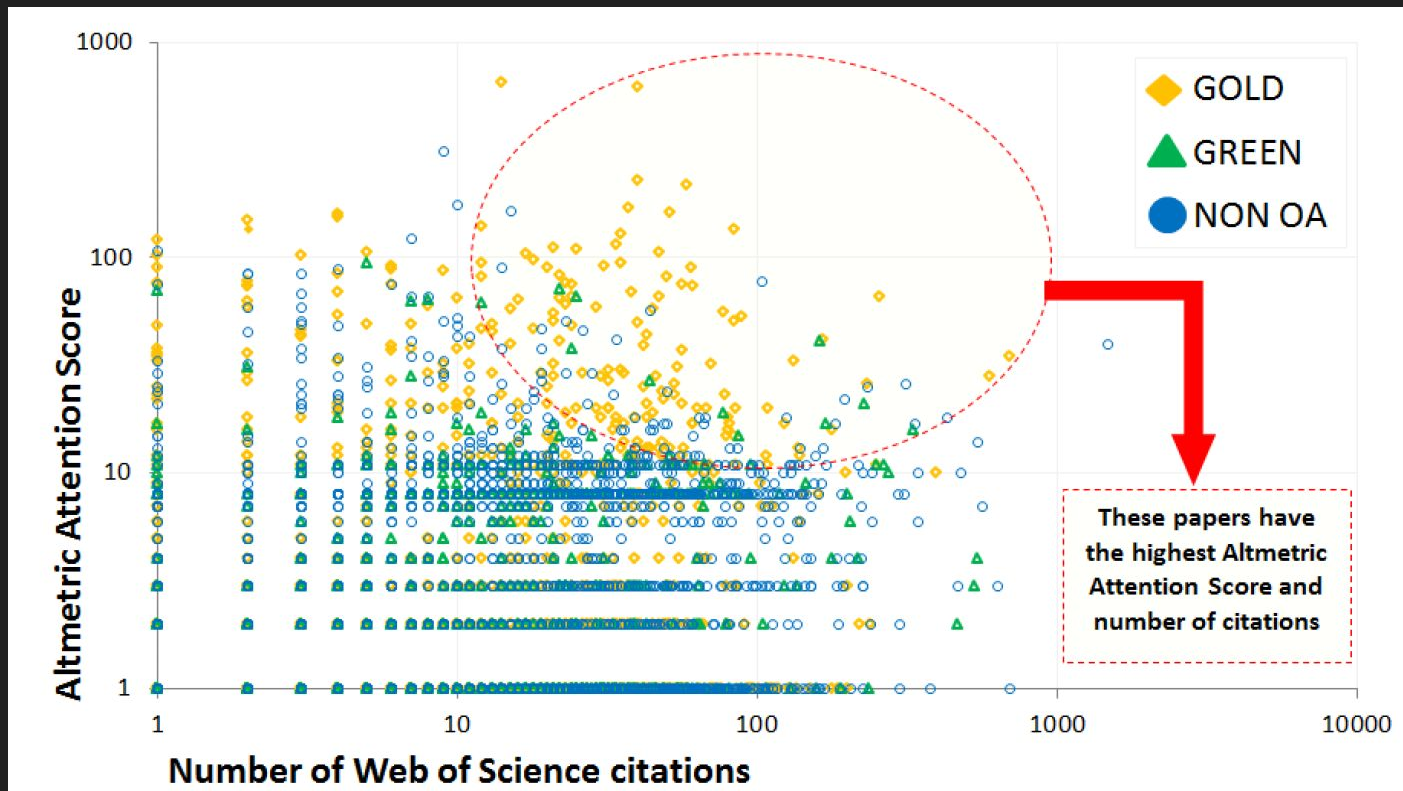
España - 2017-2021. Fuente: InCites







Open science  
could  
become just  
the extension  
of privilege.”



Robinson-Garcia, N., Arroyo-Machado, W., Moed, H.F., Torres-Salinas, D. Do altmetrics promote Open Access? An exploratory analysis on altmetric differences between types of access in the field of Physics. STI 2018 Conference Proceedings, Sept 12-14, 2018. Leiden, The Netherlands, p. 898-903. <https://hdl.handle.net/1887/65221>

Las revistas de Acceso Abierto suelen mostrar **menor diversidad geográfica** que las revistas tradicionales en sus **comités editoriales**.

Smith, A. C., Merz, L., Borden, J. B., Gulick, C. K., Kshirsagar, A. R., & Bruna, E. M. (2021). Assessing the effect of article processing charges on the geographic diversity of authors using Elsevier's "Mirror Journal" system. *Quantitative Science Studies*, 2(4), 1123–1143. [https://doi.org/10.1162/qss\\_a\\_00157](https://doi.org/10.1162/qss_a_00157)

El triunfo de un modelo de negocio en el que hay que **pagar para publicar** en las revistas de mayor impacto, convierte la publicación en un **privilegio de quien cuenta con financiación**.

Olejniczak, A. J., & Wilson, M. J. (2020). Who's writing open access (OA) articles? Characteristics of OA authors at Ph.D.-granting institutions in the United States. *Quantitative Science Studies*, 1(4), 1429–1450. [https://doi.org/10.1162/qss\\_a\\_00091](https://doi.org/10.1162/qss_a_00091)



**Open science  
could  
become just  
the extension  
of privilege.”**

# Contradicciones y problemas

- El **Acceso Abierto** acelera y exagera los **problemas del sistema de comunicación científica**
  - ◆ Revisión por pares
  - ◆ Reproducibilidad
  - ◆ Indexación de revistas
- La **apertura de procesos internos y social** pueden exagerar la **crisis de credibilidad social** que sufre la ciencia
  - ◆ Desinformación
  - ◆ Ciencia zombie

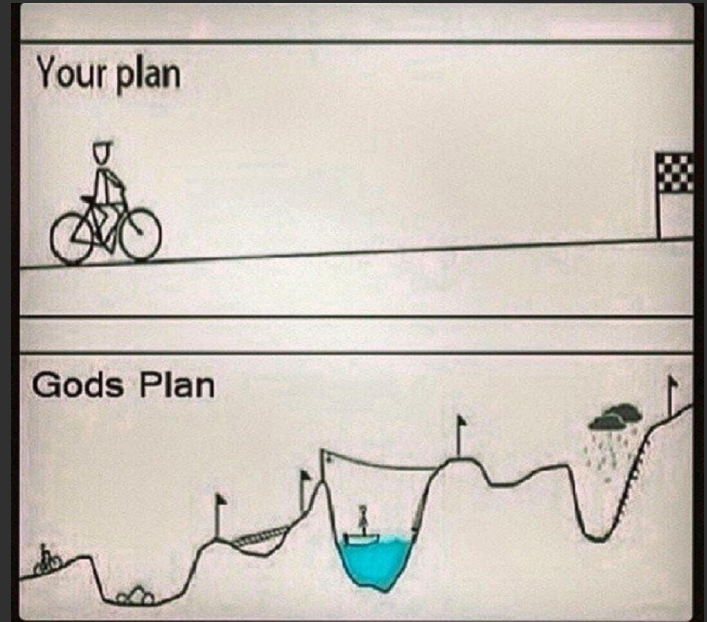


# Jornada sobre la Situación y Perspectivas del **Acceso Abierto**

10 de noviembre de 2022 - Valencia

**ORGANIZA:**

**Grupo UISYS**, Universitat de València



**¡Gracias por la  
invitación!**