Dr. Jochen Bihn openaccess@lib4ri.ch





- Background
- How to make your publications Open Access
 - Golden Road
 - Hybrid Open Access Journals
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- The State of Open Access
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(1) https://openaccess.mpg.de/2076881/2014_05-h2020-factsheet-open-access-faq.pdf

(2) <u>http://legacy.earlham.edu/~peters/fos/overview.htm</u>





Global Change Biology

PERSPECTIVE 🔁 Free Access

A simple explanation for declining temperature sensitivity with warming

E. M. Wolkovich 🔀, J. Auerbach, C. J. Chamberlain, D. M. Buonaiuto, A. K. Ettinger, I. Morales-Castilla, A. Gelman,

First published: 05 August 2021 | https://doi.org/10.1111/gcb.15746

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Abstract

Recently, multiple studies have reported declining phenological sensitivities (Δ days per °C) with higher temperatures. Such observations have been used to suggest climate change is reshaping biological processes, with major implications for forecasts of future change. Here, we show that these results may simply be the outcome of using linear models to estimate nonlinear temperature responses, specifically for events that occur after a cumulative thermal threshold is met—a common model for many biological events. Corrections for

the apparent decline. (estimates based on cal without any shift in the to identify when and h

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Global Change Biology

PRIMARY RESEARCH ARTICLE 🔂 Open Access 🛛 💿 🕦

Drought stress mitigation by nitrogen in boreal forests inferred from stable isotopes

Choimaa Dulamsuren, Markus Hauck 🔀

First published: 26 July 2021 | https://doi.org/10.1111/gcb.15813 | Citations: 1

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Adapted from: Larivière V, Haustein S, Mongeon P (2015) The Oligopoly of Academic Publishers in the Digital Era. PLOS ONE 10(6): e0127502. https://doi.org/10.1371/journal.pone.0127502; licensed under a Creative Commons Attribution License



Publisher Market Share 2014-2018

as measured by articles and reviews indexed in the Web of Science



Najko Jahn (2019) Research compendium for a dataset about corresponding author country affiliations indexed in the Web of Science 2014 – 2018. Licensed under CC-BY 4.0.

The global publishing landscape is dominated by a few large publishers.





The Academic Publishing Market



Source: Right to Research Coalition. (n.d.). Retrieved March 30, 2017, from http://www.righttoresearch.org/learn/problem/index~print.shtml

- oligopolistic conditions
- dysfunctional market
- huge profit margins

"Publishing obscure academic journals is that rare thing in the media industry: a license to print money." (The Economist, 14 April 2012)





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| journals |) | 1 | MMWR. Recommendations and reports : Morbidity and mortality weekly report. Recommendations and reports / Centers for Disease Control <i>Open Access</i> | 87.75 | 99% 1/89 Epidemiology | 1,053 | 12 | 100 | | | |
| Minimum citations Minimum documents Citescore highest quartile | | 2 | MMWR. Surveillance summaries : Morbidity and mortality weekly report. Surveillance summaries / CDC Open Access | 26.12 | 99% 2/247 Health (social science) | 1,463 | 56 | 88 | | | |
| Show only titles in top 10 percent 1st quartile 2nd quartile 3rd quartile | | 3 | Journal of Statistical Software Open Access | 25.02 | 99% 1/123 Statistics, Probability and Uncertainty | 6,631 | 265 | 70 | | | |
| | ^ | 4 | Living Reviews in Relativity Open Access | 19.77 | 98% 1/46 Physics and Astronomy (miscellaneous) | 257 | 13 | 85 | | | |
| ☐ Book Series ☐ Conference Proceedings ☐ Trade Publications | | 5 | Living Reviews in Solar Physics Open Access | 15.57 | 98% 2/76 Astronomy and Astrophysics | 218 | 14 | 100 | | | |

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| Open Access Ø Open Access | | 7 | ACS Central Science | 4,160 | 12.837 | 0.01783 | - 8 |
| Category Schema | | 8 | Science Advances | 21,901 | 12.804 | 0.10997 | - 11 |
| Web of Science | | 9 | Physical Review X | 13,462 | 12.211 | 0.07426 | - |

How to assess the quality of OA Journals

- Included in DOAJ?
- Read some articles in the journal!
- Have a look at the journal's website!
- Have a look at the editorial board!
- Is the publisher a member of <u>OASPA</u> (Open Access Scholarly Publishers Association) or <u>COPE</u> (Committee on Publication Ethics)?
- More tips: <u>Think. Check. Submit.</u> <u>Open Access Journal Quality Indicators</u>
- Do not trust «blacklists» of *predatory* journals. Use critical thinking.



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Institutional Funding

- Costs are covered by an institution, society etc.
- Documenta Mathematica, funded by the Deutsche Mathematiker-Vereinigung
- <u>RILEM Technical Letters</u>, funded by the International Union of Laboratories and Experts in Construction Materials, Systems and Structures

Consortial Funding and Crowdfunding

- Palaeontologia Electronica, sponsored by several scientific societies
- SCOAP³, Initiative based at CERN to convert core high energy physics journals to OA
- Subscribe to Open, e.g. 8 journals from <u>Annual Reviews</u>
- SciPost managed by scientists via a foundation
- Author pays (Article Processing Charges APC)
 - Author are charged a publication fee after acceptance of the article
 - The cost of APCs varies considerably depending on the publisher and the journal
 - Median APC: 2000 EUR (<u>OpenAPC</u>, Dec 2023)
 - Acta Palaeontologica Polonica 22 EUR
 - Cell Genomics: 7960 EUR



How to pay the APC

Is the publication an outcome of a funded project?

- The SNSF offers funding for articles in <u>pure</u> Open Access journals.
- Funding is independent from the project budget and application can be submitted at any time, even after the project has ended.
- Guidelines: <u>https://oa100.snf.ch/en/funding/journal-articles/</u>

European Commission (Horizon 2020)

- Fees for Open Access publications in pure and hybrid Open Access journals can be claimed as project expenses.
- Reimbursement only during the duration of the grant.

Bill & Melinda Gates Foundation

- The foundation pays publication fees required by a publisher.
- To access this funding, authors will need to use the <u>Chronos</u> system.





Open Access agreements (full OA journals)

- The library has agreements about free OA publishing with several publishers of full OA journals
- APCs are paid by the library. Authors are not charged for their articles.

Lib4RI has agreements with the following OA publishers (pure OA journals):

- Separation Copernicus
- Section Frontiers
- 🄄 MDPI
- ✤ ACS
- ^b Elsevier (still no agreement for 2024; article <u>submitted</u> until 31.12.23 are covered)
- 🄄 IEEE
- IOP Publishing
- 🎭 IWA
- Royal Society
- SAGE
- Requirements: **corresponding/submitting author** has to be (co-)affiliated with Eawag/Empa/WSL/PSI.
- Mind the gap! Eligible journals, eligible article types, article quota, workflow...
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Open Access Publication Fund

The library pays Open Access fees for publications in full Open Access journals.

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- Authors decide if they want to make their articles OA (for a fee)
- Most subscription journals offer an OA option (Springer Open Choice, Wiley Online Open ...)
- Mixed Content: Closed Access and OA articles in one journal







Hybrid Open Access – The Problem

Revenues for a journal
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 +
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- Solution States The Problem: double dipping
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Materials Science and Technology

Englant EU Muellan EA Nuganahaw Kuna

Environmentally relevant UV-light weathering of polystyrene microand nanoplastics promotes hepatotoxicity in a human cell line

Felix H. Englert^{ab}, Fabrice A. Mueller^b, Battuja Dugershaw-Kurzer^c, Vera M. Kissling^c, Sarah Boentges^c, Govind S. Gupta^c, Gabriele A. Fontana^b, Sabine Diedrich^b, Laura Suter-Dick^{de}, Shana J. Sturla^b, Tina Buerki-Thurnherr^c

a University of Heidelberg, Faculty of Medicine, Heidelberg, Germany

- ^b ETH Zurich, Department of Health Sciences and Technology, Laboratory of Toxicology, Zurich, Switzerland
- ^c Empa Swiss Federal Laboratories for Materials Science and Technology, Particles-Biology Interactions, St. Gallen, Switzerland
- ^d School of Life Sciences, University of Applied Sciences and Arts Northwestern Switzerland, 4132, Muttenz, Switzerland

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e Swiss Centre for Applied Human Toxicology (SCAHT), 4001, Basel, Switzerland

* corresponding author: tina.buerki@empa.ch

Mueller, F. A., Dugershaw-Kurzer, B., Kissling, V. M., Boentges, S., Gupta, G. S., ... Buerki-(2023). Environmentally relevant UV-light weathering of polystyrene micro- and nanoplastics patotoxicity in a human cell line. *Environmental Science: Nano*, *10*(6), 1644-1659. rg/10.1039/D3EN00044C

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5 s/NPs) are global pollutants of concern to human health due to their increasing environmental n reach systemic circulation and distribute to organs, with the liver being a potential target due to its /er, knowledge of MP and NP hepatotoxicity is scarce and mostly focused on primary particles, which the aim of this study was to characterize how UV-weathering influences hepatic cell responses to e characterized the effects of primary PS MPs (3 µm) and NPs (25 and 100 nm) on a human liver cell 7 ing to profile alterations in pathologically relevant key cellular events, including oxidative stress, lipid 3 well as evaluating differential expression of genes relevant to lipid metabolism, inflammation, and đ in cell viability even at high concentrations (100 μ g ml⁻¹) or after prolonged exposure (10 days). β particles induced cytotoxicity after 24 h at a concentration of 0.1 µg ml⁻¹, which is <7% of PS blood. Other cellular stress responses were observed only upon exposure concentrations of UVthe maximum concentration (12 μ g ml⁻¹) detected in human blood. Finally, genes involved in lipid 4 nesis were upregulated upon exposure to most of the tested MPs and NPs. Conclusions: UVreases their hepatotoxicity. Cytotoxicity was more pronounced for micro-sized PS particles, but PS ant to the development or progression of fatty liver disease. The data demonstrate the relevance of e properties and biological impacts of MPs and NPs and emphasize the need for further studies of ction and disease risk.

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| | 70 | | |

The State of Open Access











Swiss National Strategy on Open Access

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4. Vision

Taking account of the principles expressed above, the Swiss National Strategy on OA aims

- to achieve the following objective, in accordance with international benchmarks: by 2024,
- all scholarly publication activity in Switzerland should be OA, all scholarly
 This na publications funded by public money must be freely accessible on the internet. The OA
 adopted landscape will consist of a mix of OA models.

1.

Revolutionary developments in information technology have made it possible to share knowledge easily. A scientific culture characterised by its openness and by "the way researchers work, collaborate, interact, share resources and disseminate results^{*1} is called Open Science. It implies a transformation of the publication culture and opening up of science and research. Open Science practices, in particular OA, are increasingly being adopted worldwide, reflecting the fact that publicly funded research results are a public good which can only be fully exploited if everyone has free access without any restrictions.

OA initiatives started mainly as a reaction of scientific communities to the unsustainable and cost-increasing developments in the scientific publishing landscape. Over the last few decades, subscription costs have soared and profit-oriented publishing houses have played a dominant role in the publication and dissemination of scientific works². Their position is based on the fact that researchers appreciate their content, work for them as authors, reviewers and editors and often feel obliged to publish their works with them - all based on the current evaluation and reputation mechanisms - in order to maintain optimal career chances. As a consequence, most of the publicly funded research is locked behind a paywall.

All over the world, OA initiatives offer a chance of providing broad-based open access to research results, bringing research back to the scientists and to the public that funds it. They also represent an opportunity to point out flaws and consequences of the current evaluation and reputation mechanisms in science. Research funding



Swiss Open Access Monitor



About Charts & Data FAQ Wiki

Welcome to the Swiss Open Access Monitor

"By 2024, all scholarly publication activity in Switzerland should be OA, all scholarly publications funded by public money must be freely accessible on the internet." (swissuniversities Swiss National Strategy on OA)

The Swiss Open Access Monitor is the tool to monitor the progress of the implementation of Open Access at national level. <u>More</u>

Open Access shares at national level



https://oamonitor.ch/

Journal Articles 2018-2022



Eawag, Empa, PSI & WSL







State of Open Access at the 4RI

| | DORA Eawag | DORA Empa | DORA PSI 1 | DORA WSL | Total |
|--------------------------|------------|------------|------------|----------|-------------|
| Journal Articles in 2023 | 459 | 748 | 1 128 | 735 | 3 070 |
| Open Access | 391 | 582 | 893 | 593 | 2459 |
| | 85.2% | 77.8% | 79.2% | 80.7% | 80.1% |
| With embargo | 43 | 101 | 101 | 83 | 328 |
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Summary





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| Journal List | unfol | | |
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| Publisher: American Meteorological Society Publication Period: 1988- ISSN : 0894-8755 E-ISSN : 1520-0442 Earlier Title: Journal of Climate and Applied Meteorology | Peer Reviewed Journal Impact Factor: 5.38 (details) Green Open Access (details) ● Published Version ● Embargo: 12 Months ● Published Version ● Embargo: 6 Months ● Author must be affiliated to institution | | |





Summary (& some suggestions)

- Open Access has benefits for you, your institution, science and society.
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