

ICSTI 2025 Annual Conference



ETH Library, ETH Zurich

September 18 - 19

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schedule.



To connect to WiFi

<https://cat.eduroam.org/>



*ICSTI provides a forum for member organizations to share **experience, expertise, and understanding** with a network of international scientific and technical information stakeholders driving innovation and navigating key issues.*

ICSTI Annual Conference: Workshop 1



Sarah Rouhi

- **“Scientific societies navigating the storm: how open science is transforming the scholarly publishing landscape”**

Daniela Hahn

- **“Open Science: Navigating Trends, Challenges and Opportunities”**

Alessio Bolognesi

- **“Evolution of Publishing”**

Peter Kraker and
Cristoph Arthofer

- **“Open Science: Navigating Trends, Challenges and Opportunities”**

Sarah Rouhi



Scientific Societies Navigating the Storm: How Open Science is Transforming the Scholarly Publishing Landscape

- Sara Rouhi, Director, Open Science/Publishing Innovation
- American Institute of Physics (AIP) Publishing
- srouhi@aip.org
- Bluesky: @RouhiRoo.bsky.social

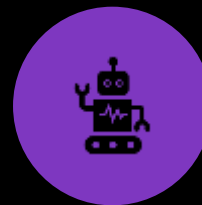


By way of intro...

- Bluesky: @RouhiRoo.bsky.social
- LinkedIn:
<https://www.linkedin.com/in/sararouhi/>
- ORCID: 0000-0003-1803-6186
- Email: srouhi@aip.org



**NEW, EQUITABLE
BUSINESS MODELS –**
PLOS, AIP PUBLISHING



**NEW BUSINESS
DEVELOPMENT/PRODUCT
DESIGN – PLOS,
DIGITAL SCIENCE, AIP
PUBLISHING**



**COMMUNITY OUTREACH
AND ENGAGEMENT –**
ACS PUBLICATIONS,
DIGITAL SCIENCE



**OPEN SCIENCE
ADVOCACY – PLOS, AIP
PUBLISHING**

About AIP: a Federation and Institute

As a 501(c)(3) non-profit, AIP is:

- **A federation** that advances the success of its Member Societies
- **An institute** that engages in research and analysis to empower positive change in the physical sciences

AIP's member societies:

- [ACA: The Structural Science Society](#)
- [Acoustical Society of America](#)
- [American Association of Physicists in Medicine](#)
- [American Association of Physics Teachers](#)
- [American Astronomical Society](#)
- [American Meteorological Society](#)
- [American Physical Society](#)
- [AVS: Science & Technology of Materials, Interfaces and Processing](#)
- [Optica](#)
- [The Society of Rheology](#)





Our Products

- 1** AIP Flagship Magazine
- 43** Peer-Reviewed Hybrid & Open Access Journals
- 3,245** Volumes of AIP Conference Proceedings
- 2** Book Programs—AIPP books & University Science Books



Our Partners

- 13** Scientific Societies
- 3,603** Subscribing Institutions & Corporations
- 1** Global Community of Authors, Readers, Peer Reviewers, and Editors



Our Purpose

To bring the latest discoveries to the world by providing researchers with the best home for their work.

About AIP Publishing

As a not-for-profit subsidiary of AIP, we exist to advance the physical sciences for the benefit of humanity by



“Society publishers are at a crossroads. The current trajectory — declining revenues, increasing volumes, growing technological complexity, and abandonment of independent publishing — is unsustainable for many organizations.”

Society Publishers at a Crossroads: New Evidence of an Accelerating Crisis - Rob Johnson, Research Consulting



Fractured global
priorities

Perverse
research
incentives

Article-based
economy

Research fraud
as a criminal
enterprise

AI giveth and
taketh away

Geopolitical
uncertainty;
attacks on
science

A complex storm system...

Fractured global
priorities

[Home](#) > [News](#) >

Changing with the times: our evolving approach to open access

Shaping our Open Access approach amid a complex, evolving open research landscape, supporting authors to best suit their local context

 [Sara Bosshart](#)

Article

In 2022, the Royal Society of Chemistry (RSC) announced our ambition to transition all of our RSC-owned journals to open access (OA) within the next five years. This ambition made us the first chemistry publisher to publicly commit to a fully OA future.

Since then, we embarked on a global programme to engage with our community and to understand the ways in which we could collaboratively build a fully OA future, overcoming local challenges and supporting stakeholders to adapt to open access. Based on the conversations we had across the world and in response to shifts in the global research landscape, we are evolving our OA strategy. Rather than a universal transition to 100% open access by 2028, we are moving toward regionally tailored approaches to OA and models that support diverse pathways to openness, based on local needs, funding landscapes, and infrastructure.

**One size does
not fit all**

*Royal Society of
Chemistry update on
their open access
commitment*

Fractured global
priorities



Small non-profits responding to global needs

- EU/UK – Open Science forward
- China/India – mixed approaches
- Latin America/Africa – community-driven infrastructure, Diamond
- US – unclear...?



Fractured global
priorities

Global conversation driven by one region

- EU driving global policy (sometimes w/o consultation)
- Publishers rushing to compliance; Simplest solution – Gold OA
- More articles = More \$\$
- Quality/rigor at risk (esp with AI)
- Perverse incentives

Research assessment paradigm is inherently flawed.

“There is also concern that scientists seeking to build their reputation will **focus solely on increasing their research output** and impact, since these are the factors on which assessment systems are based. The worry is that this **creates false incentives that cause the focus to drift away from quality assurance and compliance with good research practice.**”

Perverse research incentives

The screenshot shows the PUBLISSO website. At the top, there is a navigation bar with links: PUBLISHING, ADVICE, RESEARCH DATA MANAGEMENT, DIGITAL PRESERVATION, and WORKING FOR. Below the navigation bar, the breadcrumb trail reads: PUBLISSO > Advice > Publishing Advice: FAQs > Reputation and research assessment in academia. The main heading of the article is 'Reputation and research assessment in academia – a brief introduction'. Below the heading, a short paragraph states: 'This article offers a brief overview of the topic. Individual factors and subject-specific aspects would require a broader examination, and cannot be considered in depth here.' The 'Introduction' section begins with the sentence: 'When it comes to building and maintaining a scientific reputation, the following elements are key:'. This is followed by a bulleted list: 'the quality of research proposals;', 'the number of publications (output);', 'the overall number of citations (impact);', and 'the acquisition of projects and third-party funding.' Below the list, another paragraph mentions: 'Other factors that can help build a reputation include the quality of teaching activities; the number of Bachelor's, Master's and doctoral theses supervised; the degree of participation in the respective scientific community (in the form of editorships, for example); and the ability to make research results accessible to the general public.' On the right side of the article, there is a 'Contact' section featuring a photo of Dr. Jasmin Schmitz, her name, and contact information: 'Phone: +49 (0)221 999 882 666' and a 'Send mail' button.

“Reputation and research assessment in academia - [a brief introduction](https://www.publisso.de/en/)”
[Dr. Jasmin Schmitz](https://www.publisso.de/en/), Deputy Head of Department of Open Science, Head of PUBLISSO:
<https://www.publisso.de/en/>

Paper mills: the 'cartel-like' companies behind fraudulent scientific journals

Published: October 21, 2024 10:09pm EOT

Sama seperti pabrik kertas, pabrik artikel ilmiah juga memiliki proses kerja yang runtut, terlapis dan sistematis. Jose Luis Stephens/shutterstock.



Science and *Nature*, two leading science journals, have revealed a growing problem: an alarming rise in fraudulent research papers produced by shady paper mill companies. This wave of fake studies is creating a major headache for the academic world, putting the integrity of global academic research at risk.

Author



Rizzy Amelia
Lecturer in Social
Universitas Airlangga

Article-based
economy



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News

Home Latest Opinion In-depth



We must break the link between publisher revenue and article volume

Volume-driven publishing pushes up costs and threatens research integrity. We need new agreements with healthier incentives, says Anna Vernon

Published on July 22, 2025

Last updated July 22, 2025

Anna Vernon

As funding tightens and universities re-evaluate what counts as impactful research, the urgency of reforming scholarly publishing and its costs has become overwhelming.



International
Science Council

About Our work Members News and publications

Why overpublication?

On the science side, we suggest that this explosive trend is driven by individual and institutional competitiveness. On the commercial side we suggest that it is driven by academic demand (due to the above factors) and profit-seeking in an already lucrative market. The insistence of publishers to increase the rate of publication in their journals has led to the wholesale resignation of those Editorial Boards (Koley, 2024) that have resisted commercial demands to publish ever more papers. The commercial business model has

the rise of so-called "predatory publishing" – the production of papers for their with little scientific merit and low editorial standards (IAP Report, 2022). 'Paper turning out papers and flooding publishing system with bogus articles (2024). Interestingly, the paper mill articles often look as good as credible articles, only line-by-line scrutiny can reveal the "tortured phases[1]" used in fake tables and figures. The practice of selling authorships has also become widespread. Editorial boards are being infiltrated with non-credible academicians in some journals (Besser, 2024). Moreover, practices such as artificially boosting citations to make researchers' profiles more attractive are now common practice (Catanzaro, 2024). Unfortunately, no credible and widespread action has so far been taken by the academic community.

The Wiley/Hindawi scandal

A recent scandal has exemplified the unstructured nature of science publishing, where publishers operate under their own rules with no significant constraints from the science community. Wiley & Sons have just decided to suspend the Hindawi journal portfolio, which

Criminal science publishing gangs – a new world of crime...

Research fraud
as a criminal
enterprise

TRIAL ▶ Naunyn Schmiedeberg Arch Pharmacol. 2021 Sep 23;394(11):2147–2151. doi: [10.1007/s00210-](https://doi.org/10.1007/s00210-021-0158-3)

[158-3](#) 

Criminal science publishing gangs damage the genesis of knowledge technology—a call to action to restore trust

[Erhard A Sabel](#)¹, [Roland Seifert](#)^{2,*}

[Author information](#) ▶ [Article notes](#) ▶ [Copyright and License information](#)

PMCID: PMC8514363 PMID: [34554267](#)

What is the power of criminal science publishing gangs ?

Criminal science publishing gangs—formerly known as “paper mills”—are fraudulent businesses producing fake scientific papers with false content. We decided to use the former term because the latter one was inspired by a fantasy novel (Byrne and Christopher [2020](#)). But we are not dealing with a fantasy novel. We are dealing with the reality of true crime.

Fraudulent science papers are produced by scientists who sell their services of writing ghost papers for customers who are presumably in urgent need to demonstrate their scientific output. Their aim is to generate—or polish—their “scientific standing” to personally gain job promotions and increase their “credibility.” Criminal science publishing gang products are sold in many scientific disciplines and challenge the very foundation of trust and reliability of

CORDIS - EU research results

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April 2024: EU RFP study on impacts of scientific fraud...

[Home](#) > [Projects & Results](#) > [H2020](#) > [H2020_GARRI-9-2015](#)

EN

Estimating the costs of research misconduct and the socio-economic benefit of research integrity

See the complete
H2020

Research fraud
as a criminal
enterprise

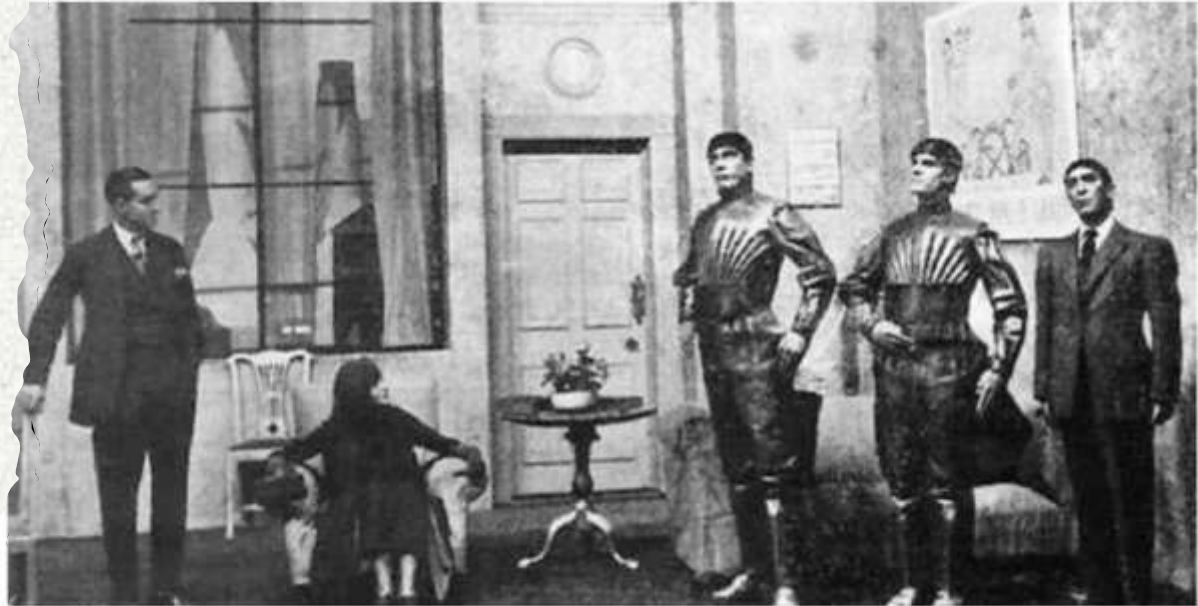
AI giveth and
taketh away

AI is like any other tool...

It's promise for
accelerating scientific
discovery AND
dissemination is huge
but so are the risks

The Czech Play That Gave us the Word 'Robot'

Karel Čapek's play "R.U.R." premiered in January 1921. Its influence cannot be overstated.



"The product of the human brain has escaped the control of human hands. This is the comedy of science."

JSCIRES, VOL 14, ISSUE 2, 2025

🕒 45 Mins Read | 👁 177 Views

High Costs, Long Waits, and Ethical Dilemmas: A Review of Challenges in Academic Publishing

AI giveth and
taket away

"Academic integrity is threatened by ethical issues like ***the improper use of AI tools, which also call into question the originality and creativity of research.*** This review draws upon insights from a curated body of recently published research papers to highlight structural injustices in academic publishing, their adverse effects on global research output, and the excessive pressure placed on faculty members to fulfill the requirements of accreditation agencies"

AI giveth and
taket away

1. Chat first interaction
2. Mediated access
3. Speed vs. verification
4. New research behavior pathway



How AI is changing research discovery



- **Chat-first interaction:** Researchers increasingly rely on AI assistants for initial exploration
- **Mediated access:** Direct source consultation declining in favour of AI-synthesized responses
- **Speed vs. verification:** Instant answers often bypass traditional validation processes
- **The new research pathway:** Question → AI Chat → Decision (bypassing original sources)

Natalia Manolo, CEO OpenAire, a pan-European open scholarly infrastructure provider. Speaking at the 2025 Open Science Fair at CERN this week

As an example...

ChatGPT 5

I'm preparing a presentation on Scientific and Technical Information (ICSTI) impacting research. I need key points I should mention to whom speak English.

Here's a structured set of **key points** you can use for your presentation on Scientific and Technical Information (ICSTI). I've framed them to be clear and impactful.

Would you like me to **draft a slide outline** (with suggested visuals and talking points per slide) so you can take this straight into presentation form?



Yes!

Perfect — here's a **slide-by-slide outline** you can adapt directly into your deck. Each slide has a clear title, suggested visuals, and short talking points so it works well for an international audience.

1. Framing the Issue

- **AI is powerful but risky:** While AI accelerates research, it also introduces risks to the **trustworthiness of science**.
- **Integrity is at stake:** If research becomes unreliable, the credibility of science suffers worldwide.

2. Main Risks to Research Integrity

a. Fabricated or Manipulated Content

AI can generate **data that look scientific but are false or unverifiable**, leading to fake articles, overwhelming journals.

b. AI Use

AI can be used for **plagiarism or attribution** or rewrite existing work. Researchers must be transparent about when and how they use AI.

AI can also be used for **producing references, data, or claims** that are not quickly in the scholarly record.

AI can also be used for **AI-generated submissions**, which are difficult and time-consuming to detect.

As a subject matter expert, I can query, question, verify, and eliminate responses that are incorrect or irrelevant.
But early career researchers, students, Gen Z users...they're less likely to "use but verify."

AI giveth and taketh away

"Here, we explore the risks of **over-reliance on such automated tools**, echoing potential threats to scientific integrity and a surge in low-quality publications, while also considering their potential role in the reproduction and verification of scientific findings. To address these challenges, we recommend the development of clearer guidelines and ethical standards for the use of artificial intelligence (AI) in research,..."

"The Promise and Perils of Autonomous AI in Science" Junyi Gao, M.S and Ewen M. Harrison, FMedSci. Published December 16, 2024, *NEJM AI* 2025;2(1)

DOI: 10.1056/Ale2401073

VOL. 2 NO. 1

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EDITORIAL

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The Promise and Perils of Autonomous AI in Science

Authors: Junyi Gao, M.S. , and Ewen M. Harrison, FMedSci.  [Author Info & Affiliations](#)

Published December 16, 2024 | *NEJM AI* 2025;2(1) | DOI: 10.1056/Ale2401073 | VOL. 2 NO. 1
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Abstract

In this edition of *NEJM AI*, Ifargan and colleagues present data-to-paper, an automated platform designed to mimic human scientific practice by guiding a large language model through a stepwise research process to produce complete research papers. While the platform shows promise, significant errors frequently occur with complex datasets, requiring human intervention for correction. Here, we explore the risks of over-reliance on such automated tools, echoing potential threats to scientific integrity and a surge in low-quality publications, while also considering their potential role in the reproduction and verification of scientific findings. To address these challenges, we recommend the development of clearer guidelines and ethical standards for the use of artificial intelligence (AI) in research, including the need for transparency in research

AI giveth and taketh away

Federal Research Cuts Threaten U.S. Innovation and Leadership

FEDERAL BUDGET

BACKGROUNDER

INNOVATION AND COMPETITIVENESS

Geopolitical
uncertainty;
attacks on
science

All the while...

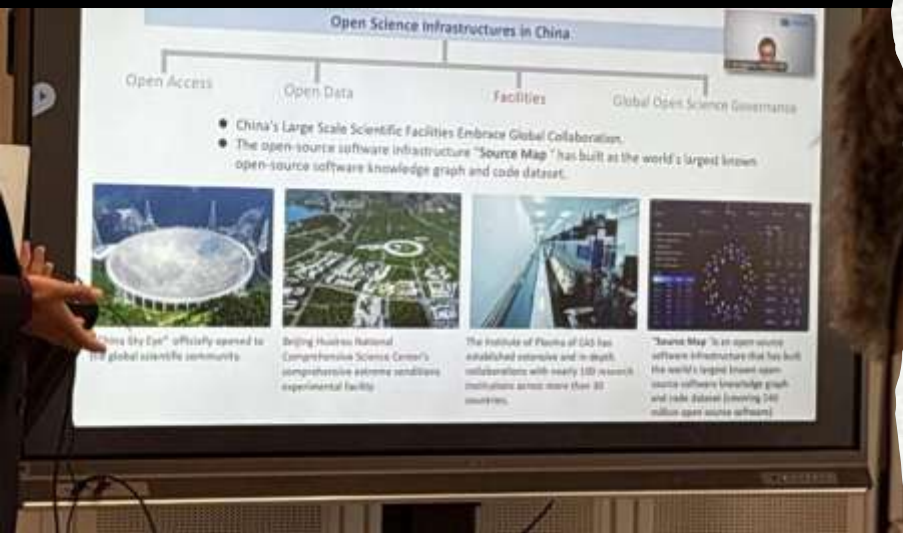
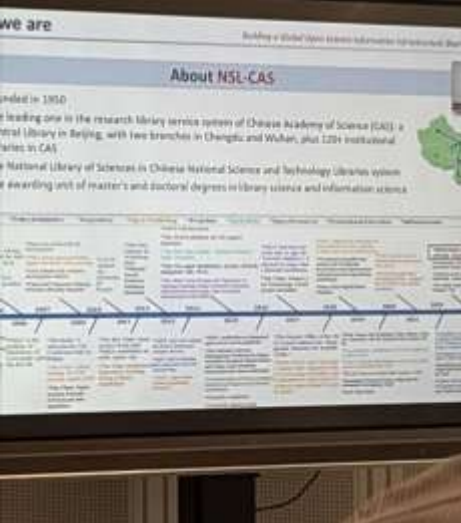
PRESIDENTIAL ACTIONS

Restoring Gold Standard Science

Executive Orders

May 23, 2025

AIP
Publishing



**All the while...
other leaders
are filling the
void...**

Jin Xie and Jinxia Huang (Open Science Research Center, National Science Library, Chinese Academy of Sciences) leading 2025 Open Science Fair workshop: "Fostering Global Collaboration in Open Science Infrastructure Sharing" with OpenAire and other global UNESCO partners



The question every scholarly society is asking...

How do we ensure we are about to continuing providing the services, benefits, and support tied to our mission and our parent's mission?



Research institutions

- Research assessment paradigm slow to change
- Focused on securing grant funding
- Risk losing international student enrollment
- Higher ed under attack



Funders/policy makers

- Mandates with insufficient funding mechanisms
- No serious compliance tracking
- Grant assessment focused on traditional metrics



Publishers

- Increased cost in tools/service to support robust peer review, OA/OS
- Fighting zero sum game for marketshare
- Explosion of researcher/scientists to support



Scientific societies

- Rely on publishing as primary revenue stream
- Burdened with unwieldy governance structures
- Resistant to overtly "commercial" efforts
- Managed by members who are not necessarily financially focused



Libraries

- Prioritizes OA/OS/values but often with out funds
- Transactional approaches based on budgets
- Collective action challenges



Authors

- Driven by institutional/funder assessment priorities
- Deeply invested in journal/article paradigm
- Less interested in OA/OS for its own good
- Unaware of economics of publishing/library services
- Expect "one click" support from all stakeholders

How do we navigate a complex system of competing priorities?

How do we overcome these tensions?

Partnership
/ cross-
industry
collaboratio
n

Business
models

Tough
decisions





EXPLORE THE LATEST

Publishers working together to advance research integrity: a snapshot

Elected Council Members serve three-year terms and may be reelected for a maximum of two consecutive terms. Two co-chairs serve offset two-year terms. Full details on the Council election processes, balancing criteria and procedures (updated in 2022) are available in the [RDA Council Election Processes & Procedures](#) document.



Rosie Hicks
CEO
Australian Research Data Commons



Juan Bicarregui (co-chair)
Head of Data Division
Science and Technology Facilities
Council, UKRI



Maria Cruz
Programme / Project Manager
Dutch Research Council (NWO)



Wolfram Horstmann
Director & CEO
RZ Karlsruhe - Leibniz-Institute for
Information Infrastructure



Mikiko Tanifuji
Deputy Director
Research Center for Open Science
and Data Platform (RCOS), National
Institute of Informatics (NII)



Sara Garavelli
Strategic European Engagement
and Coordination Development
Manager, CSC - IT
Center for Science in Finland

The Metadata Exchange Hub

As an intermediary, the OA Switchboard simplifies the sharing of information between publishers, institutions and funders authoritative, timely, aggregated and validated publication metadata. This reduces the transactional cost for stakeholders, because it is a safe space for publication metadata, as mission driven, not-for-profit, community-led initiative.

```

graph LR
    S1((Stakeholder 1)) <--> OSB((OA Switchboard  
[envelope icon]))
    OSB <--> S2((Stakeholder 2))
  
```

Learn more about the "intermediary" concept in our [blog](#) and [video animations](#)

**Research
integrity, open
science best
practice,
metadata
standardization**

**Cross-
stakeholder
partnerships
tackling
collective
challenges**

**Partnership
/ cross-
industry
collaboratio
n**

Society publishers working together:

100% investment in funds back to science
Only content that *adds* to scientific
knowledge

Research integrity *ahead of profit*
Admit errors/correct them publicly

Institute of Physics Publishing (IOPP)
American Physical Society
American Institute of Physics Publishing
(AIPP)

Partnership
/ cross-
industry
collaboratio
n

 PURPOSE-LED
PUBLISHING™

SCIENCE IS OUR ONLY SHAREHOLDER

IOP Publishing

APS

AIP
Publishing



AIP
Publishing

More collaboration for sustainability...

“[We are like-minded NFP publishers who share the common ambition fo]r an orderly and sustainable transition to open scholarship and to improve the efficiency of the scholarly communication ecosystem for the benefit of researchers and society at large in a fair and sustainable way.” ~Society Publishers Coalition <https://www.socpc.org>

Subscribe 2 Open is a collective action business model where publishers and libraries are in active dialogue to push toward open content while still maintaining institutional support for publishing cost.

SUBSCRIBE TO PEN

Community of Practice

“Subscribe to Open” (S2O) is a pragmatic approach for converting subscription journals to open access—free and immediate online availability of research—without reliance on either article processing charges (APCs) or altruism.

S2O relies on existing library subscription procurement processes. The model



Our mission

The Society Publishers' Coalition (SocPC) is a group of likeminded, not-for-profit learned societies, community publishers and charities who publish as part of their charitable objectives and who re-invest the surplus from their publishing in the disciplinary communities they serve.

SocPC members share the common ambition to see an orderly and sustainable transition to open scholarship and to improve the efficiency of the scholarly communication ecosystem for the benefit of researchers and society at large in a fair and sustainable way. In order to help achieve this we wish to work with researchers, funders, institutions and other stakeholders.

Partnership
/ cross-
industry
collaboratio
n

Complex business model landscape

- Subscriptions
- Hybrid journals
- Gold open access / APCs
- Diamond (sponsored) models
- Read and Publish agreements (RAP)
- Collective action models like PLOS Community Action Publishing and AIP Publishing's new AIP Fusion model

Publishers are trying different combinations of these models to find long term sustainable outcomes.

Business models

SUBSCRIBE TO PEN

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Major shift between publisher/ library negotiation dynamics

- Libraries have negotiating principles
- Leveraging the purse strings to support mission/value driven publishers
- Demanding transparency and accountability from publishers

The nonprofits that consult with the library community on ***models that are mutually beneficial*** are the ones that will thrive.

Business
models

SUBSCRIBE TO OPEN

to Community of Practice

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S2O relies on existing library subscription procurement processes. The model

Society
Publishers'
Coalition

Our mission

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SocPC members share the common ambition to see an orderly and sustainable transition to open scholarship and to improve the efficiency of the scholarly communication ecosystem for the benefit of researchers and society at large in a fair and sustainable way. In order to help achieve this we wish to work with researchers, funders, institutions and other stakeholders.

Evolving strategies

- Growing push for scholarly societies to find alternative revenue streams
 - Product Innovation
 - AI Licensing
 - Acquisition or divestment
- Outsourcing technology, production, editorial or ALL publishing to 3rd parties
- Expanding global publishing footprint
- Cutting costs amidst immediate revenue issues in the US/UK and EU

Tough
decisions

White paper
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findings
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Executive summary

Society publishers play a unique role in the research landscape, combining deep subject expertise with community-led quality standards. They build trust in the enterprise of science at a time when it is in increasingly short supply.

Yet the scholarly publishing industry is in flux. Technological advances – from widespread digitisation to artificial intelligence – combined with intensifying policy mandates for openness are fundamentally reshaping the landscape. For society publishers, this environment presents both significant challenges and strategic opportunities.

To understand how they are responding, Research Consulting surveyed 66 society publishers and validated findings through an interactive workshop with 40 industry representatives. Our findings reveal:

- **Publishing remains core to societies' identity** – Nearly 80% of respondents consider publishing central to their mission, with most having published for over 50 years.
- **Print persists alongside digital** – Despite digital transformation, more than half of societies maintain dual-format publishing, balancing innovation with tradition.
- **Revenue pressures are mounting** – Since 2019, 56% of societies report declining journal revenues, with implications for their broader community activities.
- **Scale confers resilience** – Societies publishing larger journal portfolios and more diverse outputs demonstrate greater financial stability, while those with more limited offerings face heightened vulnerability.
- **Artificial intelligence presents a paradox** – AI ranked as both the greatest challenge and the most significant opportunity, with societies seeking guidance on implementation and licensing.
- **Open access creates volume without proportionate revenue** – 55% of societies expect content volume to grow faster than revenues, straining quality assurance processes.
- **Collaboration is increasingly essential** – Societies see collaborative approaches as key to tackling challenges including data integration, AI implementation, revenue diversification and the transition to open access publishing.

Now is the time for reinvention.

Society publishers will have to redefine what publishers do and the value we bring.

Top 5 Challenges	Top 5 Opportunities
1. Artificial intelligence and machine learning in publishing (n=33)	1. Artificial intelligence in publishing processes (n=20)
2. Competition from commercial publishers (n=25)	2. Collaboration between society publishers (n=20)
3. Library demands for open access and/or pricing reform (n=24)	3. Expanding into new markets or regions (n=18)
4. Government and funder mandates for open science (n=22)	4. Expanding open access offerings (n=15)
5. Research integrity management (n=16)	5. Enhanced author services and support (n=14)

“Safeguarding the future of society publishing: Research-consulting.com
<https://www.research-consulting.com/wp-content/uploads/2025/05/Safeguarding-the-future-of-society-publishing-online.pdf>

A photograph of a forest path. The path is covered in fallen yellow and brown leaves. It splits into two diverging paths that lead into a dense forest of tall trees with green foliage. The lighting is soft, suggesting an overcast day.

**Collaboration and creativity are the only roads
forward. Thank you!**

Bluesky: @RouhiRoo.bsky.social

LinkedIn: <https://www.linkedin.com/in/sararouhi/>

ORCID: 0000-0003-1803-6186

Email: srouhi@aip.org

Daniela Hahn

Konsortium der Schweizer Hochschulbibliotheken
Consortium des bibliothèques universitaires suisses
Consorzio delle biblioteche universitarie svizzere
Consortium of Swiss Academic Libraries



Advancing Diamond OA in Switzerland

Lessons Learned from the
PLATO Project

Agenda

- 1 PLATO Overview
- 2 PLATO Study: Diversity, Multilingualism and Funding
- 3 Ecosystem of Swiss Diamond OA Journals: Key Takeaways and Lessons Learned
- 4 Recommendations
- 5 What now?

Setting the Stage

What is Diamond/Platinum Open Access?

Diamond/Platinum Open Access refers to a scholarly publishing model without fees for either authors or readers. It is scholar-led, community-owned and based on values of diversity and equity.

Advantages for researchers?

- Immediate and full open access without pay barriers
- Copyrights remain with authors
- Scholar-led initiatives without commercial interests
- Integration into local research contexts and international visibility



<https://scienceeurope.org/our-resources/oa-diamond-journals-study/>

PLATO Overview

Initiative to advance sustainable Diamond Open Access publishing in Switzerland

Objectives

- Analysis of the current landscape of Diamond OA journals in Switzerland
- Devising sustainable funding scenarios for Diamond Open Access journals in Switzerland
- Stakeholder Engagement and Community Building

Co-funded by swissuniversities (Programme Open Science I) and the Partner Institutions

Partner Institutions



ETH zürich



Project Duration: February 2022–June 2025

PLATO Study

Objective

- Overview of the Swiss ecosystem of Diamond OA journals, its scope, operations, business models and infrastructures
- Identification of challenges and opportunities of Diamond OA journals

Concept

- In collaboration with the Institute for Applied Data Science & Finance, Bern University of Applied Sciences
- Three parts: bibliometric, qualitative (interviews with editors) and quantitative (survey: authors, editors, hosting infrastructures)



Published 5 January 2023
DOI [10.5281/zenodo.7461727](https://doi.org/10.5281/zenodo.7461727)

Ecosystem of Swiss Diamond OA Journals

Key Takeaways and Lessons Learned



In a nutshell

214 journals
60 (28.03%) are indexed
in DOAJ

Social Sciences: 45.33%
Arts & Humanities: 23.83%
Life Sciences: 20.09%
Physical Sciences: 4.21%
Technology: 4.21%
Interdisciplinary: 2.34%

Almost 50% of journals are published
by Higher Education Institutions
(10% of those by universities of
applied sciences and PHs)
17.76% by academic societies
10.28% by for-profit publishers

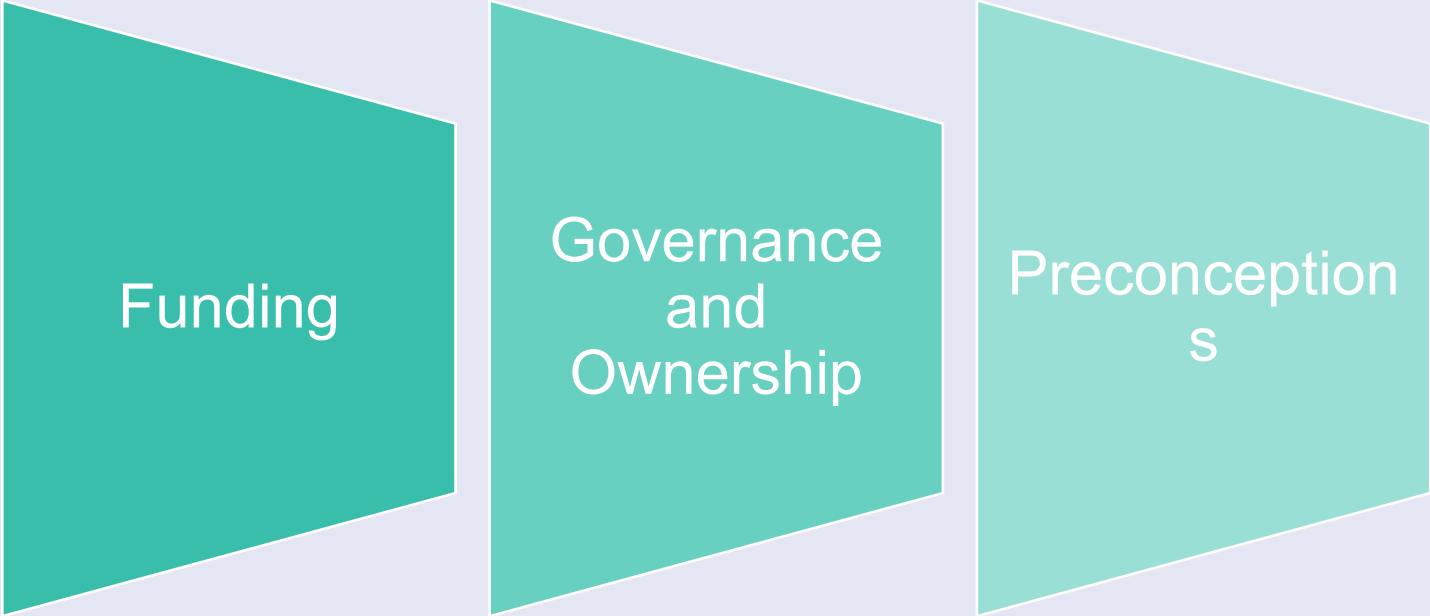
71% of journals publish
<25 articles per year

English is most common publishing
language (32.24%)
French 12.15%
German 10.75%
English/French/German 7.48%
English/German 7.48%
English/French/German/Italian 5.61%

50% of journals operate with less than
CHF15'000.

In their operations, most journals
mainly rely on volunteer/unpaid work.

What are the challenges?



Funding

Governance
and
Ownership

Preconception
s

What are the challenges?

Funding

Lack of sustainable funding options leads to lower confidence in long-term sustainability of journal operations (> 3 years).

Governance and Ownership

Preconception s

What are the challenges?

Funding

Lack of sustainable funding options leads to lower confidence in long-term sustainability of journal operations (> 3 years).

Governance and Ownership

Scholar-led governance relies on early succession planning and requires support regarding legal aspects of OA publishing.

Preconception S

What are the challenges?

Funding

Lack of sustainable funding options leads to lower confidence in long-term sustainability of journal operations (> 3 years)

Governance and Ownership

Scholar-led governance relies on early succession planning and requires support regarding legal aspects of OA publishing.

Preconception S

In certain disciplines, Diamond OA journals seem to be sidelined because of focus on impact factors, despite increasing costs.

What are the opportunities?

Take back control
over scholarly
communication

Investment in a
diverse, inclusive,
and affordable
science
communication
system

Shared hosting
infrastructures as
enablers of
Diamond OA

What are the opportunities?



Take back control
over scholarly
communication

Publishing/Reviewing in
and for the scholarly
community

Investment in a
diverse, inclusive,
and affordable
science
communication
system

Position Diamond OA as
solid alternative to
commercial publishing

Shared hosting
infrastructures as
enablers of
Diamond OA

Increase investment in
institutional publishing
infrastructures to ensure
high quality of support

Advancing Diamond OA in Switzerland

Recommendations from the PLATO Project



Recommendations

1. Strategic Investment of Public Funds

Establishing dedicated Diamond OA budgets at institutional levels and creating a collective national Diamond OA Consortium to collectively fund journals and institutional service providers, ensuring a transparent and equitable financial model.

Recommendations

1. Strategic Investment of Public Funds

2. Policy Integration

Aligning funding approaches with Switzerland's revised National Open Access Strategy (2024) to facilitate Diamond OA and ensure long-term viability and support.

Recommendations

1. Strategic Investment of Public Funds

2. Policy Integration

3. Building a Business Case

Kicking off a strategic process by a cross-functional group of stakeholders to monitor the scope of Diamond OA in Switzerland and creating a USP for Swiss higher education institutions to invest in Diamond OA and highlight return on investment.

Recommendations

1. Strategic Investment of Public Funds

2. Policy Integration

3. Building a Business Case

4. Institutional Collaboration

Expanding shared publishing infrastructures, pooling publishing services, expanding editor training and strengthening national and European partnerships (e.g., ALMASI, CRAFT-OA, EDCH, DIAMAS).

Recommendations

1. Strategic Investment of Public Funds

2. Policy Integration

3. Building a Business Case

4. Institutional Collaboration

5. Reducing Dependence on Commercial Publishers

Building researchers' trust in Diamond OA as a cost-effective alternative to APC-based models, increasing visibility, accessibility and societal impact.

What now?

CoDOA-CH

Creating a Sustainable Funding Scheme for Diamond Open Access through Institutional Collaboration in Switzerland

Objective:

Establish a National Diamond Open Access Consortium with the aim to fund scholar-led journal through a sustainable consortial funding scheme

Work Packages:

- Governance: Developing a Framework for the Consortium
- Evaluation Procedure and Quality Criteria: Defining Eligibility and Funding Criteria
- Financial Flows: Pooling and Distributing Funds
- Communication: Creating Visibility and Outreach

Project Duration: July 2025 – July 2026

Co-Funded by swissuniversities (Programme Open Science II) and the partner institutions

Website: www.codoa.ch

Konsortium der Schweizer Hochschulbibliotheken
Consortium des bibliothèques universitaires suisses
Consorzio delle biblioteche universitarie svizzere
Consortium of Swiss Academic Libraries

EPFL

ETH zürich



Lib4RI

**Universität
Basel**

**UNI
FR**
UNIVERSITÉ DE FRIEDRICH
UNIVERSITY FRIEDRICH

**UNIVERSITÉ
DE GENÈVE**

**UNIVERSITÄT
LUZERN**

unine
Université de Neuchâtel

**Universität
Zürich**

ZB
Zentralbibliothek
Zürich

How you can contribute

...if you're a researcher

...if you're a journal editor

...if you're a librarian

...if you're an institutional leader

Thank you!

Contact: daniela.hahn@slsp.ch

Alessio Bolognesi



eLife

Evolution of Publishing

Workshop: “Open Science: Navigating Trends, Challenges and Opportunities”

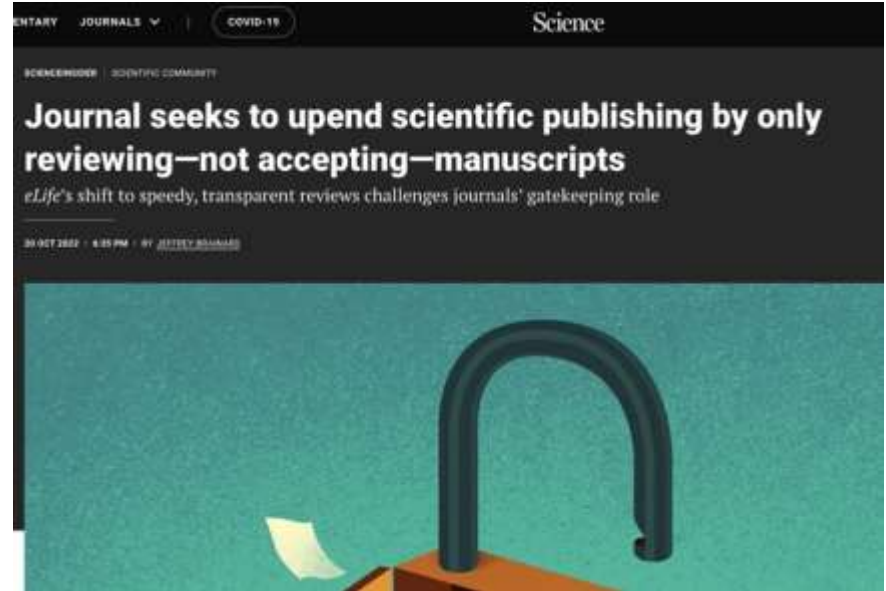
2025 Annual Conference, Bridging Open Science Ethics and Infrastructure, 19th, September, Zurich, Switzerland

Alessio Bolognesi PhD - Head of Publishing Development, eLife
a.bolognesi@elifesciences.org



Outline

- About eLife (1 slide)
- Changes
- Q&A



About eLife

- An independent non-profit led by scientists
- Public peer review and evaluation of preprints in the life and medical sciences
- Develops open-source platforms for review and dissemination of research



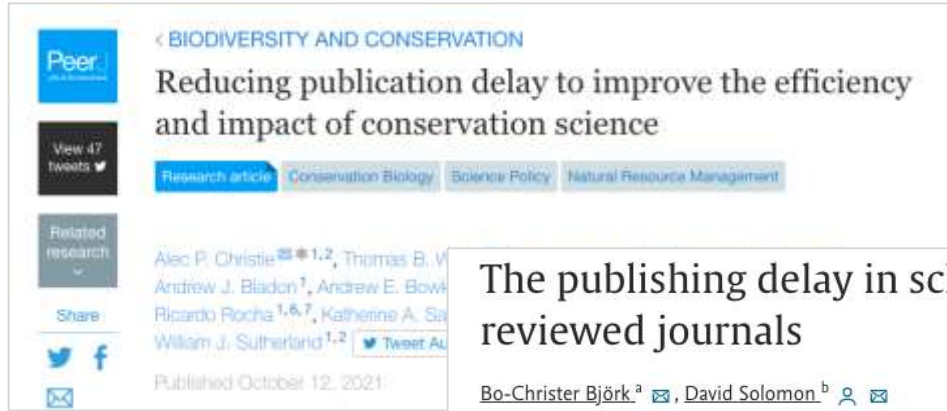


**Changing the way research is
reviewed, evaluated and
communicated.**



Changing not for the sake of it...

The current system is slow



Christie et al., 2021

Bjork and Solomon, 2013

The publishing delay in scholarly peer-reviewed journals

Bo-Christer Björk^a, David Solomon^b

Show more

+ Add to Mendeley Share Cite

<https://doi.org/10.1016/j.joi.2013.09.001>

[Get rights and content](#)

The average time to publication is **9 months** (human gestation)

The current publishing metrics are not reliable

Promoting inclusive metrics of success and impact to dismantle a discriminatory reward system in science

Sarah W. Davies  , Hollie M. Putnam  , Tracy Ainsworth, Julia K. Baum, Colleen B. Bove, Sarah C. Crosby, Isabelle M. Côté, Anne Duploux, Robinson W. Fulweiler, Alyssa J. Griffin, Torrance C. Hanley, Tessa Hill, Adriana Humanes, [...], Amanda E. Bates  [view all]

Published: June 15, 2021 • <https://doi.org/10.1371/journal.pbio.1010000>

Davies et al., 2021

Fire and Guestrin 2019

JOURNAL ARTICLE

Over-optimization of academic publishing metrics: observing Goodhart's Law in action

Michael Fire , Carlos Guestrin 

GigaScience, Volume 8, Issue 6, June 2019, giz053,
<https://doi.org/10.1093/gigascience/giz053>

Impact factor or citations: $\neq$ article quality, yet misapplied in research assessment;
gameable; proprietary/non transparent; distort incentives

The current system does not fully leverage the value of peer review

RESEARCH ARTICLE

The political economy of academic publishing: On the commodification of a public good

Stephan Puehringer , Johanna Rath, Teresa Griesebner

Puehringer et al., 2021

Research | [Open Access](#) | [Published: 14 November 2021](#)

A billion-dollar donation: estimating the cost of researchers' time spent on peer review

[Balazs Aczel](#) , [Barnabas Szaszi](#)  & [Alex O. Holcombe](#)

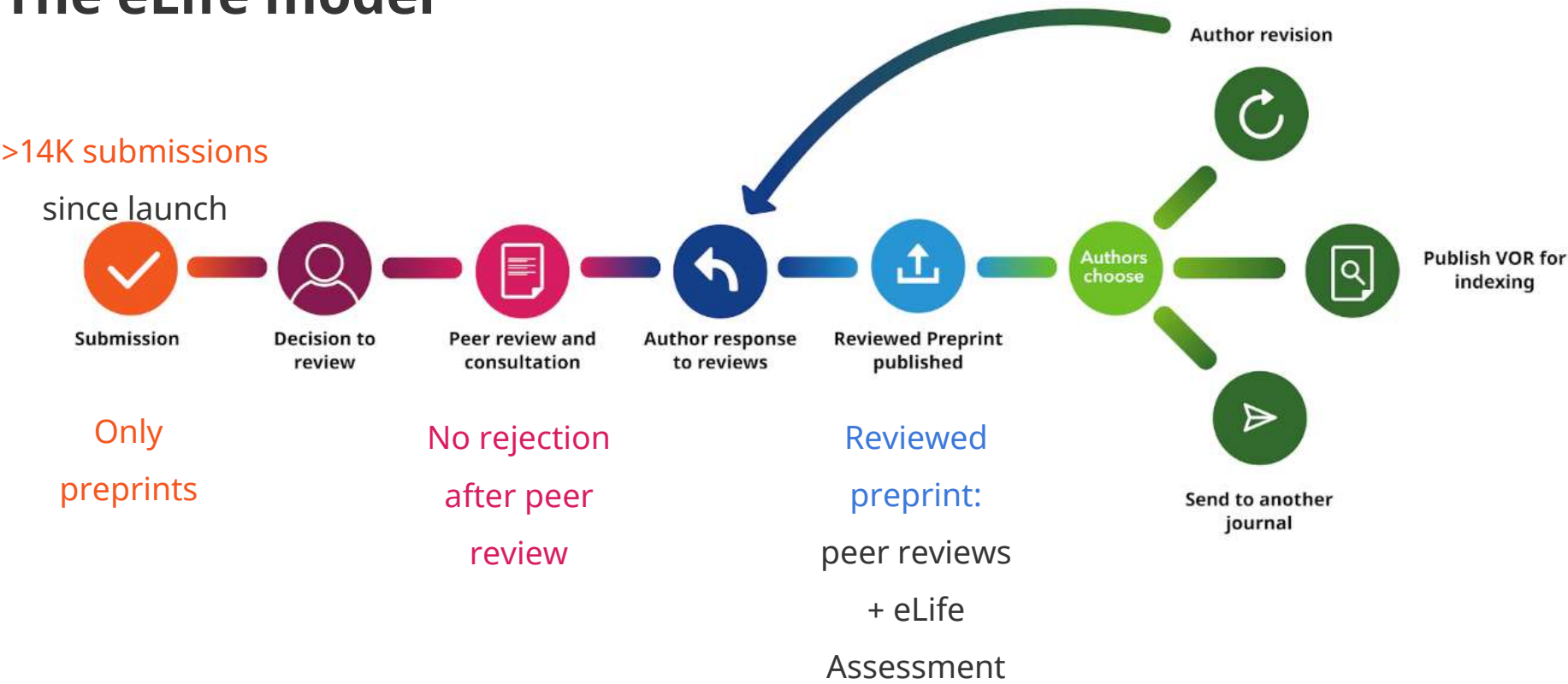
[Research Integrity and Peer Review](#) **6**, Article number: 14 (2021) | [Cite this article](#)

41k Accesses | **29** Citations | **2957** Altmetric | [Metrics](#)

Aczel et al., 2021

Peer reviews get lost when the paper is rejected, same paper often re-reviewed at different journals

The eLife model



Output

Planar cell polarity coordination in a cnidarian embryo provides clues to animal body axis evolution

Julie Uvelira, Antoine Donati, Marvin Léria, Marion Lechable, François Lahaye, Christine Vesque, Evelyn Houliston, Tsuyoshi Momose

Sorbonne Université, CNRS, Laboratoire de Biologie du Développement de Villefranche-sur-mer (LBDV-UMR7009), France; Sorbonne Université, CNRS UMR7622, INSERM U1156, Institut de Biologie ParisSeine (IBPS)-Developmental Biology Unit, France

Jul 2, 2025 • <https://doi.org/10.7554/eLife.104508.3>

Full text Figures and data Peer review Side by side

eLife Assessment

This analysis of the formation of the oral-aboral body axis in cnidarians, the sister group of bilaterians, is a significant and **fundamental** contribution to the field of Wnt signalling and planar cell polarity, particularly in our understanding in gradient formation, non-canonical Wnt signalling and Wnt-Frizzled interactions in cnidarians. The evidence supporting the conclusions is **compelling** and has the potential to contribute to a deeper understanding of the origin and evolution of Wnt signalling in cnidarians and metazoans in general. These findings, which are presented in a thoughtful and scholarly manner, will be of broad interest to developmental and evolutionary biologists.

<https://doi.org/10.7554/eLife.104508.3.a20>

[Read more about this assessment](#)

Version of Record

July 2, 2025

[Read the peer reviews](#)

Reviewed Preprint

v2 • May 12, 2025

Reviewed Preprint

v1 • January 28, 2025

Hide all versions

Download

Cite

Share

Comment

3,972 views • 89 downloads

1 citations



Altmetric provides a collated score for online attention across various platforms and media. [See more details](#)

stage in the peer review process -

Version of Record is indexed

Public peer reviews

eLife Assessment

show more/less

Output

Common
vocabulary -
definitions

Full text Figures and data Peer review Side by side

eLife Assessment

This analysis of the formation of the oral-aboral body axis in cnidarians, the sister group of bilaterians, is a significant and **fundamental** contribution to the field of Wnt signalling and planar cell polarity, particularly in or understanding in gradient formation, non-canonical Wnt signalling and Wnt-Frizzled interactions in cnidarians. The evidence supporting the conclusions is **compelling** and has the potential to contribute to a deeper understanding of the origin and evolution of Wnt signalling in cnidarians and metazoans in general. These findings, which are presented in a thoughtful and scholarly manner, will be of broad interest to developmental and evolutionary biologists.

<https://doi.org/10.7554/eLife.104508.3.sa0>

Significance of the findings:

Fundamental: Findings that substantially advance our understanding of major research questions

Landmark **Fundamental** Important Valuable Useful

Strength of evidence:

Compelling: Evidence that features methods, data and analyses more rigorous than the current state-of-the-art

Exceptional **Compelling** Convincing Solid Incomplete Inadequate

During the peer-review process the editor and reviewers write an eLife Assessment that summarises the significance of the findings reported in the article (on a scale ranging from landmark to useful) and the strength of the evidence (on a scale ranging from exceptional to inadequate). Learn more about eLife Assessments

[See less](#) ◀

Version of Record
July 2, 2025
[Read the peer reviews](#)

Reviewed Preprint
v2 • May 12, 2025

Reviewed Preprint
v1 • January 26, 2025

◀ Hide all versions

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3,072 views • 88 downloads
1 citations

Altmetric provides a collated score for online attention across various platforms and media.
[See more details](#)

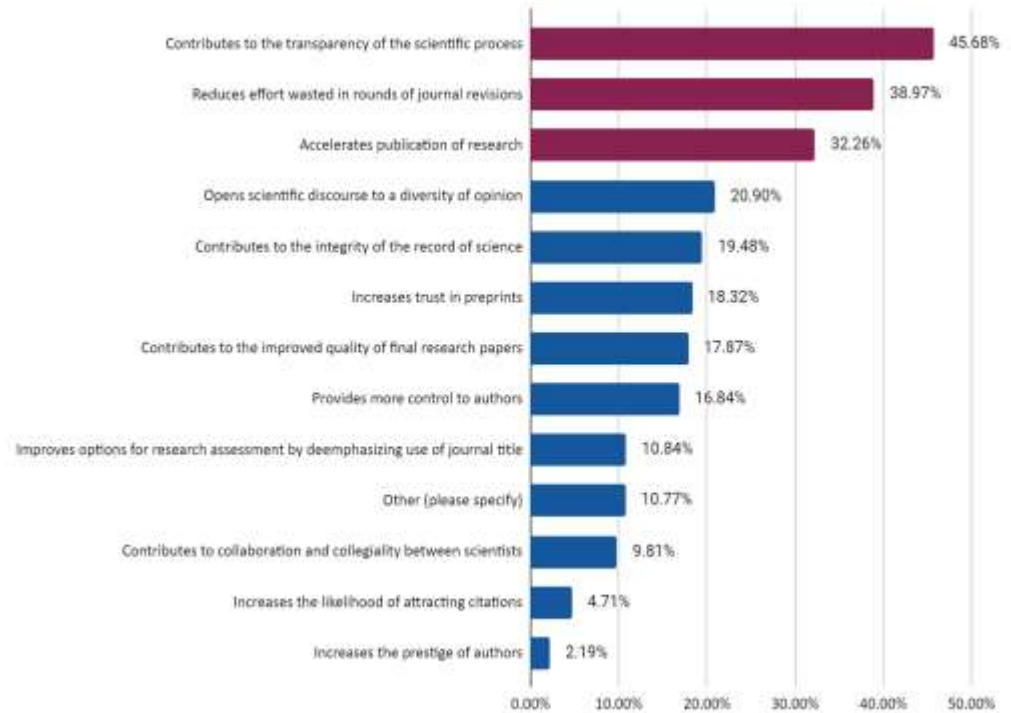
Implications

- Quicker (2,5X) access to peer reviewed science, including its limitations
- Transparency - accountability -trust
- Research assessment based on the content of the article, not Journal name or journal-level metrics
- Authors are in control - certainty of outcome avoids re-review of the same article at different journals

What do eLife authors think?

Top 3 key benefits:

- Accelerated publication
- Greater transparency
- Less effort wasted in rounds of revisions



"choose three" | n=1,550

Business models at eLife - for institutions and funders

- **Uncapped scheme** (unlimited publications; ongoing with MIT, Imperial College London, University of Sheffield, etc)
- **Centralised scheme** (centralised funding; ongoing with HHMI, Max Planck, Swedish National Library) _____
- **Contribute to a more equitable and sustainable system:** No financial barrier for authors
- **Simplified logistics**

A movement for change



We must walk the talk

Change requires action.

It is a choice.

It is a shared responsibility.

What can we do? Options for funders, institutions and researchers

- Adopt article-level evaluation
- Support publishing that decouples quality assessment from Journal-level metrics (e.g. by new policies)
- Audit research assessment (accountability)
- Withdraw subscriptions to proprietary non-accountable commercial entities (e.g., Scopus and Web of Science)
- Invest in open non-proprietary infrastructure

Acknowledgement

Thanks to our founding bodies, our funders, eLife colleagues!

Thank you for your time!





evolution of publishing

Supporting slides

eLife Assessments: common vocabulary

Significance of Findings	Strength of Evidence
Landmark: Findings with profound implications and widespread influence, which are likely to be of broad interest.	Exceptional: Exemplary use of existing and new methods that establishes new standards for a field.
Fundamental: Findings that substantially advance understanding of important research questions.	Compelling: High quality data and analyses, more rigorous than the current state-of-the-art.
Important: Findings with theoretical or practical implications for multiple subfields.	Convincing: Appropriate and validated methodology in line with current state-of-the-art, with good support for the claims.
Valuable: Findings with theoretical or practical implications for a subfield.	Solid: Uses appropriate methodology, with minor weaknesses.
Useful: Findings with focused importance and scope.	Incomplete: Methodology provides some support for the main claims with some limitations.
	Inadequate: Methodology does not provide support for the primary claims.

eLife Assessment: more examples

eLife assessment

This study presents a **fundamental** finding on how levels of m6A levels are controlled, invoking a consolidated model where degradation of modified RNAs in the cytoplasm plays a primary role in shaping m6A patterns and dynamics, rather than needing active regulation by m6A erasers and other related processes. The evidence is **compelling** and uses transcriptome-wide data and mechanistic modeling. However, it is possible that m6A-erasers will have roles in specific developmental contexts or conditions, so this model may not apply universally.

<https://doi.org/10.7554/eLife.100448.1.sa3>

[Read more about this assessment ▼](#)

eLife assessment

This work introduces a Python package, Avian Vocalization Analysis (AVN) that provides several key analysis pipelines for segmentation, annotation, and visualization of zebra finch song. AVN can be used to predict the stage of song development, quantify acoustic similarity, and detect abnormalities associated with deprived auditory feedback or social isolation. The methods are **solid** and are likely to provide a **useful** tool for scientists aiming to automate the analysis of large datasets of zebra finch vocalizations.

<https://doi.org/10.7554/eLife.101111.1.sa4>

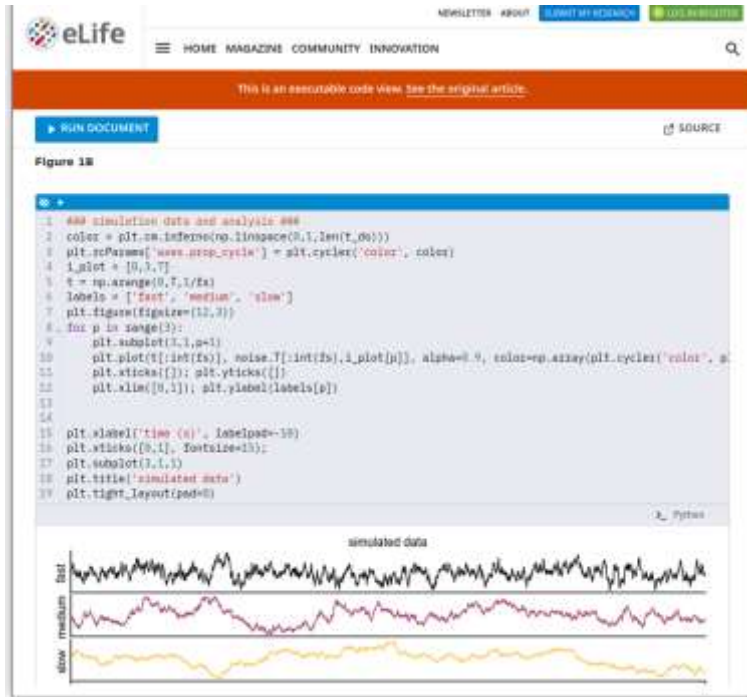
[Read more about this assessment ▼](#)

eLife model - the journey so far



more at: <https://elifesciences.org/inside-elife/8947f033/the-elife-model-two-year-update>

Executable Research Articles



Steps to enrich your published article with code and data



1.

Convert your eLife article into R Markdown/ Jupyter notebook with Stencila Hub



2.

Add code chunks into the R Markdown/ Jupyter notebook locally



3.

Upload enriched R Markdown/ Jupyter notebook and necessary tabular data files to Stencila Hub



4.

Share a project snapshot with the eLife Production Team

Web of Science position

- Created a policy to exclude journals using this type of PRC model (policy [here](#))
- Peer review as a binary process - line to accept articles in a Journal
- No VoR for articles evaluated as “incomplete” and “inadequate” to keep the Impact Factor and fully indexed status

Scopus position

- Moved eLife from Journals Collection to the Preprints Collection, i.e., eLife output considered as if it never went through formal peer review

eLife position

- Do not accept articles in a Journal
- Transparent and rigorous peer review and assessment of already published research for its advantages
- Accept to lose fully indexed status and Impact Factor

“Incomplete” and “inadequate”:

published without change in Journals fully indexed by
Web of Science

eLife:

first example of a Journal delisted by Web of Science for
reasons other than research integrity issues

The concern

- Reliance on the IF and similar journal-level indicators for research assessment allows a single commercial indexer to decide what changes can be introduced into scholarly publishing and research assessment
- Concern goes beyond eLife (others are operating PRC models, e.g., MetaROR, Lifecycle Journal, Rapid Reviews Infectious Diseases, Biophysics Colab etc.)

We must walk the talk

Change requires action.

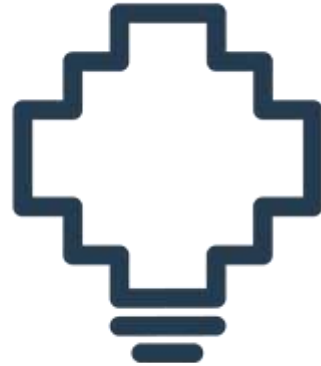
It is a choice.

It is a shared responsibility.



evolution of publishing

Peter Kraker and Cristoph Arthofer



OPEN
KNOWLEDGE
MAPS



interdisciplinary
transformation
university austria

Reimagining Research Assessment

AI-driven Visualisations in support of a Holistic Evaluation

Peter Kraker & Christoph Arthofer

Created with Maxi Schramm

ICSTI Annual Conference
19 September 2025



**OPEN
KNOWLEDGE
MAPS**



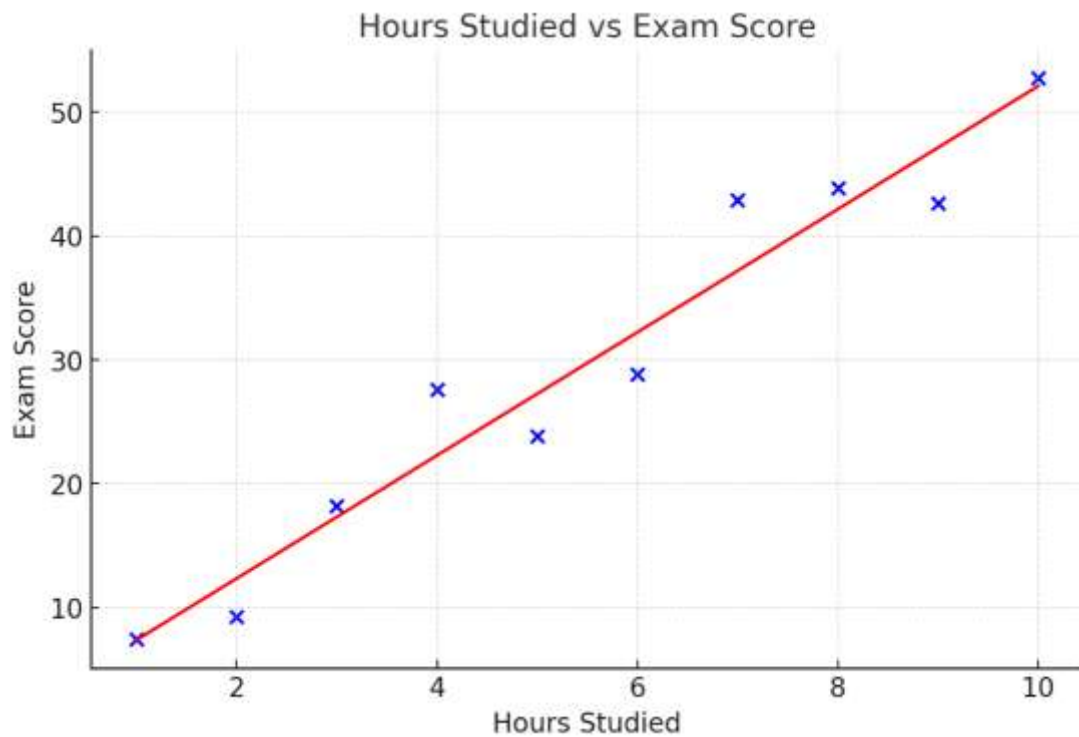
interdisciplinary
transformation
university austria

Did you know?

Your brain can identify images seen for
as little as 13 milliseconds

Potter et al.
(2014)

19700 Helix Dr



	Hours Studied	Exam Score
1	1	7.48
2	2	9.31
3	3	18.24
4	4	27.62
5	5	23.83
6	6	28.83
7	7	42.9
8	8	43.84
9	9	42.65
10	10	52.71



OPEN **KNOWLEDGE** **MAPS**



SARA GIRONI CARNEVALE

Scientists are drowning in COVID-19 papers. Can new tools keep them afloat?

Who we are



A Charitable Nonprofit
Improving Discovery
For Science And Society

Overview of heart diseases





Map a research topic with AI

Get an overview - Find documents - Identify concepts

5 Mio
knowledge maps
created

☐ PubMed (life sciences)

☒ BASE (all disciplines)

Refine your search 

digital education

GO

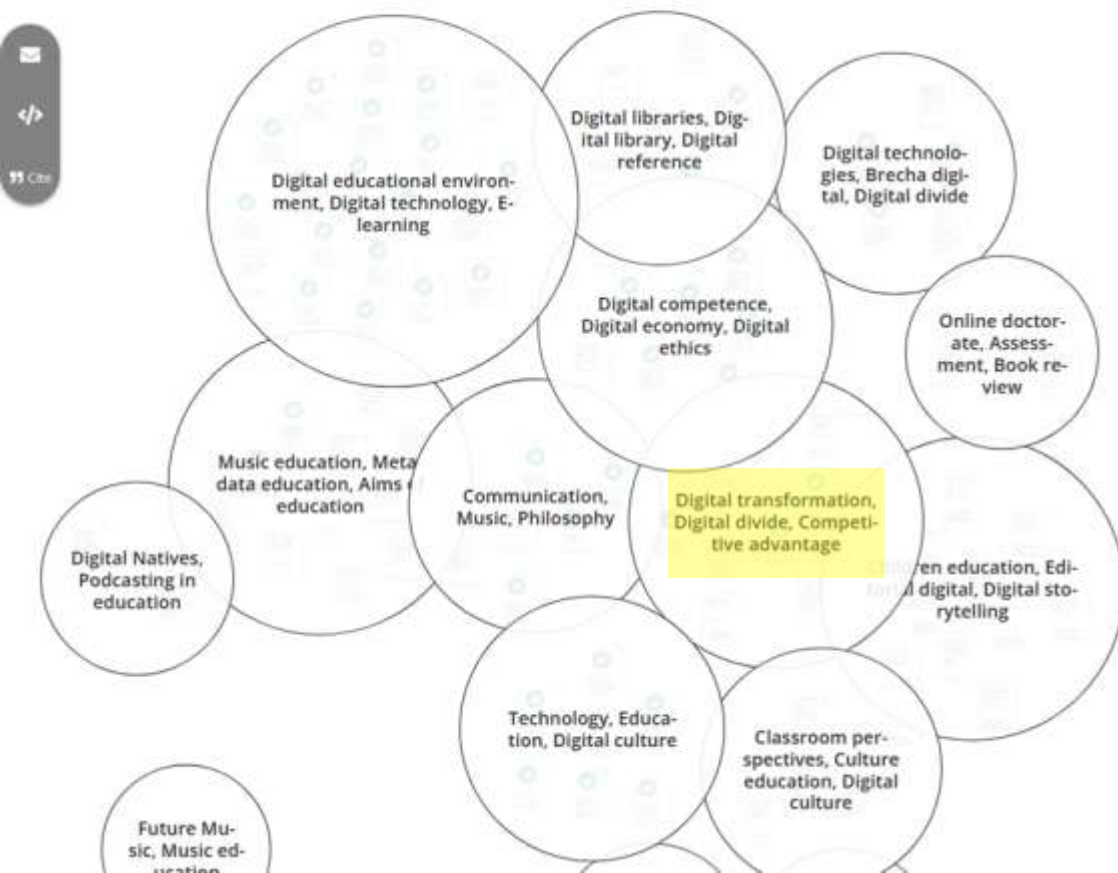
Try out: [digital education](#) [climate change](#) AND [impact](#)



<https://openknowledgemaps.org>

Knowledge Map of digital education

100 most relevant documents | Data source: BASE | Until 16 Jun 2023 | Document types: All lang | Data quality | [More information](#)



Overview (100 documents)

[Open access](#)
[journal/newspaper article](#)

Overview of the Digital Education Action Plan 2021-2027 (2021)

National Forum For The Enhancement Of Teaching And Learning In Higher Education
[doi]: <https://dx.doi.org/10.6084/m9.figshare.14124389>

This Forum Insight provides an overview of the Digital Education Action Plan 2021-27: Resetting education and training for the digital age (DEAP)1, published by the European Commission on 30 September 2020. The DEAP acknowledges the key enabling factors for...

[PDF](#)
[Cite as](#)
[Export](#)

Area: [Digital educational environment](#), [Digital technology](#), [E-learning](#)

[journal/newspaper article](#)

Concepts for Digital Libraries in Education (2001)

N. Seshagiri
[link]: <http://repository.ias.ac.in/85193/>

This article does not have an abstract.

[Cite as](#)
[Export](#)

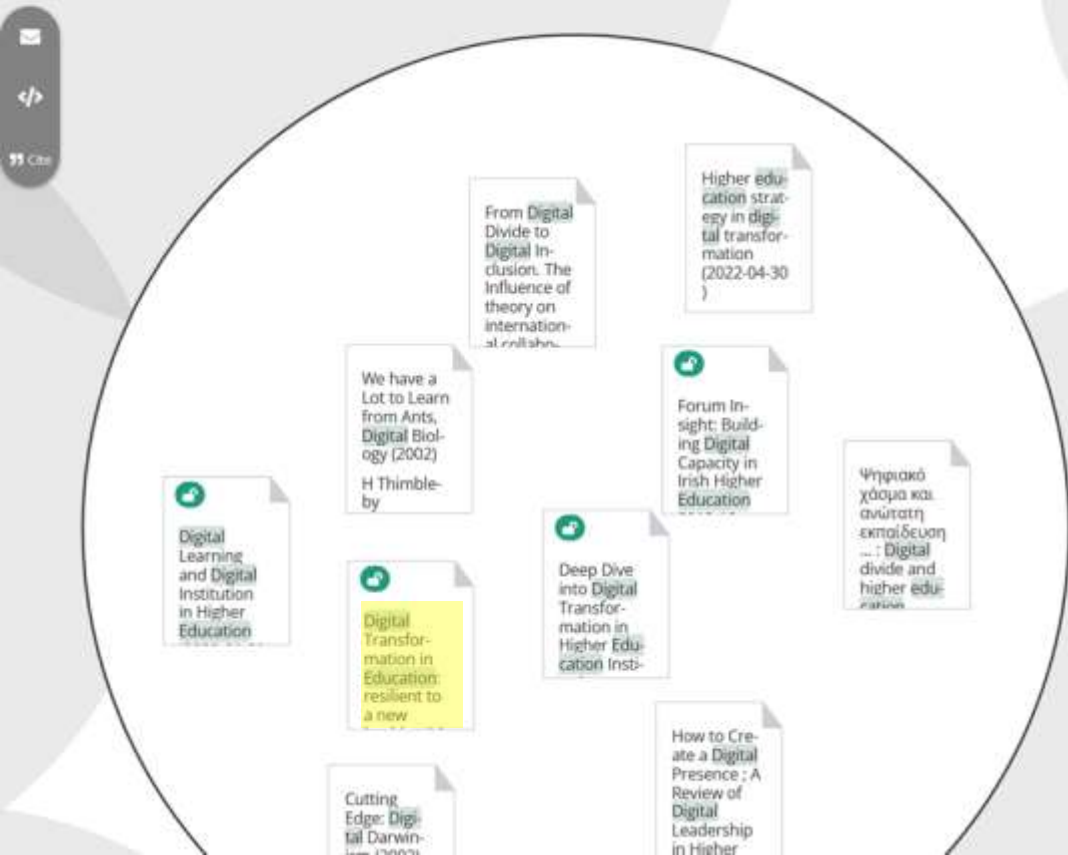
Area: [Concepts for digital](#), [Libraries in education](#)

[journal/newspaper article](#)
[journal/newspaper other content](#)

Special Issue Guest Editorial: Digital Storytelling & Children Education (2016-12-22)

Area: Digital transformation, Digital divide, Competitive advantage

← Back to overview



Area (10 documents)

Search within visualization

show: Any

sort by: Relevance

Open access

journal/newspaper article

Digital Learning and Digital Institution in Higher Education (2023-01-01)

Mamdouh Alenezi

Education Sciences, Vol 13, Iss 88, p 88 (2023)

[doi]: <https://doi.org/10.3390/educsci13010088>

Higher education institutions are going through major changes in their education and operations. Several influences are driving these major changes. Digital transformation, online courses, digital-navy students, operational costs, and micro and nano degrees are just...

PDF

Cite as

Export

Area: Digital transformation, Digital divide, Competitive advantage

journal/newspaper article

From Digital Divide to Digital Inclusion. The Influence of theory on international collaboration in higher education (2012)

Leo Van Audenhove

[link]: <https://biblio.vub.ac.be/vubir/from-digital-divide-to-digital-inclusion-the-influence-of-theory->

No abstract available

Cite as

Export

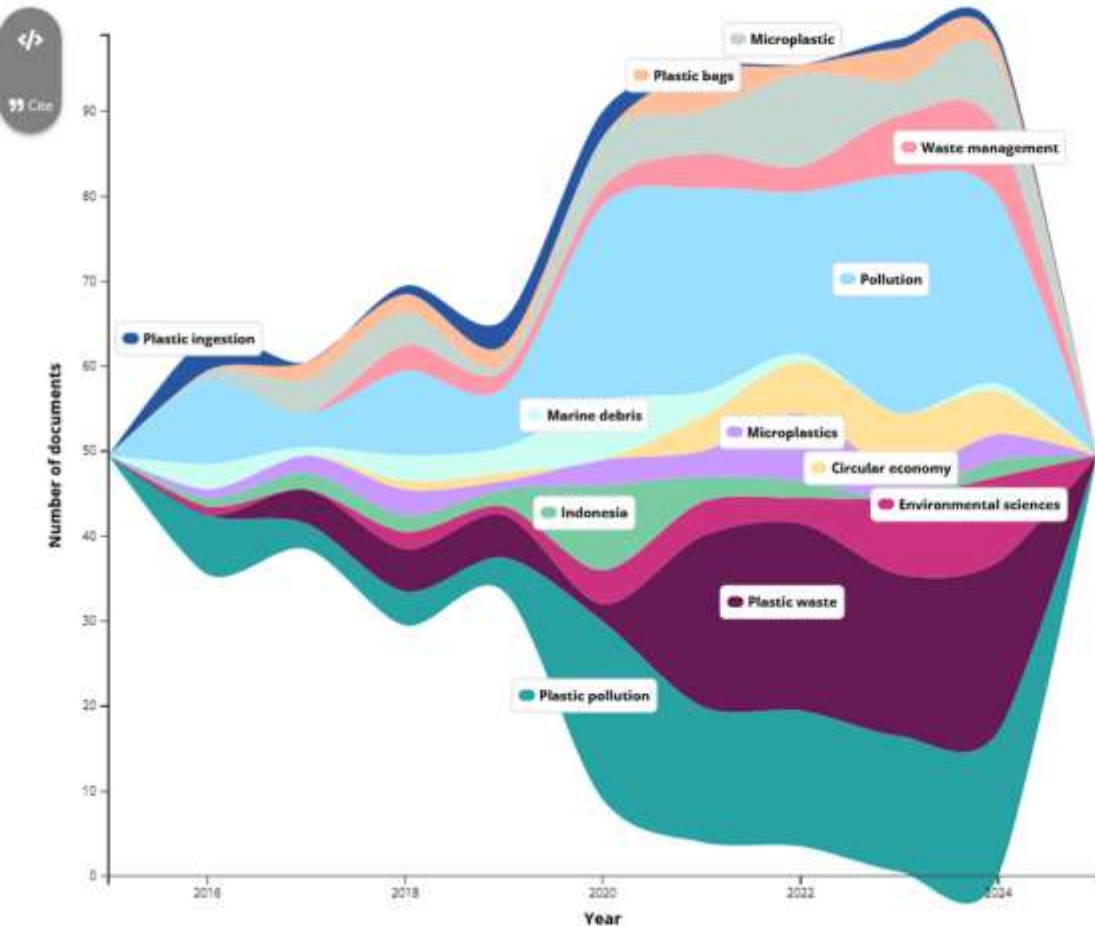
Area: Digital transformation, Digital divide, Competitive advantage

journal/newspaper article

How to Create a Digital Presence: A Review of Digital Leadership in Higher

Streamgraph of plastic

303 most relevant documents Data source: BASE Until 7 Dec 2024 Document types All lang Data quality More information



Overview (303 documents)

Search within visualization

show: Any

sort by: Relevance

open access

journal/newspaper article

Experimental Study on Soils Stabilized with Two Types of Plastic Waste (2020-06-02)

D. (Dinis) Gardete, R. (Rosa) Luzia

KnE Engineering

[link]: <https://www.neliti.com/publications/509669/experimental-study-on-soils-stabilized-wi...>

The reuse and recycling rates for plastics are still below desirable values. The valorisation of plastic wastes that presently end in landfills or is incinerated can help to mitigate this environmental problem. There have been studies in soil improvement using...

PDF

Cite as

Export

journal/newspaper article

Why Turkey should not import plastic waste pollution from developed countries? (2021 Oct)

Sedat Gündoğdu, Tony R Walker

Mar Pollut Bull : ISSN:1879-3363 : Volume:171

[link]: <https://pubmed.ncbi.nlm.nih.gov/34333304>

Turkey became a major importer of global plastic waste after China banned plastic imports on January 1, 2018. Turkey imported only 261,864 tonnes of plastic waste annually before the ban, but annual imports increased to 772,831 tonnes by 2020. Turkey...

Cite as

Export

journal/newspaper article

Plastic road surfacing (2024)











AQUANAVI

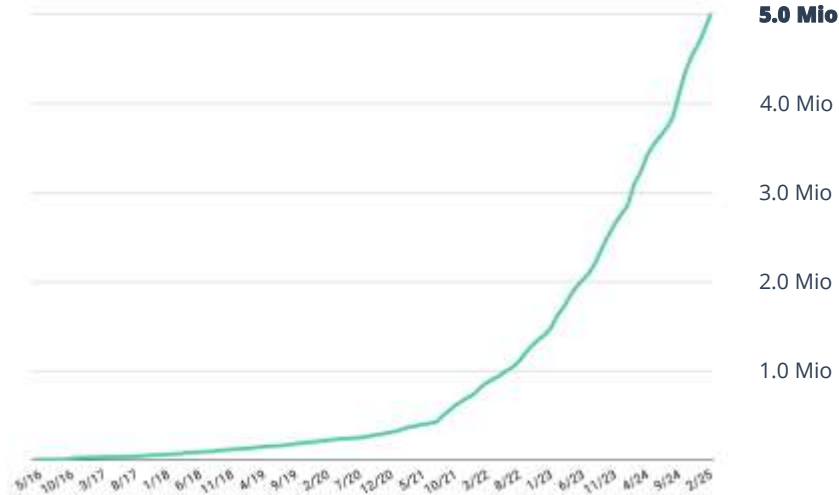
Your interactive atlas for aquatic mesocosm research



OSCARS
Open Science Centre for
Research & Society

Strong adoption

GROWTH OF KNOWLEDGE MAPS



5+ million knowledge maps

1+ million users per year

220+ countries and territories

9 minutes avg. visit duration

80% engagement rate

60% returning users

How it works



Our visualisations are **based on the most relevant documents** matching your query. The relevancy is determined by the data source (e.g. BASE or PubMed).



We operate an **artificial intelligence (AI) pipeline** to create the visualisations. The pipeline combines natural language processing methods to aggregate and display publications according to similarity in topics.

Open infrastructure



Our offering includes:

- ✓ Innovative search and discovery services
- ✓ Integrations for BASE, PubMed, OpenAIRE, and ORCID
- ✓ A wide range of training activities and materials
- ✓ Our award-winning visualization software
- ✓ Community support & engagement programs



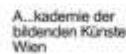
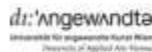
Supporting members



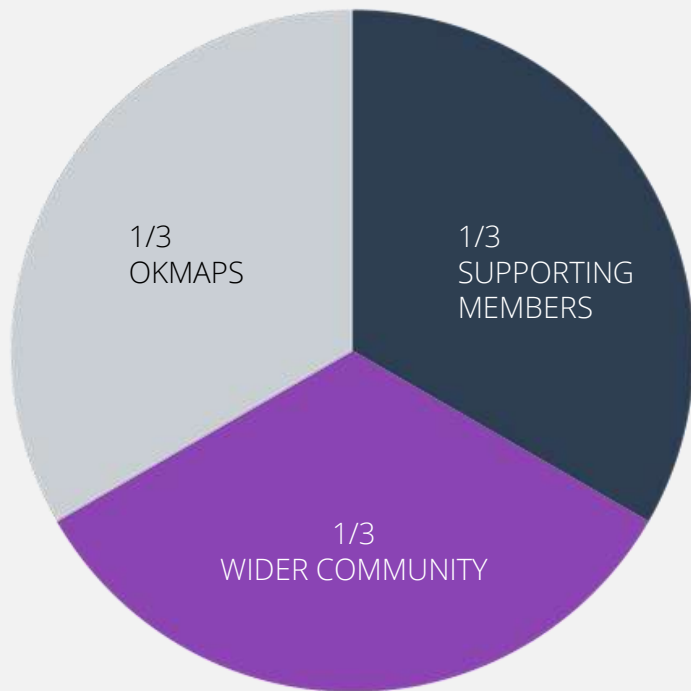
ETH zürich

ETH-Bibliothek

Gates Foundation



Open infrastructure



Governance of technical roadmap

This means:

- ✓ Open licences for content (CC BY), data (CC0), and source code (MIT)
- ✓ Co-creation of platform with our community
- ✓ Community involvement in governance
- ✓ Equitable balancing of stakeholder needs



Custom Services



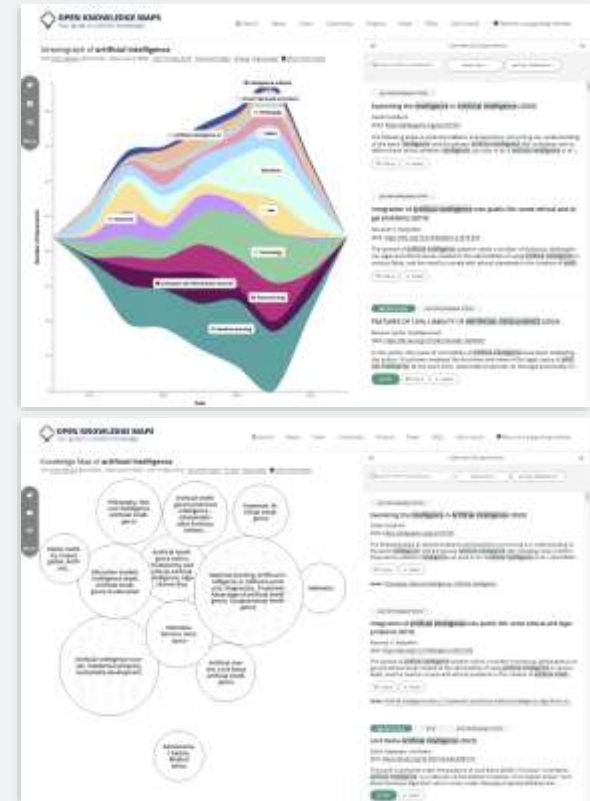


Available as easy-to-install cloud components

Example: TU Wien Bibliothek integration

The screenshot shows the TU Wien Bibliothek search results page for the query 'artificial intelligence'. The page features a sidebar on the left with navigation options like 'Ergebnisse verbessern', 'Sortieren nach', and 'Nur zeigen'. The main content area displays a list of search results, including 'International journal for artificial intelligence in engineering' and 'Engineering applications of artificial intelligence'. A yellow circle highlights the 'Extern suchen in' section, which includes links to 'Open Knowledge Maps (SAGE)' and 'Open Knowledge Maps (Kobal)'. The TU Wien logo is visible in the top right corner.

Online at:
<https://catalogplus.tuwien.at/>



Library catalogue integrations

The screenshot displays a library catalogue interface with the following components:

- Top Navigation:** Logos for ETH zürich, universität wien, and GEF PRIMO. Search options include BASIC SEARCH, JOURNAL SEARCH, DATABASE SEARCH, LOCATION GUIDE, PICKS FROM OUR COLLECTIONS, and ACQUISITION REQUEST. User options include Sign in and Menu.
- Search Bar:** Contains the query "education in finland" and filters for "International articles" and "Access to MARC".
- Filters:** A sidebar on the left offers filters for "Sortieren nach", "Zeig mir", "Relevanztyp", "Jahr", "ETH Zürich", "Relevanztyp", "Sprache", "Urheber_in", "Thema", "Datenquelle", and "Heine Sucher schließen an".
- Refinement Panel:** A central panel titled "Tweak my results" allows refining by Topic, Creator, Form, Basic Classification, Regierung Lib. Classif., Type of Thesis (only AT), and Data Sources. It also includes an "extended search to" section with links to "Knutson Library Catalog", "Google Scholar", "Crossref Knowledge Maps", and "Crossref Knowledge Maps".
- Search Results:** The main area shows two results:
 - ARTICLE:** "Increasing absolute mortality disparities by education in Finland, Norway and Sweden, 1971–2000" by Shkolnikov, Vladimir M.; Andersen, Evgenii M.; Jalarvi, Daria A.; Jasilioni, Domantas; Knekt, Rytas; Rytas; Vagero, Denny; Valkonen, Tapio. Published by the BMJ Publishing Group Limited. For permission to use (where not already granted under a license) please go to http://group.bmj.com/group/rights-licensing/permissions. 2012 BMJ Publishing Group. 2015 PAST-CNRS. Journal of epidemiology and community health (1979), 2012, Vol 66 (4), p 372-378. 44 ... Using high quality, census-linked data and absolute inequality measures, this study documents the changes in absolute and relative mortality differences by education in Finland, Norway and Sweden... M. PIER REVIEWED. Available Online: [Ally's InfoView Issue](#), [Ally's InfoView Issue](#).
 - ARTICLE:** "Shaping the concept of bioeconomy in participatory projects - An example from the post-graduate education in Finland" by Takala, Tuomo; Takala, Jukka; Haapala, Antti; Pölkönen, Sini; Torsanen, Pirkka; Valkonen, Rosa; Pöykkö, Tapio.
- Refinement Panel (Right):** A sidebar titled "Refine your results" offers filters for Sort by, Availability, Resource Type, Subject, Publication Date, Language, Collection, Journal Title, New Records, and Tolsta hakuri / Find @. It also includes links to "Open Knowledge Maps (B&B)" and "Open Knowledge Maps (Published)".

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<https://www.unil.ch/unil/fr/home/menuinst/recherche/thematiques/sante/cancer.html>

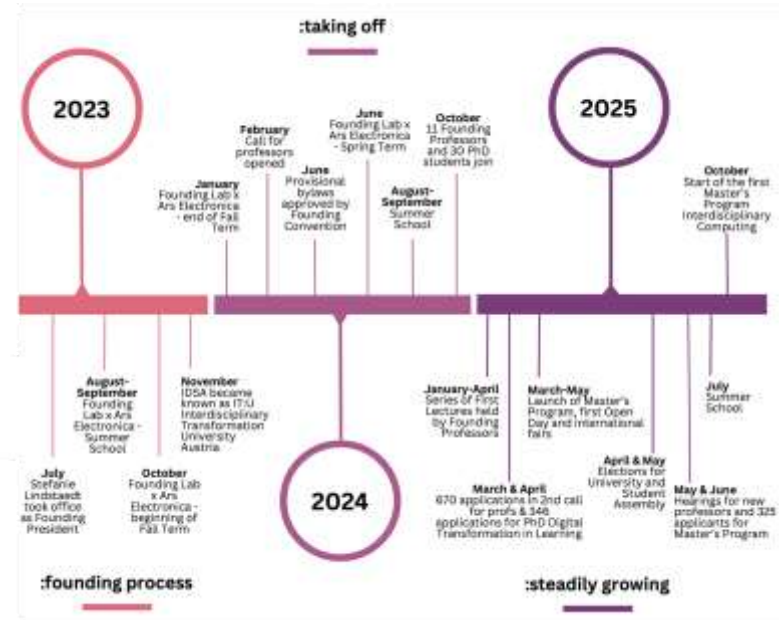
[illegible]



*Discovering and Representing
Interdisciplinary Researchers
with AI-Powered Visualisations*

IT:U Interdisciplinary Transformation University Austria

- New technical university with a strong focus on
 - Interdisciplinarity
 - Digital transformation
 - Project-based learning
- Timeline:
 - Summer 2023: Founding process start-up
 - Autumn 2024: First research groups and PhD students start their work
 - Autumn 2025: First MSc program in Interdisciplinary Computing starts
- Existing research quality assessment frameworks:
 - San Francisco Declaration on Research Assessment (DORA¹)
 - Coalition for Advancing Research Assessment (CoARA²)



Traditional metrics to assess research are increasingly seen as poor indicators, e.g. h-index, JIF.

San Francisco Declaration on Research Assessment (DORA¹)

Coalition for Advancing Research Assessment (CoARA²)

✓ Consider the value and impact of peer-reviewed research papers

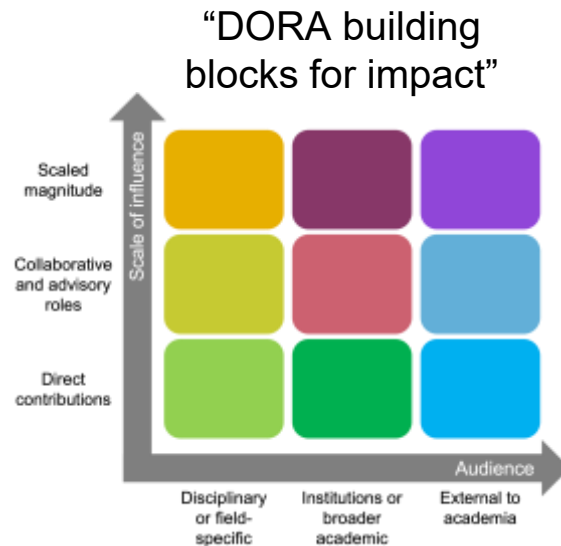
+ other research outputs

✓ **Assess research on its own merits** rather than on the basis of the journal in which the research is published.

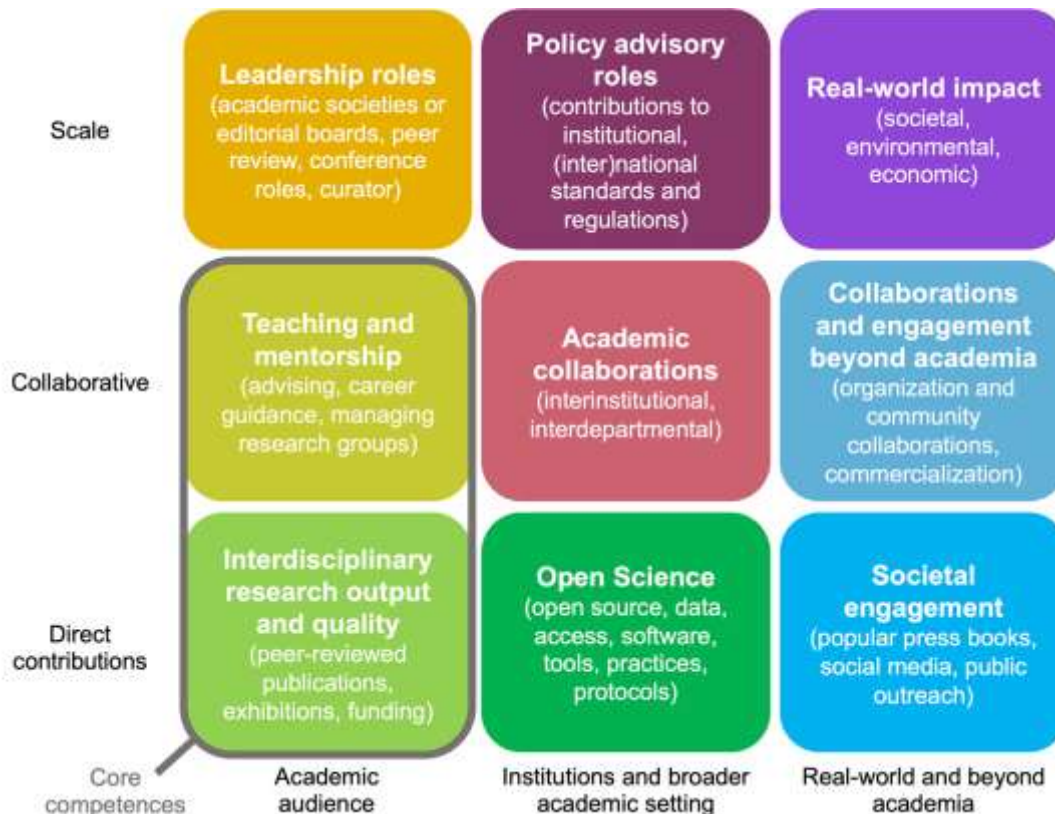
✓ **Be explicit about criteria** used in evaluations, hiring, tenure, promotion

decisions.

¹ <https://sfdora.org>; ² <https://coara.eu>



IT:U research impact framework



Adapted building blocks for impact based on the The Declaration on Research Assessment (DORA), Original figure from: <https://sfdora.org/resource/rethinking-research-assessment-building-blocks-for-impact/>

Goals and target audience

Goals

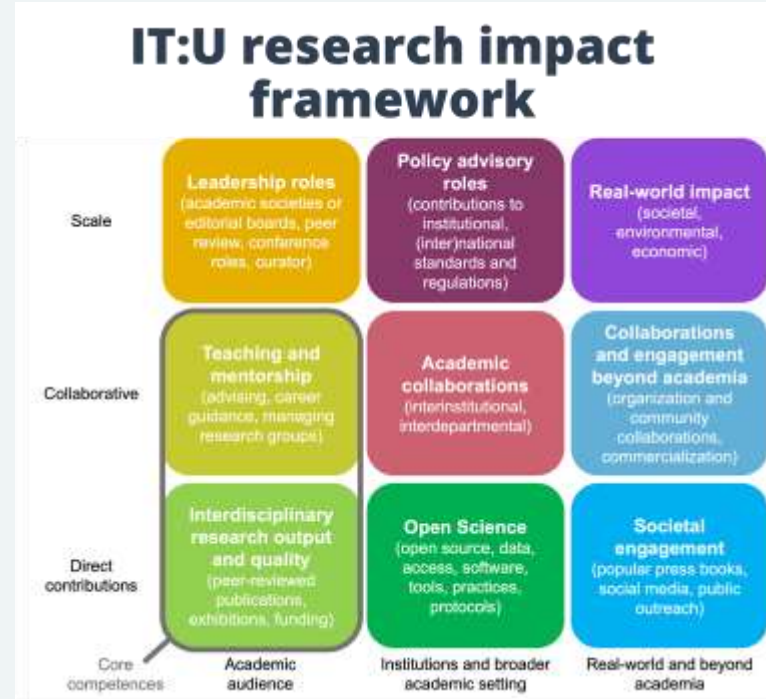
- Developing a service that enables users to evaluate research holistically, yet efficiently
- Supporting institutions in adopting research assessment practices beyond traditional metrics

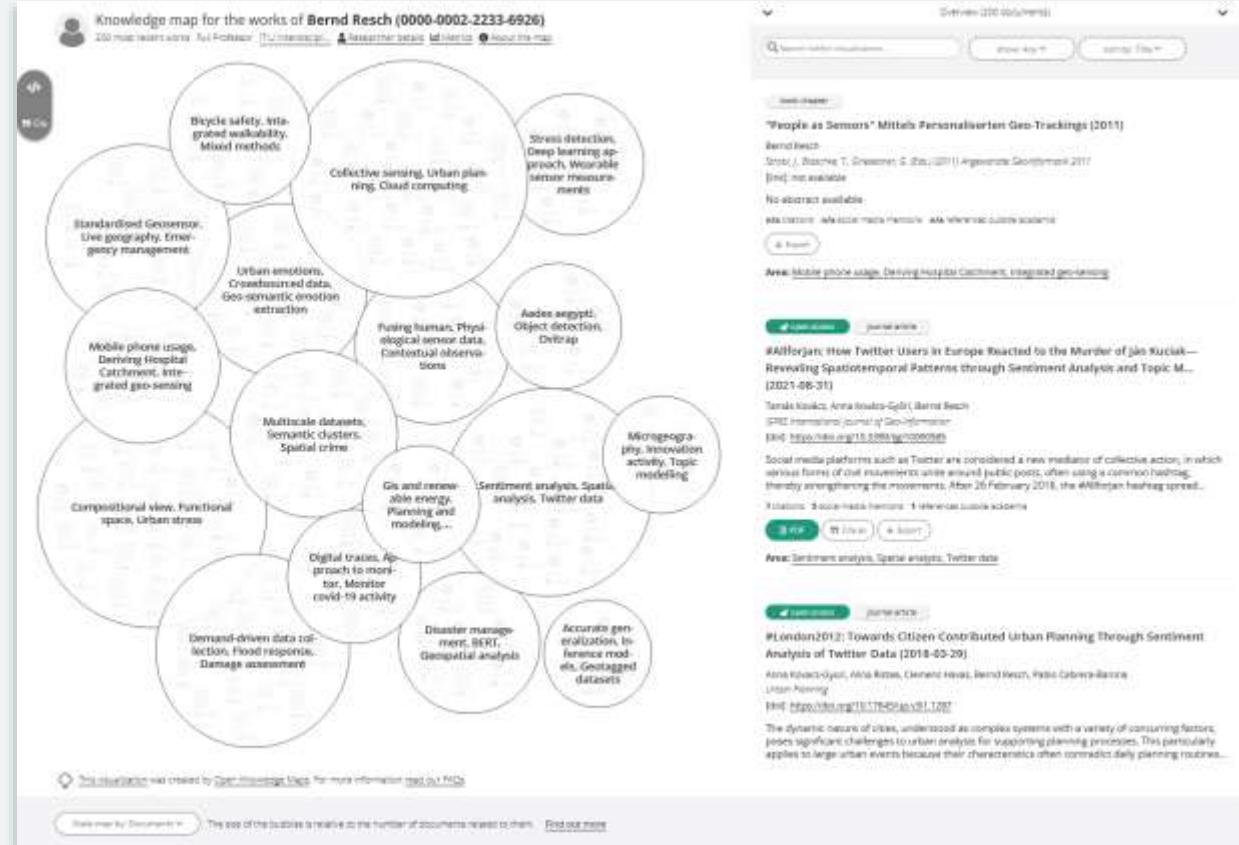
Target audience

- **Assessment committees**, to support promotion, tenure, and hiring decisions
- **Researchers and students**, to identify eminent scholars, collaborators and reviewers
- **Institutional leadership and research support staff**, to highlight the breadth and depth of their work

Work plan

1. Interdisciplinary research output
2. Teaching & mentorship
3. Open science *Focus of VisConnect*
4. Academic collaborations
5. Leadership roles
6. Societal engagement
7. Collaboration beyond academia
8. Policy advisory roles
9. Real world impact

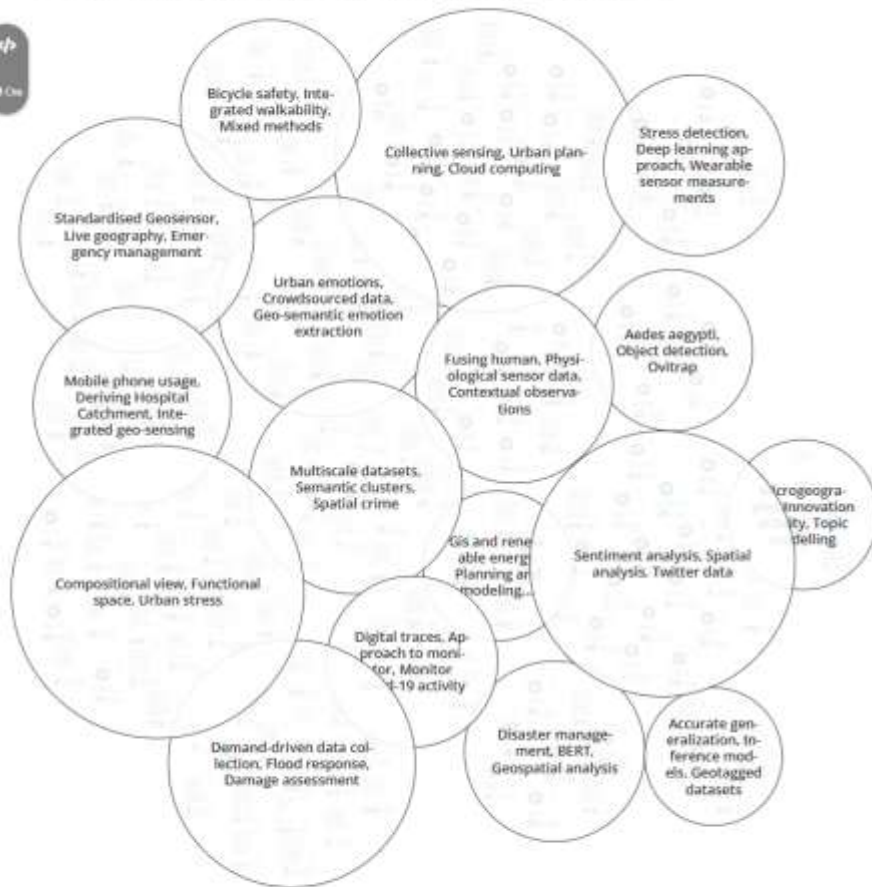




ENTER ORCID (E.G. 0000-0002-5238-4195)

0000-0002-2233-6926

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book chapter

"People as Sensors" Mittels Personaliserten Geo-Trackings (2011)

Bernd Resch

Shoib, J., Blaschke, T., Griesemer, S. (Eds.) (2011) *Angewandte Geoinformatik 2011*

[link] not available

No abstract available

0 citations 0 social media mentions 0 references outside academia

Export

Area: Mobile phone usage, Deriving Hospital Catchment, Integrated geo-sensing

Open Access

journal article

#AllforJan: How Twitter Users in Europe Reacted to the Murder of Jan Kuciak—Revealing Spatiotemporal Patterns through Sentiment Analysis and Topic M... (2021-08-31)

Tamara Kovács, Anna Kovács-Györi, Bernd Resch

SPRS International Journal of Geo-information

[doi]: <https://doi.org/10.3390/sj110090585>

Social media platforms such as Twitter are considered a new mediator of collective action, in which various forms of civil movements unite around public posts, often using a common hashtag, thereby strengthening the movements. After 20 February 2018, the #AllforJan hashtag...

7 citations 3 social media mentions 1 reference outside academia

PDF

Cite as

Report

Area: Sentiment analysis, Spatial analysis, Twitter data

Open Access

journal article

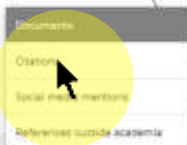
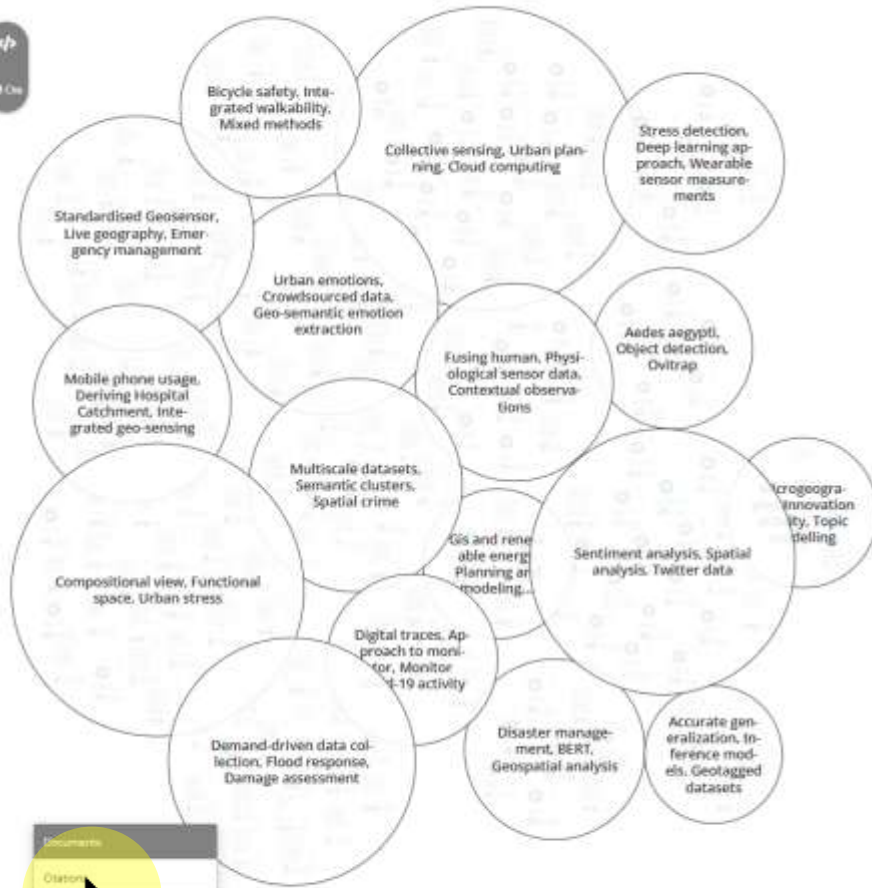
#London2012: Towards Citizen-Contributed Urban Planning Through Sentiment Analysis of Twitter Data (2018-03-29)

Anna Kovács-Györi, Alina Ristea, Clemens Hava, Bernd Resch, Paolo Cabrera-Barona

Urban Planning

[doi]: <https://doi.org/10.17645/up.v3i1.1287>

The dynamic nature of cities, understood as complex systems with a variety of concerning factors, poses significant challenges to urban analysis for supporting planning processes. This particularly applies to large urban events because their characteristics often contradict daily plan...



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No abstract available

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journal article

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Tamás Kovács, Anna Kovács-Györi, Bernd Resch

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Area: Sentiment analysis, Spatial analysis, Twitter data

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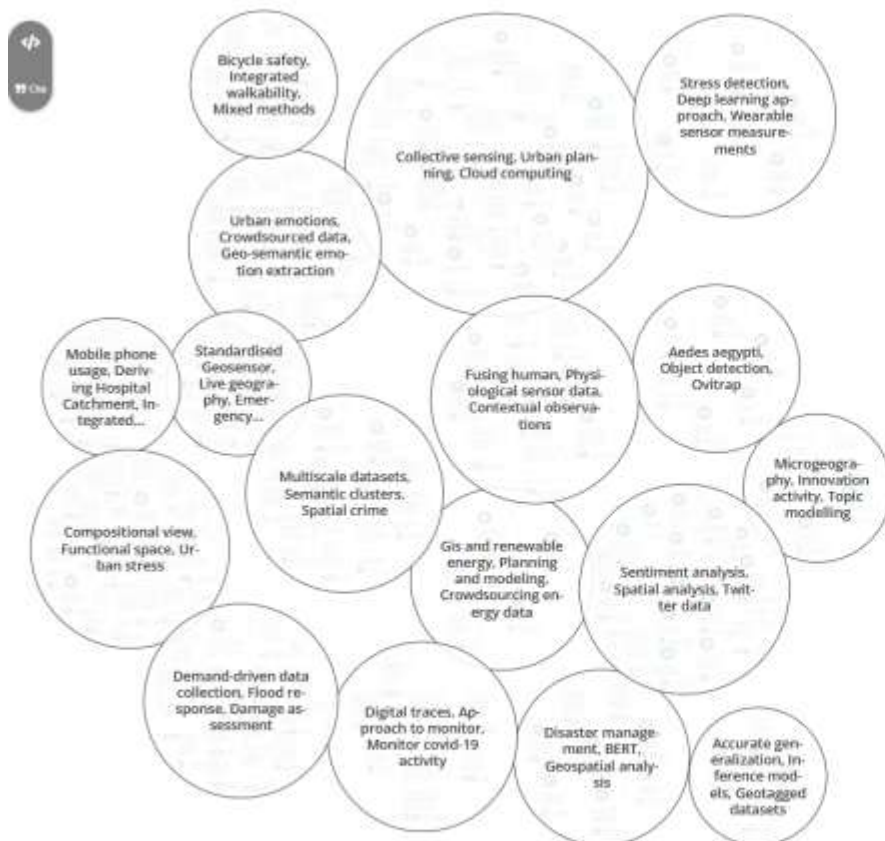
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Journal article

Crowdsourcing, Citizen Sensing and Sensor Web Technologies for Public and Environmental Health Surveillance and Crisis Management: Trends, OGC Standards a... (2011)

Bernd Resch
International Journal of Health Geographics
 [doi: <https://doi.org/10.1186/1476-072X-10-67>]

No abstract available

287 citations 16 social media mentions 16 references outside academia

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Area: Collective sensing, Urban planning, Cloud computing

Open access Journal article

Combining machine-learning topic models and spatiotemporal analysis of social media data for disaster footprint and damage assessment (2018-07-04)

Bernd Resch, Florian Uhländer, Clemens Hees
Cartography and Geographic Information Science
 [doi: <https://doi.org/10.1080/15230406.2017.1356242>]

No abstract available

171 citations 4 social media mentions 16 references outside academia

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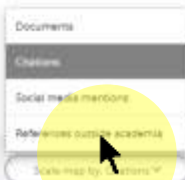
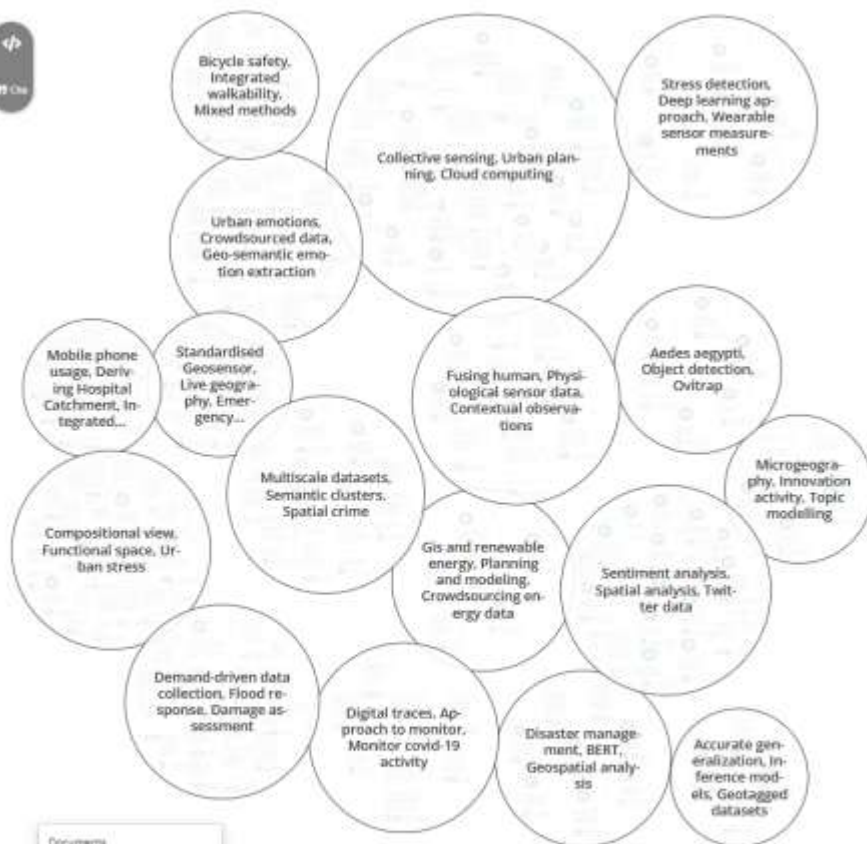
Area: Demand-driven data collection, Flood response, Damage assessment

Open access Journal article

Detecting Moments of Stress from Measurements of Wearable Physiological Sensors (2019)

Bernd Resch
Sensors (Basel, Switzerland)
 [doi: <https://doi.org/10.3390/s19173805>]

There is a rich repertoire of methods for stress detection using various physiological signals and algorithms. However, there is still a gap in research efforts moving from laboratory studies to real-world settings. A small number of research has verified when a physiological response is a...



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Crowdsourcing, Citizen Sensing and Sensor Web Technologies for Public and Environmental Health Surveillance and Crisis Management: Trends, OGC Standards a... (2011)

Bernd Resch
International Journal of Health Geographics
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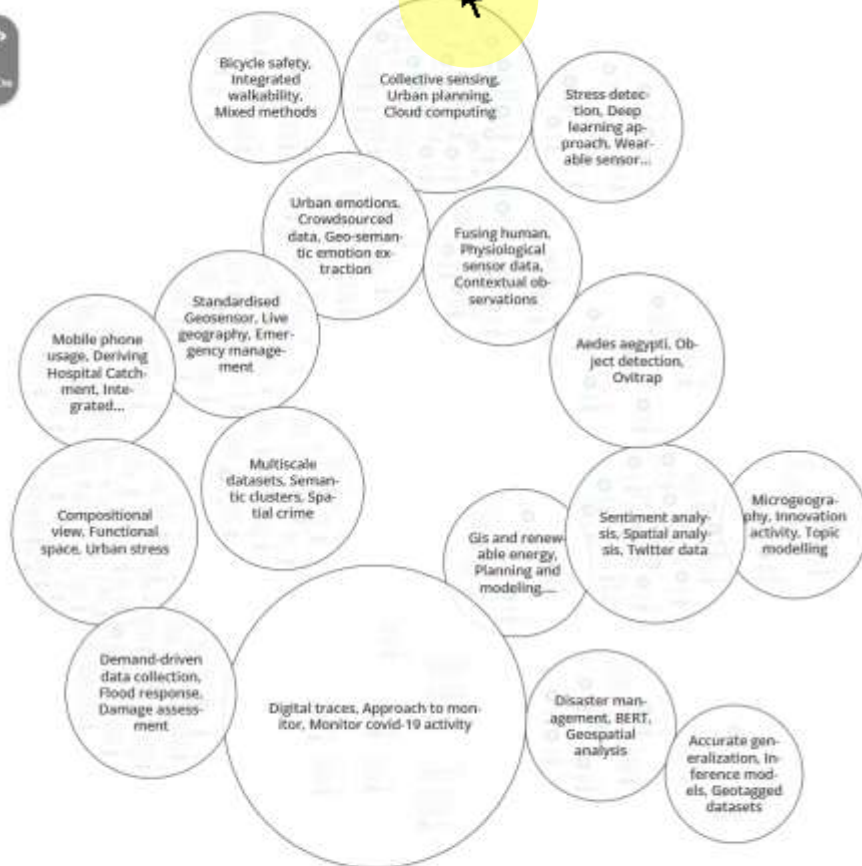
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[journal article](#)

Using digital traces to build prospective and real-time county-level early warning systems to anticipate COVID-19 outbreaks in the United States (2023-01-20)

Lucas M. Stolerman, Leonardo Clemente, Canelle Roiter, Kitis V. Parag, Arunee Majumder...
 Science Advances
 [doi]: <https://doi.org/10.1126/sciadv.abq1199>

No abstract available

27 citations 36 social media mentions 82 references outside academia

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Area: [Digital traces, Approach to monitor, Monitor covid-19 activity](#)

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An early warning approach to monitor COVID-19 activity with multiple digital traces in near real time (2021-03-05)

Nicole E. Rogan, Leonardo Clemente, Pariser Lausaul, Justin Kaashoek, Nicholas B. Link, Andre T. Nguyen, Fred S. Lu, Pieter Huybans, Bernd Resch, Clemens Nauas, Andreas Pentschke, Jessica Davis, Matteo Chinazzi, Backtosh Mustafa, ... Mauricio Santillana
 Science Advances
 [doi]: <https://doi.org/10.1126/sciadv.abe5889>

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[open access](#) [journal article](#)

High-resolution mapping of urban Aedes aegypti immature abundance through breeding site detection based on satellite and street view imagery (2024-08-06)

Staffen Knoblauch, Myat Su Yin, Writin Chattrin, Antonio Augusto de Aragão Rocha, Peter Haddaway...
 Scientific Reports
 [doi]: <https://doi.org/10.1038/s41598-024-67514-w>

Identification of Aedes aegypti breeding hotspots is essential for the implementation of targeted vector control strategies and thus the prevention of several mosquito-borne diseases worldwide. Training computer vision models on satellite and street view imagery in the municipality of Rio ...



RESEARCHER DETAILS

Close

BIOGRAPHY

No data available

EMPLOYMENT (11)

10/2024 - present / Full Professor / ITU Interdisciplinary Transformation University / Linz, AT

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PROFESSIONAL ACTIVITIES

Services

No data available

EDUCATION & QUALIFICATIONS (4)

2015 - 2018 / Habilitation in Geoinformatics / Paris-Lodron University of Salzburg, Austria / Salzburg, AT

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FUNDING (49)

Theodor Körner Price

2015 - present / Award / Funder: Austrian Ministry of Transportation, Innovation and Technology (bmvit)

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LINKS (3)

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DISTINCTIONS / AWARDS

No data available



METRICS

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TRADITIONAL METRICS

Normalised h-index: 1.5

Academic age: 19

h-index: 28

Number of total citations: 3052

Notes on metrics: Metrics are based on citation data provided by Crossref and information supplied by the researcher on their ORCID profile. Results may be impacted by accuracy and completeness of this data.

ALTMETRICS

Number of total unique social media mentions: 621

Number of total news, encyclopaedia, patent and policy references: 182

Notes on metrics: Metrics are based on data provided by Altmetric and information supplied by the researcher on their ORCID profile. Results may be impacted by accuracy and completeness of this data. Social media mentions include the following: Facebook, blog posts, Google+, Reddit, X, Youtube, Q&A forums and Stack Exchange.

TEACHING & MENTORSHIP

Number of total supervised PhD students: not available

Number of total supervised Master students: not available

Number of total supervised Bachelor students: not available

Notes on metrics: Metrics are based on information supplied by the researcher on their ORCID profile. Entries titled "Supervision" and "Co-supervision" are counted for each degree. Results may be impacted by accuracy and completeness of this data.

all professors

:overview

:projects

:publications



Bernd Resch

Professor of Geosocial
Artificial Intelligence



Prof.



bernd.resch@it-u.at



Overview (200 documents)

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Open access Journal article

#Altforjan: How Twitter Users in Europe Reacted to the Murder of Ján Kuciak—Revealing Spatiotemporal Patterns through Sentiment Analysis and Topic M... (2021-08-31)

Tamás Kovács, Anna Kovács-Györi, Bernd Resch

ISPRS International Journal of Geo-Information

[doi]: <https://doi.org/10.3390/ijgi10090585>

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7 citations 5 social media mentions 1 references outside academia

Open access 11 Cite as Export

Area: Sentiment analysis, Geosocial media analysis, Spatial analysis

Open access Journal article

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Anna Kovács-Györi, Alina Ristea, Clemente Havas, Bernd Resch, Fabio Cabrita Barreto

Urban Planning

[doi]: <https://doi.org/10.17943/upj.v3i1.1287>

The dynamic nature of cities, understood as complex systems with a variety of concurring factors, poses significant challenges to urban planners due to constant information management. These rapidly changing conditions...



Knowledge map for the works of **Peter Kraker (0000-0002-5238-4195)**

76 works Founder & Chairman [Open Knowledge Map](#) [Researcher details](#) [Metrics](#) [About the map](#)



19 Cite



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Overview (76 documents)



Q Search within visualization

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other

#DontLeaveItToGoogle: How Open Infrastructures Enable Continuous Innovation in the Research Workflow (2019-03-21)

Peter Kraker, Maxi Schramm

Zenodo

[doi]: <https://doi.org/10.5281/zenodo.2602089>

Closed and proprietary infrastructures limit the accessibility of research, often putting paywalls in front of scientific knowledge. But they also severely limit reuse, preventing other tools from building on top of their...

n/a citations **93** social media mentions **n/a** references outside academia

PDF

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Area: [Discovery](#), [User interfaces](#), [Scholarly communication](#)

other

#DontLeaveItToGoogle: How Open Infrastructures Enable Continuous Innovation in the Research Workflow (2019-03-21)

Peter Kraker, Maxi Schramm

Zenodo

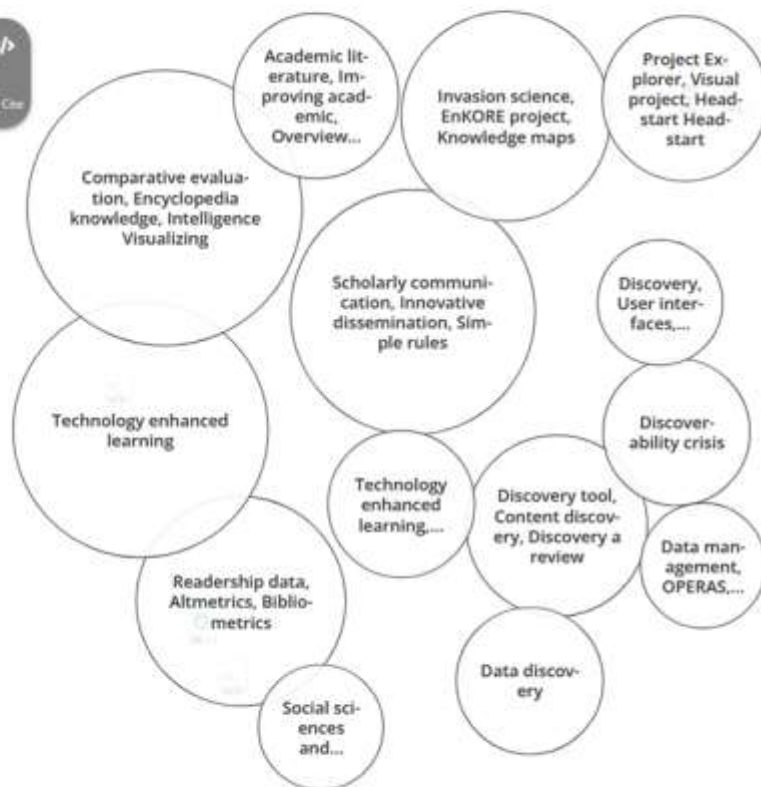
[doi]: <https://doi.org/10.5281/zenodo.2602088>

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n/a citations **n/a** social media mentions **n/a** references outside academia

Knowledge map for the works of **Peter Kraker (0000-0002-5238-4195)**76 works Founder & Chairman [Open Knowledge Map](#) [Researcher details](#) [Metrics](#) [About the map](#)

11 Citations



Overview (6 documents)



Q dataset



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dataset

Figshare Public Metadata until 02/12/2014 (2015)

Peter Kraker

[doi]: <https://doi.org/10.6084/m9.figshare.1320834>

No abstract available

n/a citations 11 social media mentions n/a references outside academia

Export

Area: [Technology enhanced learning](#)

dataset

Research Practices on the Web in the Field of Technology Enhanced Learning (2013)

Peter Kraker, Stefanie Lindstaedt

Figshare

[doi]: <https://doi.org/10.6084/M9.FIGSHARE.156030.V1>

Recently, developments under the banners of Science/Research 2.0 have received a lot of attention in the scientific community. Along with Web 2.0 tools and technologies, a certain change in researcher practices can be...

n/a citations n/a social media mentions n/a references outside academia

Export

Area: [Technology enhanced learning, Shortcomings existing practice, Com...](#)

Summary: Main characteristics

Visual profile of a researcher's work across research, teaching, and open science

Integrates data from **ORCID**, **Crossref**, **Altmetric** and **BASE** using an **AI pipeline**

Includes datasets, software, policy papers, and other **non-traditional outputs**

Built to support equitable evaluation, free of black-box scoring

Follow-up project VisConnect+

Expanding on the achievements of the original VisConnect project

Planned extensions

- Encompassing **additional dimensions of impact** (e.g. leadership roles, policy advisory roles, engagement beyond academia)
- Providing insights into how a researcher collaborates **across disciplines and institutions**
- Enabling the **mapping of researchers** based on user-defined queries (e.g. finding researchers working on a specific research topic)

Follow-up project VisConnect+

Collaborative research project **with a duration of 3-4 years**

Current partners:

- IT:U – Interdisciplinary Transformation University Austria
- Open Knowledge Maps
- Ludwig Boltzmann Gesellschaft
- University of Vienna

Interest from: ETH Zurich, University of St. Gallen, FH Vienna

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