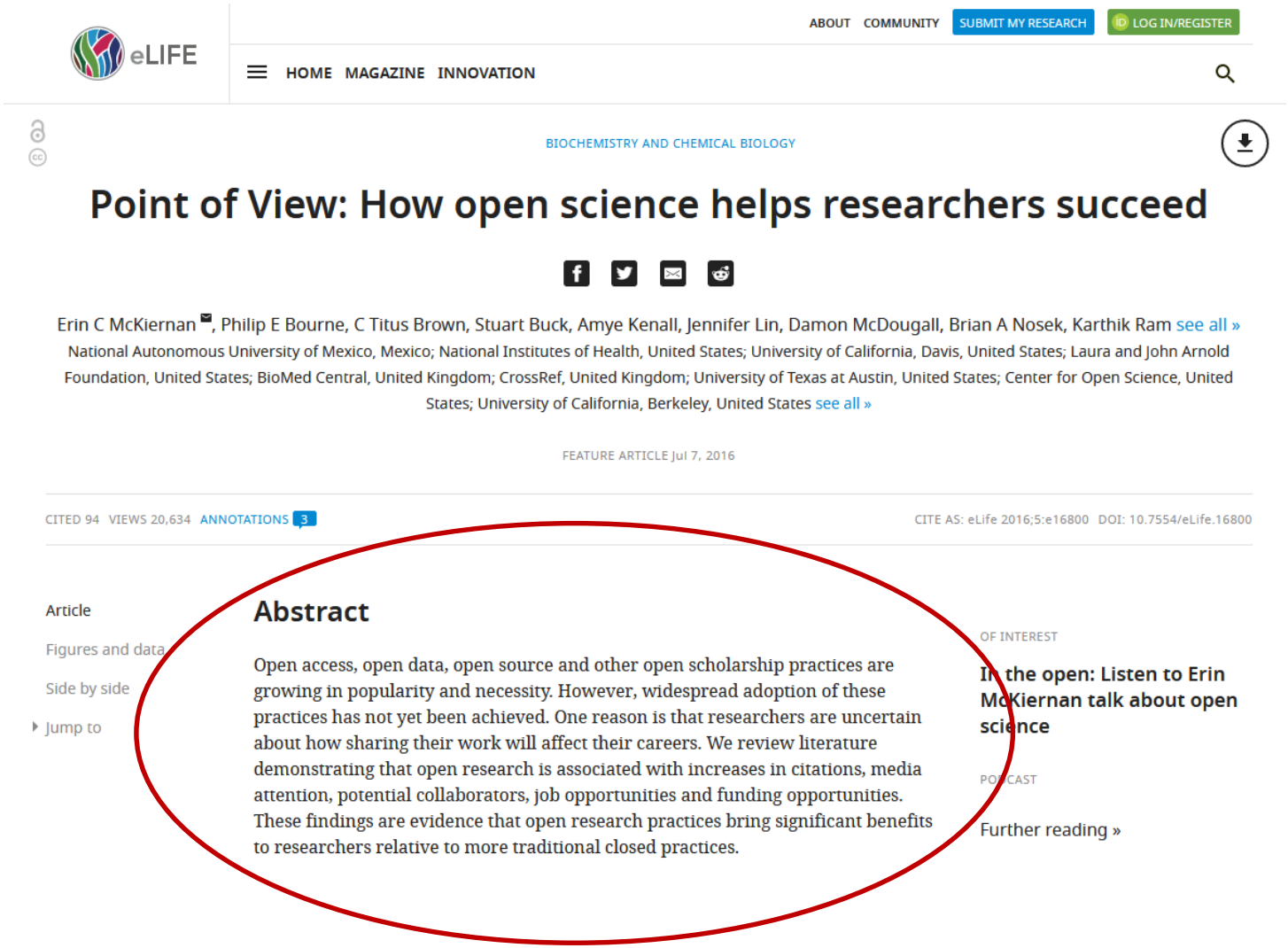
L’initiative OpenAPC : mesurer la dépense de publication pour mieux la piloter

20 ans de Couperin, Strasbourg, 21.06.2019
Dirk Pieper (Université de Bielefeld, Allemagne)

Agenda

1. **Context: Open Science and policy strategies**
2. OpenAPC in a nutshell
3. Relevance of cost transparency
4. Outlook



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BIOCHEMISTRY AND CHEMICAL BIOLOGY

Point of View: How open science helps researchers succeed

Erin C McKiernan, Philip E Bourne, C Titus Brown, Stuart Buck, Amye Kenall, Jennifer Lin, Damon McDougall, Brian A Nosek, Karthik Ram see all »

National Autonomous University of Mexico, Mexico; National Institutes of Health, United States; University of California, Davis, United States; Laura and John Arnold Foundation, United States; BioMed Central, United Kingdom; CrossRef, United Kingdom; University of Texas at Austin, United States; Center for Open Science, United States; University of California, Berkeley, United States see all »

FEATURE ARTICLE Jul 7, 2016

CITED 94 VIEWS 20,634 ANNOTATIONS 3

CITE AS: eLife 2016;5:e16800 DOI: 10.7554/eLife.16800

Article

Figures and data

Side by side

Jump to

Abstract

Open access, open data, open source and other open scholarship practices are growing in popularity and necessity. However, widespread adoption of these practices has not yet been achieved. One reason is that researchers are uncertain about how sharing their work will affect their careers. We review literature demonstrating that open research is associated with increases in citations, media attention, potential collaborators, job opportunities and funding opportunities. These findings are evidence that open research practices bring significant benefits to researchers relative to more traditional closed practices.

OF INTEREST

In the open: Listen to Erin McKiernan talk about open science

PODCAST

Further reading »

https://doi.org/10.7554/eLife.16800.001

open APC

Amsterdam Call for Action on Open Science (2016)

"Publishers, research funders and Research Performing Organisations: promote mutual understanding and agree on open access principles like **transparency**, competition, sustainability, **fair pricing**, economic viability and pluralism."

https://www.government.nl/documents/reports/2016/04/04/amsterdam-call-for-action-on-open-science

open APC

Federal Ministry of Education and Research: Open Access in Germany (2016)

Fields of action:

- OA as a principle of funding
- New ways of financing publications
- Increasing acceptance of OA
- **Measuring and monitoring OA and underlying costs**

https://www.bmbf.de/upload_filestore/pub/Open_Access_in_Deutschland.pdf

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Ministère de l'Enseignement supérieur, de la Recherche et de l'Innovation: Le Plan national pour la science ouverte (2018):

- Three commitments with roadmaps for: OA to publications, research data, participation in global Open Science developments and infrastructures
- Commitment 1 includes bibliodiversity approach and Open Science monitor

Cited English version:
https://libereurope.eu/wp-content/uploads/2018/07/SO_A4_2018_05-EN_print.pdf

open APC

Expert Group to the European Commission: Future of scholary publishing and scholary communication (2019):

- Recommendations for researchers, funders, …
- *„Universities and research institutions should […] refuse non-disclosure clauses and include clauses which **enable cost and price control**, and **compliance monitoring**. Strive to facilitate collective action with other institutions by e.g. sharing cost and price data through joint initiatives (e.g. OpenAPC).”*

https://doi.org/10.2777/836532

European University Association: EUA Big Deals Survey Report (2019)

"Offsetting mechanisms could likewise become a tool in transformative and affordable agreements with publishers as indicated in data collected by the INTACT project through its Open APC platform. Recent literature furthermore suggests that ***greater transparency of expenditure*** *[…]* ***and novel cost reallocation mechanisms*** *would have to be important elements of these agreements."*

https://eua.eu/component/attachments/attachments.html?id=358

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Current funder

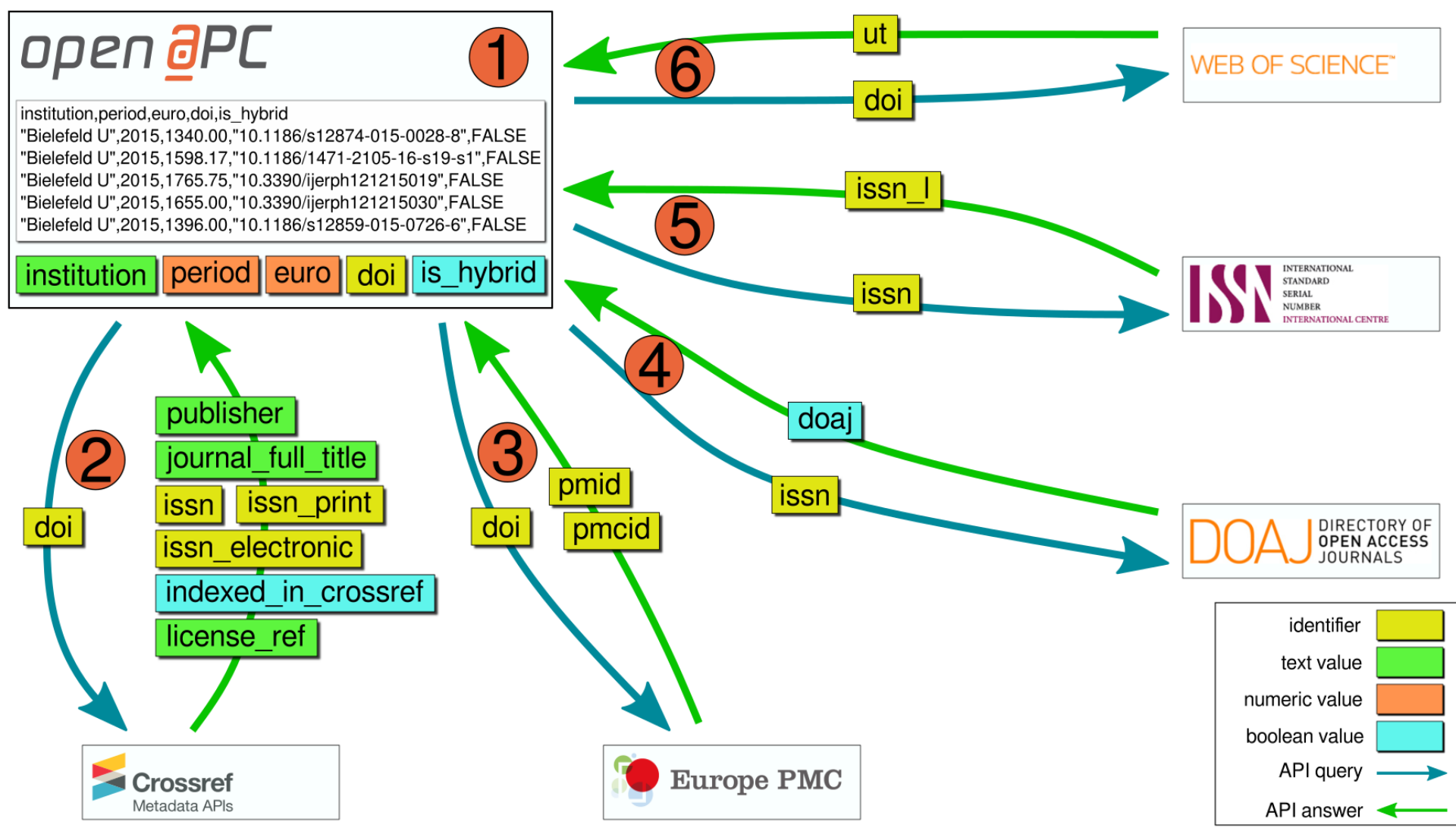
- Federal Ministry of Education and Research
- European Commission (OpenAIRE Advance - WP 6 „Towards a scholary commons“, subtask 6.3.3)

Basic goals

- Release APC cost data under an open database license
- Transparent and reusable reporting and monitoring for academic institutions and funders
- Allocation of cost and bibliometric data to support open access transformation

Open Science approach

- „everything is visible by anyone at any time“
- Transparent data versioning
- Continuous integration (Travis CI)
- Scripts are open source
- OpenAPC complies to FAIR data principles



OpenAPC enrichment overview

Data contribution

- Data submission handout
- National aggregators or single (pilot) institutions
- Sending Excel or csv files
- Pull request on GitHub
- Harvesting via OAI-PMH

Data dissemination

- Raw data and versions via GitHub
- GitHub readme
- OpenAPC blog
- OLAP server API
- Treemap visualisation

OpenAPC 2015 - 06/2019

Year	Number of institutions	Number of articles	Amount in EURO	Mean value EURO
2015 (10)	24	3,618	4,474,463	1.202
2016 (10)	40	18,370	32,802,770	1,544
2017 (10)	117	44,425	86,008,454	1,756
2018 (11)	196	55,918	105,420,735	1,681
2019 (06)	240	80,368	156,144,778	1,943

open APC

Current data set

https://github.com/OpenAPC/openapc-de

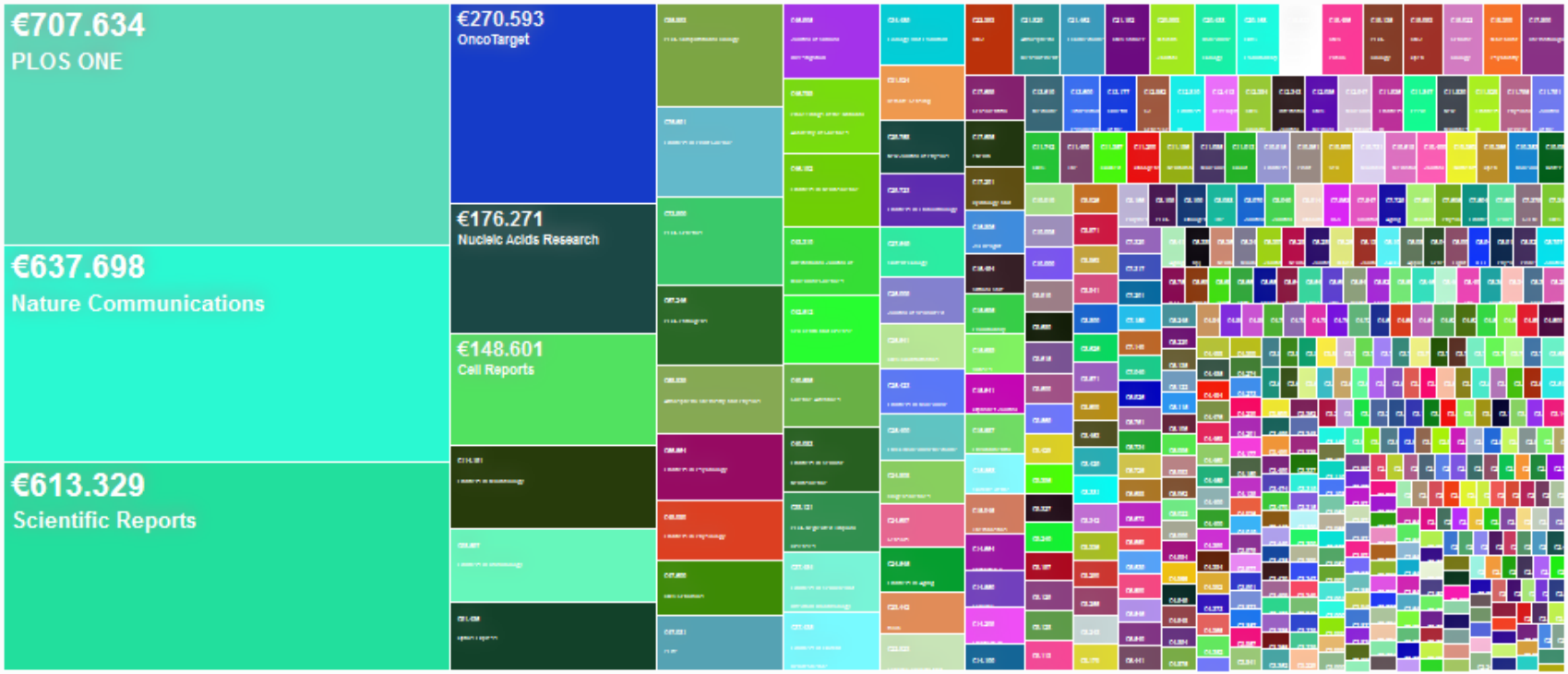
https://treemaps.intact-project.org/apcdata/openapc/

Example: Distribution of APC expenditures of French academic institutions on journal level

open APC

View: Publisher | Journal | Institution | Data & Embed

Filter: Year: All | Hybrid Status: All | Country: FRA



Sort by: Sum | Number of Articles | Mean Value | Standard Deviation

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Journals (909 entries*)	Sum	Number of Articles	Mean Value	Standard Deviation	Percentage
PLOS ONE	€707.634	562	€1.259	€222	9.69%
Nature Communications	€637.698	178	€3.583	€509	8.74%
Scientific Reports	€613.329	485	€1.265	€111	8.40%
OncoTarget	€270.593	101	€2.679	€288	3.71%
Nucleic Acids Research	€176.271	80	€2.203	€556	2.41%

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open APC

Relevance

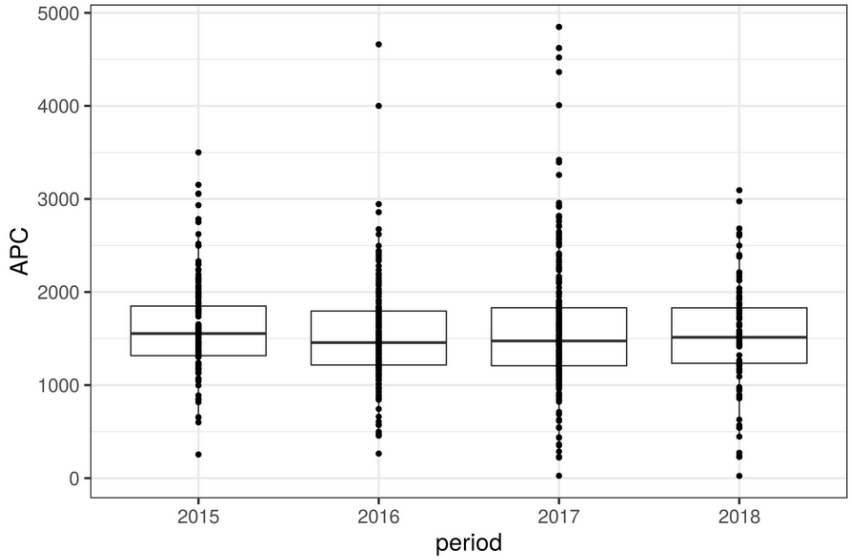
- OpenAPC allows calculation of average costs, time lines etc. for institutions, publishers, journals (for hybrid and for fully Open Access)
- Provides libraries and library consortia more transparency on the distribution of published articles
- Universities, research institutions, libraries and funder organisations can compare prices and costs, which is the precondition to act rational on a market

Relevance (example Wiley OA journals 2015-2018)

Wiley-Blackwell

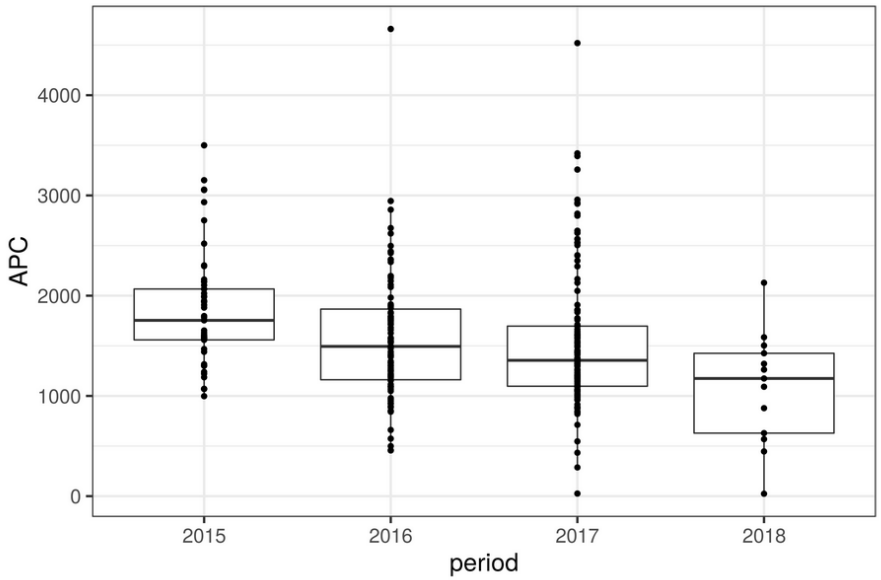
Total

Number of articles: 968



United Kingdom

Number of articles: 293



Relevance (example Wiley OA journals 2015-2018)

Wiley-Blackwell

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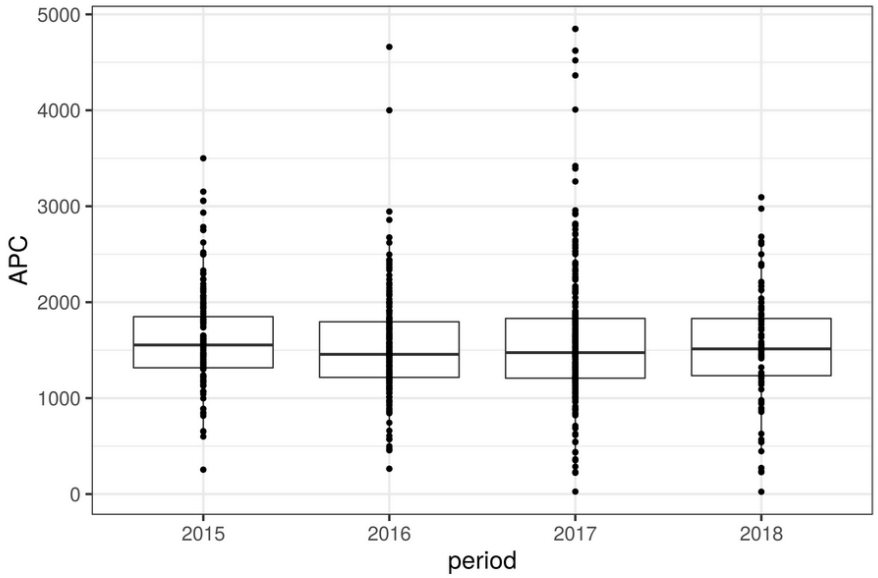
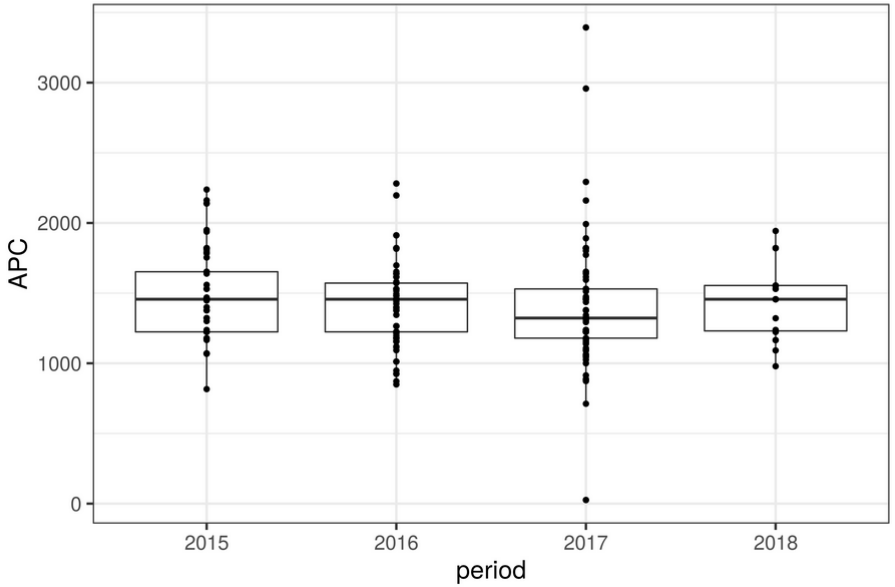
Number of articles: 968



Most frequent journal: Ecology and Evolution

Number of articles: 269

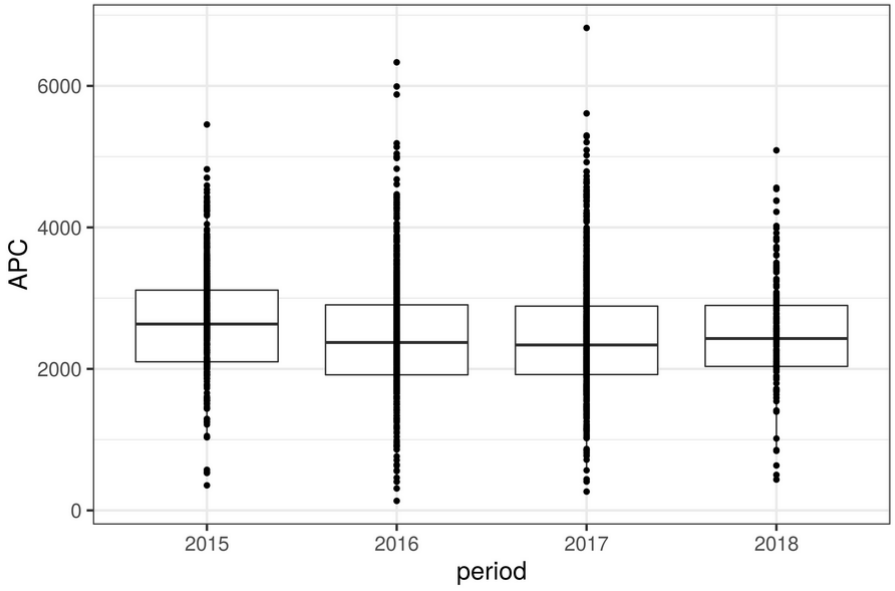


Relevance (example Wiley hybrid journals 2015-2018)

Wiley-Blackwell

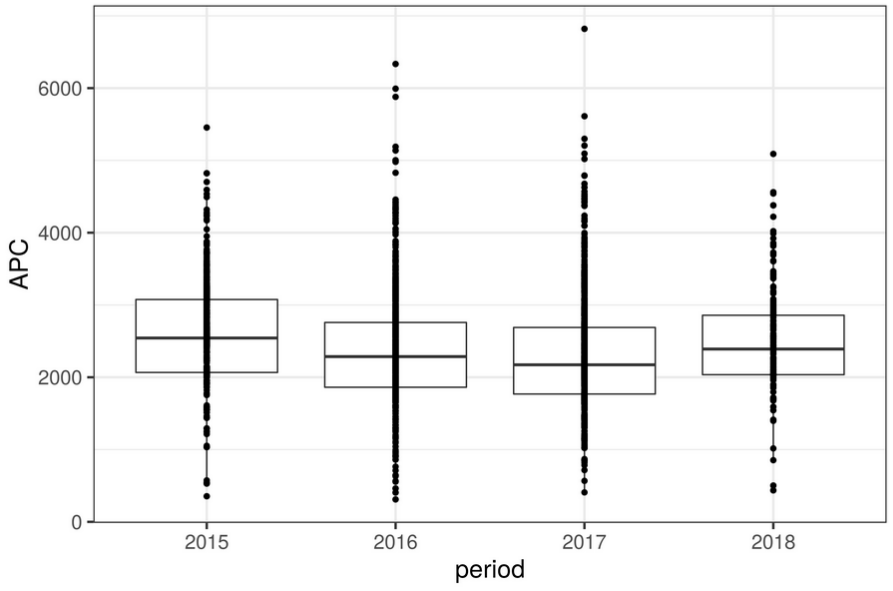
Total

Number of articles: 4088



United Kingdom

Number of articles: 3420

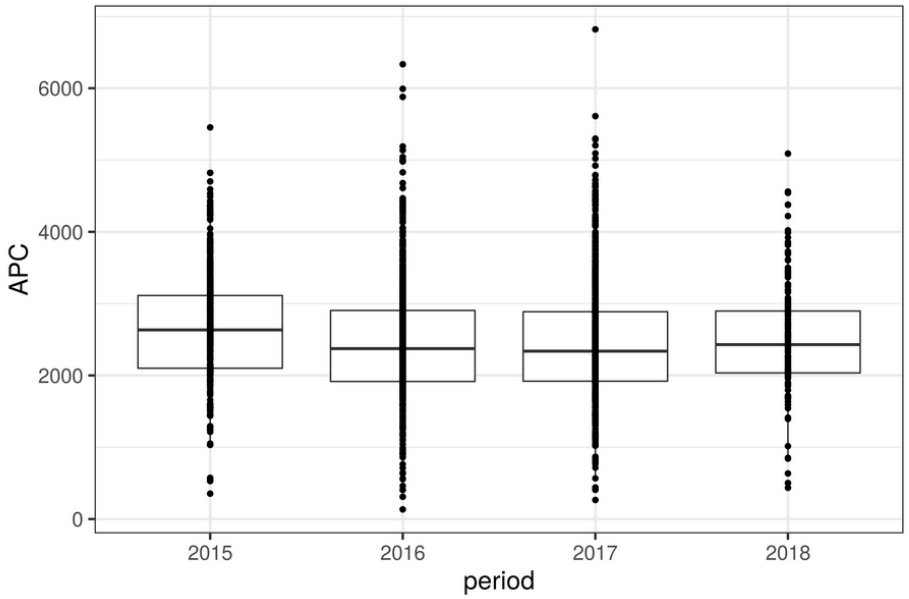


Relevance (example Wiley hybrid journals 2015-2018)

Wiley-Blackwell

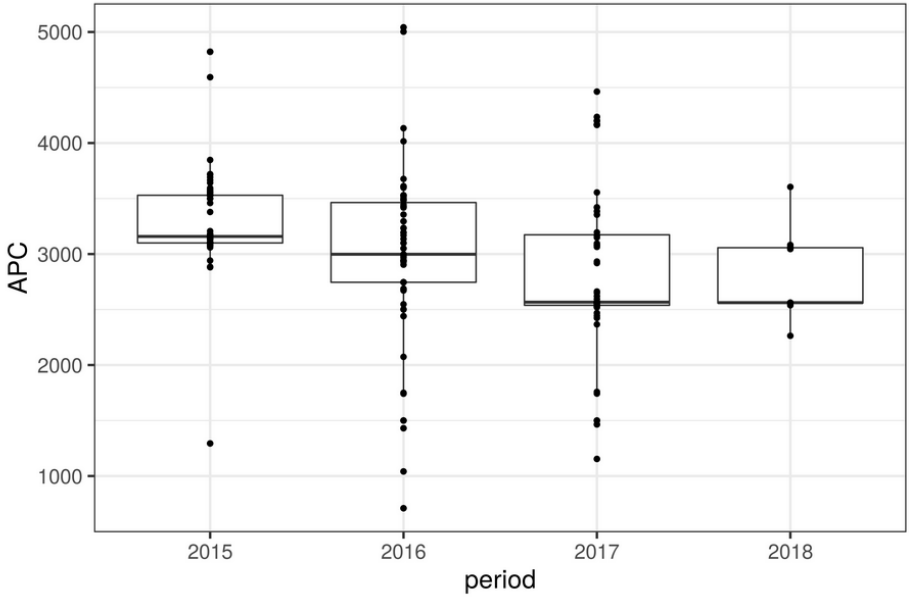
Total

Number of articles: 4088



Most frequent journal: Angewandte Chemie International Edition

Number of articles: 213

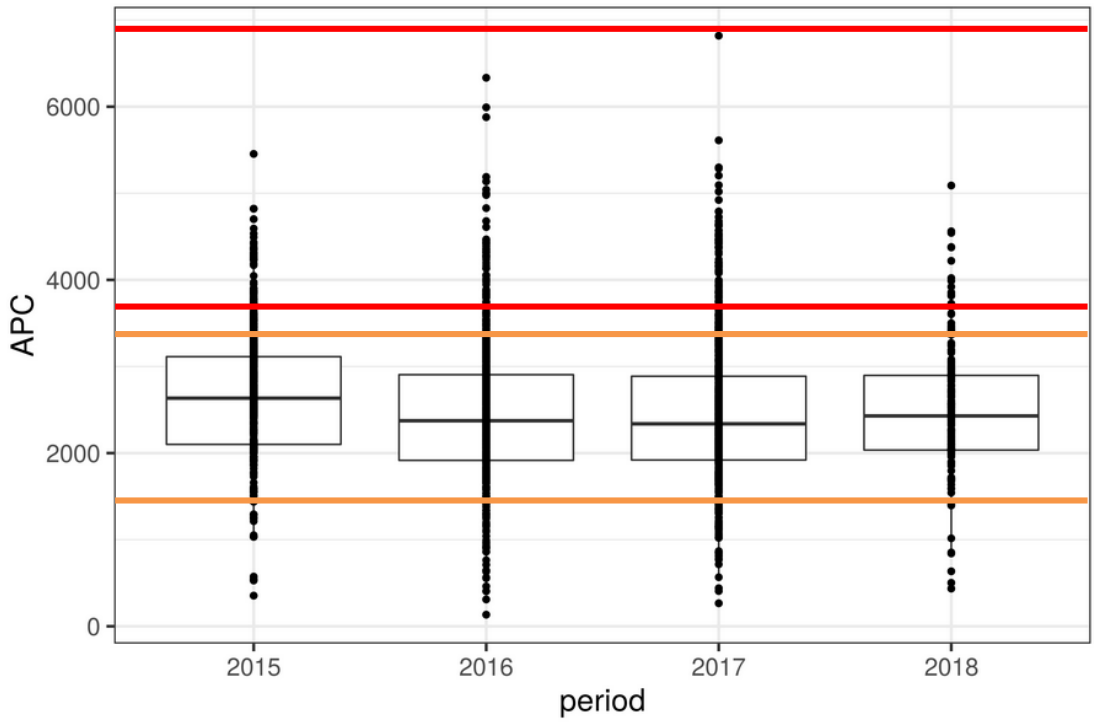


Relevance: Comparing and ranking costs per article

Wiley-Blackwell

Total

Number of articles: 4088



~ global cost per article for oa publishing and subscription (double dipping)

~ global cost per article for reading via subscription fees

DEAL-Wiley PAR fee incl. service fee and taxes

cost per article in high quality OA journal from efficient OA publishers

Transformative agreements

- Current data providers: Bibsam, Couperin, Jisc, KEMÖ, MPDL, VSNU/UKB
- Current publishers: EDP, IOP, RSC, T&F, Springer Compact

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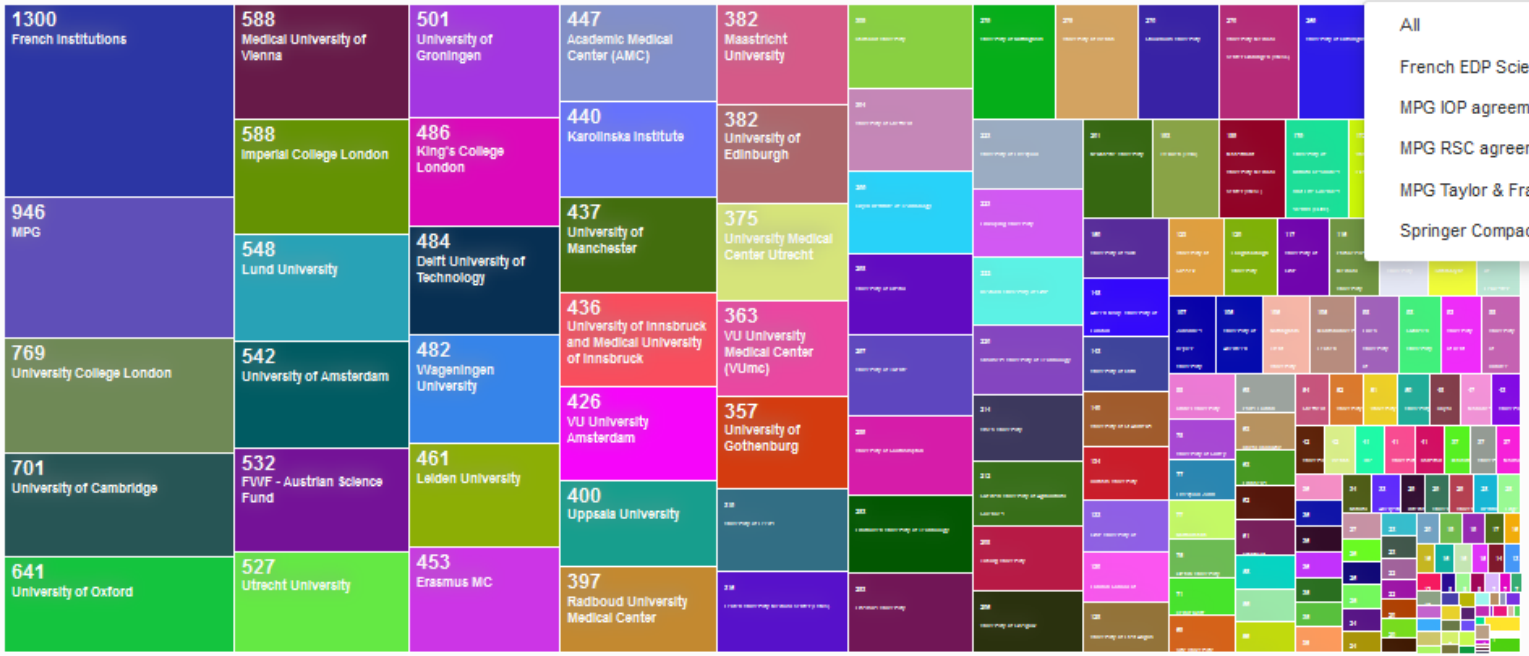
TRANSFORMATIVE AGREEMENTS

View: Publisher | Journal | Institution | Data & Embed

Filter: Year: All | Hybrid Status: All | Country: All | Agreement: All



- All
- French EDP Sciences agreement
- MPG IOP agreement
- MPG RSC agreement
- MPG Taylor & Francis agreement
- Springer Compact

Sort by: Number of Articles

Download as: CSV | JSON

Institutions (200 entries)	Number of Articles	Percentage
French institutions	1300	4.52%
MPG	946	3.29%
University College London	769	2.67%
University of Cambridge	701	2.44%
University of Oxford	641	2.23%
Imperial College London	588	2.04%
Medical University of Vienna	588	2.04%
Lund University	548	1.90%

Analysing the effect ofSpringer Compact agreements

Springer Nature // Journals (2033 entries*)	Springer Compact articles	Journal OA articles	Journal total articles	Journal OA share	OA share covered by SCA
Environmental Science and Pollution Research	97	519	11894	4.36%	18.69%
Journal of Materials Science: Materials in Electronics	39	89	8975	0.99%	43.82%
The International Journal of Advanced Manufacturing Technology	116	245	7468	3.28%	47.35%
Multimedia Tools and Applications	43	182	5898	3.09%	23.63%
Journal of Materials Science	115	206	5076	4.06%	55.83%
Environmental Earth Sciences	25	143	4780	2.99%	17.48%
Wireless Personal Communications	9	55	4227	1.30%	16.36%
Journal of Thermal Analysis and Calorimetry	18	342	4203	8.14%	5.26%
Applied Physics A	38	103	3893	2.65%	36.89%
Journal of Electronic Materials	30	80	3849	2.08%	37.50%
Applied Microbiology and Biotechnology	124	301	3774	7.98%	41.20%
Analytical and Bioanalytical Chemistry	110	302	3634	8.31%	36.42%
Annals of Surgical Oncology	111	221	3428	6.45%	50.23%
Nonlinear Dynamics	31	100	3327	3.01%	31.00%
Arabian Journal of Geosciences	6	34	3267	1.04%	17.65%
Environmental Monitoring and Assessment	23	185	3195	5.79%	12.43%
Surgical Endoscopy	120	262	3134	8.36%	45.80%
Journal of Radioanalytical and Nuclear Chemistry	25	125	3110	4.02%	20.00%

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Outlook

- Enlarge the data set
- Combining OpenAPC data set with bibliometric and repository data
- Ingest cost data per article of participating institutions from transformative agreements (e.g. DEAL-Wiley)

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Amsterdam Call for Action on Open Science (2016, p.12)

“There are concerns that the current academic publication system is unsustainable for Research Performing Organisations. In order to achieve a cost-effective, efficient and dynamic system of academic communication stakeholders need to gain appropriate insight into its costs and conditions. This is particularly relevant in the transition phase to open access when both Big Deals and article processing charges (APCs) are being used.”

More information

Pieper, D., & Broschinski, C. (2018). OpenAPC: a contribution to a transparent and reproducible monitoring of fee-based open access publishing across institutions and nations. *Insights*, *31*, 39. DOI: http://doi.org/10.1629/uksg.439

Merci de votre attention!

OpenAPC Data contributors

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