

Carbon beats gold: Diamond Open Access is the future #2

Egon Willighagen 

Published July 13, 2026

Citation

Willighagen, E. (n.d.). In *chem-bla-ics*. chem-bla-ics. <https://doi.org/10.59350/gfrxs-bxn43>

Keywords

Openaccess

Copyright

Copyright © Egon Willighagen 2026. Distributed under the terms of the [Creative Commons Attribution 4.0 International License](#), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

We need a lot more than [diamond open access](#) to really improve the publishing models. That said, but there are [examples that diamond open access publishers](#) actually want to improve more just the access to the knowledge dissemination infrastructure. But infrastructure is not only technologies; it also includes the many social aspects that are involved in adoption. And we saw [enough of that in the open access transition](#).

One aspect that limits the uptake of diamond open access models is that the scholarly community needs to change their trust model. We have seen a transition from societal publishers to commercial publishers, from scholarly-led to publisher-led. And commercial publishers certainly [breached my trust](#) (see also doi:[10.5281/zenodo.4926030](https://doi.org/10.5281/zenodo.4926030)).

Many scholars prefer the certainty of a scholarly journal where they can trust that the editorial board and their reviewers take their job seriously. This matters. The notion that peer reviewers may reject your work is an extrinsic motivation for at least some researchers to do a better job (personal communication). And that feature works well: there are indications that research published as preprint sees limited change after the formal peer review process (doi:[10.1038/d41586-026-02167-3](https://doi.org/10.1038/d41586-026-02167-3) and doi:[10.64898/2026.06.30.735556](https://doi.org/10.64898/2026.06.30.735556)):

"For most scientists, reputation is important, and they would not upload something they would not be comfortable with publishing in a journal later."

In an ideal situation, reputation would not be part of the whole equation: researchers never submit anything they think is not scientifically sound. Journals would never desk-reject an article that is scientifically sound. The question is mostly how to reach that. Everyone is busy, and it has not been so long ago that the journal impact factor was by many as indicator of scientific quality. The reality is far more complex than that.

Finding Diamond Open Access journals

So, let's assume you are interested in the idea, and want to know what diamond open access journals exist in your research field, before you can even consider the quality of that journal, you need to know which journal is diamond open access. Therefore, I [asked yesterday on Mastodon](#) about databases that list which journal are diamond.

It actually turns out that the [Directory of Open Access Journals](#) (DOAJ) does not indicate if a journal is diamond. You can filter on zero APC, but that is not the same. In fact, zero APC is routinely used by big publishers to launch new journals. One they have critical mass, they will start charging non-zero APCs.

I already received some replies about possible options:

1. [Diamond Discovery Hub](#): lists just over 4,000 diamond journals, but seems closed data (thx [Najko](#)! see also doi:[10.15291/libellarium.4569](https://doi.org/10.15291/libellarium.4569))
2. [wheretopublish.github.io](#): open data, accepts additions, but lists only 9 diamond journals (thx [Anne](#)!)

chem-bla-ics

3. [B!SON](#): a recommender that depends on DOAJ, so also without clear diamond indication (thx [Jon!](#))

All pieces of the puzzle.

When I grew up as a scholar, I learned to publish in journals where you respect the research, where you see important research in your field get published. Nowadays, this is changing. In fact, young researchers (tho many older scholars alike) fear to publish in predatory journal by accident (really! [[citation_pending](#)]). The big publishers and the new publishers have been adding so many new journals, and academia has really pushed the "publish as many articles as you can" model, that it kind of makes sense why things are different now.

And, a central database with trustworthy information about the quality of diamond open access journals is just needed.

A final note, while I have not been able to create a list of diamond open access journals with OpenAlex, already in February 2025 I found a way to list [articles tagged with a diamond status](#). This query lists over three thousand of such annoated articles for Maastricht University:

The screenshot displays a search interface for OpenAlex. The search bar at the top shows "Search 480M scholarly works" and "works" is selected. Filters are applied: Institution is "Maastricht University" and Open Access Status is "diamond". The results show 3,307 works. A list of four articles is displayed, each with a checkbox, title, authors, journal, and citation count. To the right, there are summary statistics: a bar chart for "Year", a donut chart for "Open Access" showing 100% (3,307), a table for "Topic", a table for "Institution", and a table for "Type".

Topic	Count
Particle physics theoretical and experimental studies	162
Innovations in Medical Education	77
Dementia and Cognitive Impairment Research	47
Atrial Fibrillation Management and Outcomes	34
Chronic Obstructive Pulmonary Disease (COPD) Research	29

Institution	Count
Maastricht University	3,307
Maastricht University Medical Centre	425
Radboud University Nijmegen	273
University of Groningen	222
Centre National de la Recherche Scientifique	203

Type	Count
------	-------

3,307 works

- ☐ [Workgroup Report: Drinking-Water Nitrate and Health—Recent Findings and Research Needs](#)
2005 · Mary H. Ward, Theo M. deKok, et al. · *Environmental Health Perspectives* · 885
- ☐ [Long-Term Effects of Traffic-Related Air Pollution on Mortality in a Dutch Cohort \(NLCS-AIR Study\)](#)
2007 · Rob Beelen, Gerard Hoek, et al. · *Environmental Health Perspectives* · 610
- ☐ [The impact of heat waves and cold spells on mortality rates in the Dutch population.](#) PDF
2001 · M M Huynen, P Martens, et al. · *Environmental Health Perspectives* · 579
- ☐ [microViz: an R package for microbiome data visualization and statistics](#) PDF
2021 · David Barnett, Ilya Arts, et al. · *The Journal of Open Source Software* · 542

(Interestingly, the journal where the three most cited articles were published turned diamond already in 2004 and was discontinued about half a year go "Due to recent changes in operational resources", [according to Wikipedia](#).)

Building trust

So, while the above solution do allow you to increase your success rate or finding a diamond open access journal in your field, the next question is: what can you learn about this journal. For example, what does Wikipedia say about the journal (if anything)? Do you know people that have published in that journal? The OpenAlex screenshot shows

That make me wonder what [Wikidata](#) has to offer. After all, as one of the largest linked open data sources, they must have some information.

I am not disappointed. The type [diamond open-access journal](#) is actively used, and there is plenty of other of useful fields for these journals. I came up with [this SPARQL query](#) (with some QLever sugar for labels):

```
PREFIX wdt: <http://www.wikidata.org/prop/direct/>
PREFIX wd: <http://www.wikidata.org/entity/>
PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema#>
SELECT DISTINCT ?diamondJournal ?diamondjournalLabel
      # (SAMPLE(?url_) AS ?website)
      (SAMPLE(?issnl_) AS ?issnl)
      (GROUP_CONCAT(DISTINCT STR(?issn_)) AS ?issn)
      (SAMPLE(?lang_) AS ?language)
      (SAMPLE(?doaj_) AS ?doaj)
      (GROUP_CONCAT(DISTINCT STR(?subject);separator=", ") AS ?subjects)
WHERE {
  ?diamondJournal wdt:P31 wd:Q108440863 .
  OPTIONAL { ?diamondJournal wdt:P236 ?issn_ }
  OPTIONAL { ?diamondJournal wdt:P7363 ?issnl_ }
  OPTIONAL { ?diamondJournal wdt:P856 ?url_ }
  OPTIONAL { ?diamondJournal wdt:P407 / @en@rdfs:label ?lang_ }
  OPTIONAL { ?diamondJournal wdt:P5115 ?doaj_ }
  OPTIONAL { ?diamondJournal wdt:P921 / @en@rdfs:label ?subject }
  ?diamondJournal @en@rdfs:label ?diamondjournalLabel .
} GROUP BY ?diamondJournal ?diamondjournalLabel
```

This lists more than 1,500 diamond open access journals:

Query results:

1,509 lines found 7,990ms in total 7,987ms for computation 3ms for resolving and sending

Query Virtuoso Query WDQS Limited to 100 results; show all 1,509 results

	?diamondJournal	?diamondjournalLabel	?issnl	?issn	?language	?doaj	?subjects
1	Q10360073	Revista Brasileira de Ciências Sociais	0102-6909	1806-9053 0102-6909	Portuguese	0102-6909	social science
2	Q10360102	Revista Estudos Feministas	0104-026X	1806-9584 0104-026X	multiple languages	0104-026X	women's studies
3	Q104312597	Cuadernos de la Facultad de Humanidades y Cienci[...]	0327-1471	0327-1471 1668-8104	Spanish	0327-1471	history, anthropology, humanities, social scienc[...]
4	Q105710420	Avances en Recursos Hidráulicos	0121-5701	0121-5701	Spanish	-	-
5	Q105710425	Avances en Sistemas e Informática	1909-0056	1657-7663 1909-0056	Spanish	-	-
6	Q106777493	Revista Mal-estar e Subjetividade	1518-6148	2175-3644 1518-6148	Portuguese	-	psychoanalysis
7	Q107427104	Sapiens	1317-5815	2244-7598 1317-5815	Spanish	-	-
8	Q107478632	Revista de Derecho de la Universidad Nacional de[...]	2313-6944	2707-9651 2313-6944	Spanish	2707-9651	law
9	Q107999345	Revista de Humanidades	1405-4167	1405-4167	Spanish	-	-
10	Q108279269	Whitireia Nursing & Health Journal	2350-0550	2816-0797 2816-0789	English	-	nursing

With Wikidata we can then [list UM authors that published in diamond journals](#). That list is remarkably short, however, if you compare it with the earlier results from OpenAlex. That is because Wikidata only contains a subset of scientific literature and not all articles are correctly linked to the items about their authors. But I also spotted journals in the OpenAlex list that are not really diamond.

What is next?

Clearly, we need better metadata, but things are not looking that bad either! We have something to work with. What is your favorite diamond open access journal?