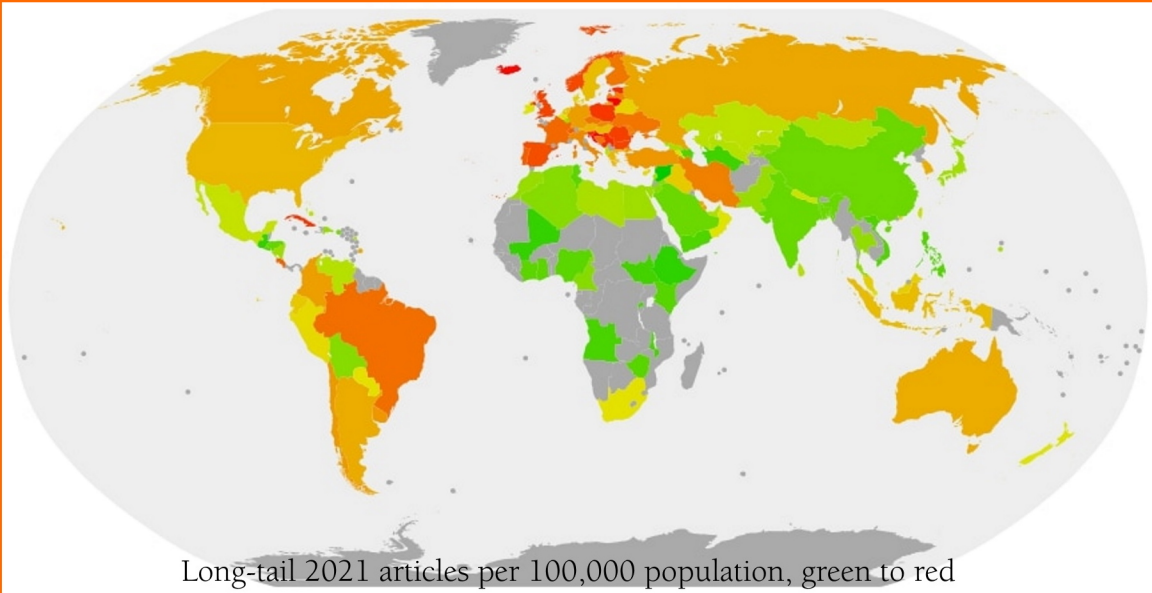


Gold Open Access by Country 2016-2021: The Long Tail



Long-tail 2021 articles per 100,000 population, green to red

A Supplement to Gold Open Access 2016-2021:
Articles in Journals (GOA7)

Walt Crawford

GOLD OPEN ACCESS
BY COUNTRY
2016-2021:

The Long Tail

Walt Crawford

Cites & Insights Books
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Gold Open Access by Country 2016-2021: The Long Tail

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Preface

This book is a supplement to *Gold Open Access Journals 2016-2021: Articles in Journals (GOA7)*, providing a look at serious gold open access publishing on a country-by-country (and region) basis, but with one big difference from earlier Country books: a focus on “the long tail,” journals *not* published by the Big 11, as discussed in GOA7.

To save space and because they don’t seem useful in this context, Starting Date and Publisher Category tables have been eliminated (but the data remains in the spreadsheet).

Countries with at least ten OA journals have full details. Subject tables appear sorted by article count. Table rows with no content are deleted. Order of tables may be adjusted to save space. Tables with no real content for a given country may be deleted.

A chapter for each region is followed by chapters for countries within that region, then a chapter offering brief notes on countries with fewer than ten OA journals (except for Pacific/English, which has no such countries). “Big Eleven” and “big eleven” are used interchangeably.

For clarification: STEM, for this project, means science, technology, engineering and math; H&SS means humanities and social science.

Thanks again to SPARC for sponsoring this project.

The heatmap on the front cover was generated using GunnMap. The appendix has details.

Overall

This book looks at the long tail of gold OA—for 2021, the 13,714 DOAJ-listed journals that are *not* published by one of what I call the Big Eleven: eleven publishers or publishing groups, including two university presses and one society, that dominate fee-based OA. You could think of them as Corporate OA, except for the society and universities, and the fact that several traditional publishers such as De Gruyter are included in the long tail.

Chapter 6 of *Gold Open Access 2016-2021: Articles in Journals (GOA7)* discusses the Big Eleven and the Long Tail; the Big Eleven are named on page 45. The group publishes 17% of the serious journals, but 55% of the 2021 articles and 89% of potential fee (APC) revenues.

A few comparisons between the Big Eleven and long tail to provide context:

- 82% of the journals and 95% of the 2021 articles in the Big Eleven have fees, compared to 22% of the journals and 37% of the articles in the long tail.
- The Big Eleven articles for 2021 were 47% biomed, 49% STEM, and 4% H&SS (humanities and social sciences). For the long tail, 27% biomed, 31% STEM, and 41% H&SS.
- Overall average cost per article in the Big Eleven was \$2,213, compared to \$336 in the long tail—a ratio of 6.6 to 1. The average cost for fee articles in the Big Eleven was \$2,341, compared to \$907 in the long tail—still a 2.6 to 1 ratio.
- Total potential 2021 revenue for the Big Eleven was \$1,561,475,190; for the long tail, \$191,075,818—a ratio of 8.2 to 1.

The remainder of this chapter has key facts for the long tail. Note that Rel% figures for country key facts are relative to the long tail as a whole, which most obviously affects cost per article and the balance among

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subject segments. That table is followed by the reduced set of tables for this book, for the entire long tail.

After that, each region has a chapter, followed by chapters for each country in that region with at least ten journals in the long tail and, as appropriate, one chapter for the other countries. Regions appear alphabetically, as do countries within regions.

Key Facts, The Long Tail

	Journals	Articles	Art%	\$/Art
All	13,714	569,490		\$336
Fee	2,963	210,767	37%	\$907
No-fee	10,751	358,723	63%	
Biomed	2,344	155,844	27%	\$620
Fee	793	76,570	49%	\$1,261
No-fee	1,551	79,274	51%	
STEM	3,334	177,874	31%	\$466
Fee	1,053	84,954	48%	\$975
No-fee	2,281	92,920	52%	
H&SS	8,036	235,772	41%	\$49
Fee	1,117	49,243	21%	\$236
No-fee	6,919	186,529	79%	

Article Volume

	2021	2020	2019	2018	2017	2016
Journals	12,822	13,196	12,991	12,572	11,975	11,118
%No-fee	78%	78%	78%	79%	79%	80%
Articles	569,490	562,495	510,405	495,413	463,980	419,519
%No-fee	63%	64%	65%	66%	66%	68%
Change	1%	10%	3%	7%	11%	

Tiny growth in 2021 after a strong 2020—and almost no change in no-fee percentages.

Article Volume

	Journals	Articles	%No-fee	\$/article
Largest: 600+	74	88,895	38%	\$1,026
Large: 150-599	570	101,048	39%	\$565
Med.: 60-149	2,499	156,236	67%	\$184
Small: 20-59	7,807	196,395	81%	\$64
Smallest: 0-19	2,764	26,916	85%	\$50

Most journals are small. Only larger journals have mostly fee articles.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$2,000+	129	34,976	\$97,784,882	\$2,796
\$1,000-\$1,999	308	42,800	\$57,606,803	\$1,346
\$500-\$999	365	27,094	\$18,733,809	\$691
\$0.20-\$499	2,161	105,897	\$16,950,324	\$160
No fee	10,751	358,723		
Total	13,714	569,490	\$191,075,818	\$336

Few very expensive journals, but they account for most of the revenue.

Subjects

While medicine is by far the largest subject, physics, other sciences (megajournals), and biology are the most expensive—the only ones over \$1,000, with chemistry and medicine the other two over \$400. Note that average cost is less than \$50 per article for nine subjects and under \$100 for another five, all of them H&SS.

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Subject	Jour.	Articles	%No-fee	\$/article
Medicine	2,101	137,776	54%	\$549
Education	996	38,609	76%	\$38
Ecology	384	31,158	67%	\$299
Language & Literature	1,100	29,423	80%	\$39
Economics	951	25,788	64%	\$80
Agriculture	520	21,982	48%	\$234
Anthropology	707	20,730	71%	\$78
Engineering	428	18,531	56%	\$257
Sociology	605	18,146	83%	\$42
Biology	243	18,068	28%	\$1,158
Chemistry	144	17,739	33%	\$691
Physics	144	16,685	39%	\$1,215
Earth Sciences	461	16,599	61%	\$372
History	531	14,116	94%	\$11
Law	521	13,912	89%	\$19
Computer Science	333	13,045	59%	\$210
Political Science	511	13,043	87%	\$32
Other Sciences	195	12,666	36%	\$1,200
Arts & Architecture	442	11,971	81%	\$72
Miscellany	242	11,451	78%	\$61
Zoology	275	11,426	38%	\$270
Mathematics	289	9,638	71%	\$210
Media & Communications	340	8,945	91%	\$26
Religion	347	8,756	68%	\$94
Technology	161	8,405	67%	\$225
Philosophy	303	8,080	92%	\$24
Psychology	267	7,523	70%	\$113
Library Science	173	5,279	95%	\$18

Africa

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	206	7,715			\$332	-1%
Fee	102	4,937	64%	73%	\$519	-43%
No-fee	104	2,778	36%	-43%		
Biomed	47	2,529	33%	20%	\$419	-32%
Fee	28	1,992	79%	60%	\$532	-58%
No-fee	19	537	21%	-58%		
STEM	62	1,874	24%	-22%	\$116	-75%
Fee	16	694	37%	-22%	\$313	-68%
No-fee	46	1,180	63%	21%		
H&SS	97	3,312	43%	4%	\$389	687%
Fee	58	2,251	68%	225%	\$572	142%
No-fee	39	1,061	32%	-60%		

Mostly fee, which is unusual for the long tail. Somewhat lean in STEM and rich in biomed. Except in H&SS, most fees are relatively low.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	195	203	196	182	179	167
%No-fee	51%	51%	51%	52%	50%	50%
Articles	7,715	8,194	7,370	7,027	6,974	5,760
%No-fee	36%	38%	39%	41%	37%	38%
Change	-6%	11%	5%	1%	21%	

A poor 2021 after a good 2020.

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Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	10	1,969	11%	\$424
Med.: 60-149	39	2,352	33%	\$398
Small: 20-59	118	3,014	52%	\$234
Smallest: 0-19	39	380	54%	\$228

No very large journals, and a narrow range of average costs.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$1,000-\$1,999	5	568	\$602,099	\$1,060
\$500-\$999	42	1,785	\$1,332,890	\$747
\$0.20-\$499	55	2,584	\$629,276	\$244
No fee	104	2,778		
Total	206	7,715	\$2,564,265	\$332

No very expensive journals.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	44	2,474	19%	\$429
Religion	12	761	0%	\$788
Education	14	574	33%	\$269
Other Sciences	7	415	81%	\$32
Economics	16	414	65%	\$259
Language & Literature	11	350	27%	\$247
Miscellany	9	245	59%	\$242
Agriculture	8	227	90%	\$31
Sociology	7	227	43%	\$315
Law	7	226	33%	\$217
Earth Sciences	5	217	80%	\$20
Ecology	13	209	69%	\$81
Engineering	7	190	65%	\$156
Anthropology	5	174	30%	\$266
Technology	3	164	11%	\$167
Zoology	5	151	4%	\$457
Political Science	6	138	30%	\$408
Computer Science	6	109	51%	\$338
Chemistry	4	71	100%	\$0
Psychology	2	62	0%	\$816
Physics	1	61	0%	\$43
Mathematics	3	60	78%	\$165
Biology	3	55	100%	\$0
History	3	47	32%	\$86
Arts & Architecture	2	38	100%	\$0
Philosophy	1	30	100%	\$0
Library Science	2	26	50%	\$68

Religion and psychology are the only fields averaging \$500 or more.

Country of Publication

Country	Journals	Articles	%no-fee	\$/article
Algeria	Note	527	100%	\$0
Angola	3	69	100%	\$0
Cameroon	1	326	0%	\$207
Côte d'Ivoire	1	101	0%	\$72
Dem. Rep. Congo the	1	32	100%	\$0
Ethiopia	8	127	100%	\$0
Gambia	1	26	0%	\$20
Ghana	6	118	55%	\$45
Kenya	3	168	8%	\$506
Libya	4	172	42%	\$201
Malawi	1	40	100%	\$0
Mali	1	25	100%	\$0
Morocco	29	658	98%	\$2
Nigeria	11	756	6%	\$282
Rwanda	1	27	100%	\$0
South Africa	111	4,373	22%	\$491
South Sudan	1	21	100%	\$0
Tunisia	4	45	100%	\$0
Uganda	1	53	0%	\$40
Zimbabwe	1	51	100%	\$0

Note that the Middle East is not included.

Algeria

No fees for any journals.

Key Facts

	Journals	Articles	Art%	Rel%
All	17	527		
Biomed	2	43	8%	-70%
STEM	9	240	46%	46%
H&SS	6	244	46%	12%

Very light in biomed, heavy in STEM

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	17	17	17	15	554	14
Articles	527	619	620	554	411	329
Change	-15%	0%	12%	35%	25%	

Big drop in 2021, now back to 2018 levels.

Article Volume

	Journals	Articles	Percent	Art/Jrn
Med.: 60-149	4	241	46%	60
Small: 20-59	10	249	47%	25
Smallest: 0-19	3	37	7%	12

No large journals.

Subjects

Subject	Journals	Articles	Art/Jrn
Economics	2	107	54
Other Sciences	2	99	50
Language & Literature	2	66	33
Engineering	2	50	25
Agriculture	2	43	22
Medicine	2	43	22
Miscellany	1	41	41
Ecology	2	30	15
Philosophy	1	30	30
Technology	1	18	18

Morocco

Key Facts, Morocco

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	29	658			\$2	-99%
Fee	1	11	2%	-95%	\$111	-88%
No-fee	28	647	98%	56%		
Biomed	3	58	9%	-68%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	3	58	100%	97%		
STEM	16	356	54%	73%	\$0	-100%
Fee	0	0	0%	-100%		
No-fee	16	356	100%	91%		
H&SS	10	244	37%	-10%	\$5	-90%
Fee	1	11	5%	-78%	\$111	-53%
No-fee	9	233	95%	21%		

Essentially all no-fee except for one very small, very low-fee economics journal. Light in biomed, heavy in STEM.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	27	29	29	26	23	18
%No-fee	96%	97%	97%	100%	100%	100%
Articles	658	693	689	604	555	367
%No-fee	98%	96%	93%	100%	100%	100%
Change	-5%	1%	14%	9%	51%	

Article Volume

	Journals	Articles	%No-fee	\$/article
Med.: 60-149	3	166	100%	\$0
Small: 20-59	19	448	98%	\$3
Smallest: 0-19	7	44	100%	\$0

No large or largest...

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$0.20-\$499	1	11	\$1,224	\$111.24
No fee	28	647	\$0	\$0.00
Total	29	658	\$1,224	\$1.86

...and no expensive or moderate prices.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Economics	7	149	93%	\$8
Agriculture	3	135	100%	\$0
Medicine	2	55	100%	\$0
Ecology	4	52	100%	\$0
Computer Science	3	50	100%	\$0
Earth Sciences	2	48	100%	\$0
Miscellany	1	48	100%	\$0
Mathematics	2	47	100%	\$0
Education	1	27	100%	\$0
Chemistry	2	24	100%	\$0
Arts & Architecture	1	20	100%	\$0
Biology	1	3	100%	\$0

A varied group, little medicine and more economics and agriculture.

Nigeria

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	11	756			\$282	-16%
Fee	9	707	94%	153%	\$301	-67%
No-fee	2	49	6%	-90%		
Biomed	5	429	57%	111%	\$439	-29%
Fee	5	429	100%	104%	\$439	-65%
No-fee	0	0	0%	-100%		
STEM	6	327	43%	39%	\$76	-84%
Fee	4	278	85%	78%	\$89	-91%
No-fee	2	49	15%	-71%		
H&SS	0	0				

Almost all fee, no H&SS, rich in biomed.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	10	11	10	9	10	9
%No-fee	20%	18%	20%	22%	20%	22%
Articles	756	787	749	736	728	619
%No-fee	6%	6%	7%	8%	6%	6%
Change	-4%	5%	2%	1%	18%	

Varying within a narrow range (757 ± 30) since 2017.

Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	2	486	0%	\$400
Med.: 60-149	2	110	0%	\$62
Small: 20-59	5	134	37%	\$70
Smallest: 0-19	2	26	0%	\$91

No largest, and only the large journals have significant fees.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$500-\$999	1	362	\$181,000	\$500
\$0.20-\$499	8	345	\$32,100	\$93
No fee	2	49		
Total	11	756	\$213,100	\$282

No expensive journals.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	5	429	0%	\$439
Technology	1	124	0%	\$110
Ecology	2	65	25%	\$64
Physics	1	61	0%	\$43
Earth Sciences	1	44	0%	\$100
Other Sciences	1	33	100%	\$0

Mostly medicine.

South Africa

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	111	4,373			\$491	46%
Fee	82	3,406	78%	110%	\$630	-30%
No-fee	29	967	22%	-65%		
Biomed	25	1,241	28%	4%	\$578	-7%
Fee	18	1,003	81%	64%	\$715	-43%
No-fee	7	238	19%	-62%		
STEM	21	694	16%	-49%	\$227	-51%
Fee	11	317	46%	-4%	\$497	-49%
No-fee	10	377	54%	4%		
H&SS	65	2,438	56%	35%	\$522	957%
Fee	53	2,086	86%	310%	\$610	158%
No-fee	12	352	14%	-82%		

Fee-heavy, especially in H&SS—and H&SS heavy, light in STEM.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	105	108	109	103	104	97
%No-fee	27%	27%	27%	27%	26%	26%
Articles	4,373	4,433	4,295	4,149	4,234	3,576
%No-fee	22%	23%	21%	21%	20%	22%
Change	-1%	3%	4%	-2%	18%	

Essentially flat since 2017 at 4,300±151 articles.

Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	6	1,056	21%	\$535
Med.: 60-149	23	1,521	17%	\$536
Small: 20-59	62	1,598	27%	\$428
Smallest: 0-19	20	198	29%	\$422

No largest, and no dominant size range.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$1,000-\$1,999	5	568	\$602,099	\$1,060
\$500-\$999	40	1,316	\$1,071,640	\$814
\$0.20-\$499	37	1,522	\$473,734	\$311
No fee	29	967		
Total	111	4,373	\$2,147,473	\$491

No very expensive; expensive journals are at the bottom of the range.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	24	1,214	17%	\$591
Religion	10	730	0%	\$817
Education	12	539	29%	\$287
Other Sciences	2	228	66%	\$58
Law	6	207	27%	\$237
Sociology	5	170	24%	\$421
Anthropology	3	156	22%	\$297
Language & Literature	7	155	0%	\$511
Economics	6	135	0%	\$786
Earth Sciences	2	125	100%	\$0
Engineering	4	122	46%	\$243
Political Science	5	121	21%	\$466
Miscellany	4	85	8%	\$670
Psychology	2	62	0%	\$816
Computer Science	3	59	10%	\$625
History	3	47	32%	\$86
Zoology	3	46	0%	\$746
Ecology	3	45	64%	\$284
Biology	1	27	100%	\$0
Agriculture	1	23	0%	\$305
Technology	1	22	0%	\$624
Arts & Architecture	1	18	100%	\$0
Library Science	1	13	0%	\$135
Mathematics	1	13	0%	\$762
Chemistry	1	11	100%	\$0

There are also three South African journals within the Big Eleven, publishing 123 articles in 2021 at an average cost of \$598.

Other African Countries

Sixteen countries, 38 journals.

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	38	1,401			\$145	-57%
Fee	10	813	58%	57%	\$249	-73%
No-fee	28	588	42%	-33%		
Biomed	12	758	54%	98%	\$205	-67%
Fee	5	560	74%	50%	\$277	-78%
No-fee	7	198	26%	-49%		
STEM	10	257	18%	-41%	\$135	-71%
Fee	1	99	39%	-19%	\$350	-64%
No-fee	9	158	61%	18%		
H&SS	16	386	28%	-33%	\$33	-34%
Fee	4	154	40%	91%	\$82	-65%
No-fee	12	232	60%	-24%		

Mostly biomed, mostly fee, but low fees.

Journals and Articles by Year

	2021	2020	2019	2018	2017	2016
Journals	36	38	31	29	28	29
%No-fee	72%	74%	77%	83%	82%	83%
Articles	1,401	1,662	1,017	984	1,046	869
%No-fee	42%	44%	63%	77%	71%	74%
Change	-16%	63%	3%	-6%	20%	

Sizable 2021 drop after huge overall growth in 2020.

Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	2	427	0%	\$175
Med.: 60-149	7	314	34%	\$366
Small: 20-59	22	585	71%	\$20
Smallest: 0-19	7	75	89%	\$11

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$500-\$999	1	107	\$80,250	\$750
\$0.20-\$499	9	706	\$122,218	\$173
No fee	28	588		
Total	38	1,401	\$202,468	\$145

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	11	733	24%	\$212
Language & Literature	2	129	22%	\$56
Zoology	2	105	6%	\$330
Miscellany	3	71	69%	\$31
Sociology	2	57	100%	\$0
Other Sciences	2	55	100%	\$0
Chemistry	1	36	100%	\$0
Religion	2	31	0%	\$100
Agriculture	2	26	100%	\$0
Biology	1	25	100%	\$0
Economics	1	23	100%	\$0
Law	1	19	100%	\$0
Anthropology	2	18	100%	\$0
Engineering	1	18	100%	\$0
Ecology	2	17	100%	\$0
Political Science	1	17	100%	\$0
Library Science	1	13	100%	\$0
Education	1	8	100%	\$0

Country Summaries

Angola

Three journals. 141 articles in 2021. No fees.

Cameroon

One medical journal with \$207 fees and 326 articles in 2021.

Côte d'Ivoire

One language & literature journal, \$72 fees, 101 articles in 2021.

Dem. Rep. Congo

One no-fee medical journal with 32 articles in 2021.

Ethiopia

Eight no-fee journals (seven active in 2021), 127 articles in 2021,

Gambia

One medical journal with \$20 fees and 26 articles in 2021.

Ghana

Six journals (all active in 2021), 118 articles, average cost \$45.

Kenya

Three journals (all active), 168 articles, average cost \$506.

Libya

Four journals (three active in 2021), 172 articles, \$201 average cost.

Malawi

One no-fee medical journal with 40 articles in 2021.

Mali

One no-fee biology journal with 25 articles in 2021.

Rwanda

One no-fee medical journal with 27 articles in 2021.

South Sudan

One no-fee medical journal with 21 articles in 2021.

Tunisia

Four no-fee journals, 45 articles in 2021.

Uganda

One medical journal with \$40 fees and 53 articles in 2021.

Zimbabwe

One no-fee sociology journal with 51 articles in 2021.

Asia

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	2,263	79,879			\$195	-42%
Fee	1,021	48,771	61%	65%	\$319	-65%
No-fee	1,242	31,108	39%	-38%		
Biomed	456	27,027	34%	24%	\$268	-57%
Fee	227	16,724	62%	26%	\$434	-66%
No-fee	229	10,303	38%	-25%		
STEM	691	25,891	32%	4%	\$256	-45%
Fee	345	17,310	67%	40%	\$383	-61%
No-fee	346	8,581	33%	-37%		
H&SS	1,116	26,961	34%	-18%	\$63	27%
Fee	449	14,737	55%	162%	\$115	-51%
No-fee	667	12,224	45%	-43%		

Mostly fees, but mostly inexpensive. Fairly rich in biomed, slightly lean in H&SS.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	2,123	2,192	2,144	2,047	1,917	1,641
%No-fee	54%	55%	55%	54%	55%	55%
Articles	79,879	75,282	65,144	61,561	58,402	51,977
%No-fee	39%	41%	42%	42%	42%	43%
Change	6%	16%	6%	5%	12%	

Growing every year, if fairly slowly in most years.

Article Volume

	Journals	Articles	%No-fee	\$/article
Largest: 600+	9	6,323	27%	\$336
Large: 150-599	89	18,115	17%	\$382
Med.: 60-149	291	19,108	38%	\$235
Small: 20-59	1,214	28,784	47%	\$65
Smallest: 0-19	660	7,549	71%	\$20

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$2,000+	4	308	\$696,680	\$2,262
\$1,000-\$1,999	30	3,106	\$4,063,072	\$1,308
\$500-\$999	63	8,565	\$5,705,375	\$666
\$0.20-\$499	924	36,792	\$5,107,401	\$139
No fee	1,242	31,108		
Total	2,263	79,879	\$15,572,528	\$195

A handful of very expensive journals, but the lower fee levels provide more articles and more revenue.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	401	25,161	39%	\$270
Education	224	8,020	34%	\$42
Economics	223	5,706	47%	\$125
Agriculture	114	4,132	21%	\$274
Engineering	99	4,123	42%	\$147
Language & Literature	143	3,020	48%	\$38
Ecology	51	2,729	29%	\$263
Zoology	60	2,672	11%	\$408
Computer Science	92	2,625	38%	\$144
Religion	143	2,398	56%	\$39
Earth Sciences	49	2,128	22%	\$496
Biology	55	1,866	27%	\$242
Physics	41	1,696	31%	\$374
Technology	39	1,541	39%	\$355
Other Sciences	47	1,536	60%	\$101
Law	81	1,508	60%	\$57
Mathematics	67	1,372	54%	\$34
Chemistry	32	1,337	50%	\$195
Sociology	56	1,229	50%	\$36
Anthropology	52	1,182	55%	\$51
Miscellany	25	942	27%	\$44
Political Science	48	747	58%	\$45
Psychology	36	603	47%	\$54
Media & Communications	25	441	38%	\$72
Arts & Architecture	21	438	68%	\$22
Library Science	18	418	59%	\$210
History	13	197	50%	\$38
Philosophy	8	112	88%	\$18

Medicine has the most articles, but zoology and earth sciences have the highest average fees.

Country of Publication

Country	Journals	Articles	%no-fee	\$/article
Bangladesh	22	933	60%	\$63
China	68	8,535	26%	\$457
Hong Kong	16	717	43%	\$1,025
India	92	7,491	31%	\$314
Indonesia	1,560	37,280	38%	\$54
Japan	52	2,785	23%	\$703
Kyrgyzstan	3	82	100%	\$0
Malaysia	88	3,300	49%	\$137
Mongolia	5	86	50%	\$38
Nepal	25	1,412	67%	\$48
Pakistan	78	3,886	32%	\$152
Philippines	14	327	94%	\$6
Singapore	20	369	65%	\$239
South Korea	135	8,427	39%	\$333
Sri Lanka	18	697	94%	\$10
Taiwan	28	1,103	31%	\$473
Thailand	28	1,084	82%	\$28
Uzbekistan	1	1,101	100%	\$0
Viet Nam	10	264	81%	\$8

Bangladesh

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	22	933			\$63	-81%
Fee	8	372	40%	8%	\$157	-83%
No-fee	14	561	60%	-5%		
Biomed	9	396	42%	55%	\$17	-97%
Fee	1	41	10%	-79%	\$169	-87%
No-fee	8	355	90%	76%		
STEM	12	530	57%	82%	\$97	-79%
Fee	7	331	62%	31%	\$155	-84%
No-fee	5	199	38%	-28%		
H&SS	1	7	1%	-98%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	1	7	100%	26%		

Very low fees in general, almost no H&SS, strong in STEM.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	20	21	21	21	20	19
%No-fee	60%	62%	62%	62%	65%	63%
Articles	933	926	843	803	714	941
%No-fee	60%	51%	54%	60%	68%	75%
Change	1%	10%	5%	12%	-24%	

Essentially flat after a good 2020.

Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	2	173	100%	\$0
Med.: 60-149	6	440	54%	\$99
Small: 20-59	11	280	40%	\$53
Smallest: 0-19	3	40	100%	\$0

No largest; all fees and most journals and articles are small or medium

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$0.20-\$499	8	372	\$58,339	\$156.83
No fee	14	561		
Total	22	933	\$58,339	\$62.53

All fees are modest.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	8	355	100%	\$0
Agriculture	6	247	0%	\$65
Other Sciences	2	124	100%	\$0
Zoology	2	108	22%	\$327
Biology	1	41	0%	\$169
Engineering	1	34	100%	\$0
Earth Sciences	1	17	100%	\$0
Philosophy	1	7	100%	\$0

Agriculture and biology are all-fee, where most others are no-fee.

China

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	68	8,535			\$457	36%
Fee	42	6,322	74%	100%	\$617	-32%
No-fee	26	2,213	26%	-59%		
Biomed	21	3,344	39%	43%	\$421	-32%
Fee	11	2,346	70%	43%	\$601	-52%
No-fee	10	998	30%	-41%		
STEM	43	4,969	58%	86%	\$485	4%
Fee	30	3,866	78%	63%	\$623	-36%
No-fee	13	1,103	22%	-58%		
H&SS	4	222	3%	-94%	\$384	677%
Fee	1	110	50%	137%	\$775	228%
No-fee	3	112	50%	-36%		

More fee articles than most, leading to higher average costs (but fee article costs are below average except in H&SS). Very weak in H&SS.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	66	63	55	45	40	40
%No-fee	38%	38%	40%	40%	38%	38%
Articles	8,535	7,792	6,519	5,967	6,389	6,106
%No-fee	26%	23%	24%	23%	26%	27%
Change	10%	20%	9%	-7%	5%	

Decent growth after a strong 2020.

Article Volume

	Journals	Articles	%No-fee	\$/article
Largest: 600+	2	420	74%	\$203
Large: 150-599	24	5,455	14%	\$504
Med.: 60-149	28	2,245	37%	\$427
Small: 20-59	14	415	75%	\$260

No smallest journals. Most articles and highest fees in large journals.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$2,000+	1	35	\$87,500	\$2,500
\$1,000-\$1,999	7	999	\$1,360,999	\$1,362
\$500-\$999	16	2,264	\$1,458,902	\$644
\$0.20-\$499	18	3,024	\$995,484	\$329
No fee	26	2,213		
Total	68	8,535	\$3,902,885	\$457

One small very expensive journal.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	20	3,316	29%	\$425
Earth Sciences	9	1,204	11%	\$463
Engineering	6	805	22%	\$392
Agriculture	8	783	15%	\$880
Physics	6	610	20%	\$455
Chemistry	3	493	78%	\$104
Computer Science	3	367	7%	\$680
Technology	3	262	28%	\$177
Zoology	2	231	0%	\$823
Other Sciences	2	144	0%	\$225
Library Science	2	143	23%	\$596
Economics	1	71	100%	\$0
Ecology	1	70	100%	\$0
Biology	1	28	100%	\$0
Language & Literature	1	8	100%	\$0

Agriculture and zoology are the only subjects averaging more than \$700.

Another 99 journals (5,648 articles in 2021; \$674 average cost) are in the Big Eleven.

Hong Kong

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	16	717			\$1,025	206%
Fee	4	411	57%	55%	\$1,788	97%
No-fee	12	306	43%	-32%		
Biomed	8	573	80%	192%	\$1,268	105%
Fee	3	386	67%	37%	\$1,882	49%
No-fee	5	187	33%	-36%		
STEM	6	110	15%	-51%	\$80	-83%
Fee	1	25	23%	-52%	\$350	-64%
No-fee	5	85	77%	48%		
H&SS	2	34	5%	-89%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	2	34	100%	26%		

Another country with almost no H&SS. Relatively high in fees in general, strong in biomed, and by far the highest average costs in Asia.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	16	16	13	13	10	8
%No-fee	75%	75%	77%	77%	80%	75%
Articles	717	502	397	379	321	356
%No-fee	43%	66%	70%	74%	84%	91%
Change	43%	26%	5%	18%	-10%	

Two strong years in a row—and big drop in no-fee article percentage.

Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	2	295	39%	\$1,342
Med.: 60-149	2	206	0%	\$1,603
Small: 20-59	6	162	85%	\$54
Smallest: 0-19	6	54	100%	\$0

No largest; expensive large and medium.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$2,000+	1	180	\$396,000	\$2,200
\$1,000-\$1,999	2	206	\$330,300	\$1,603
\$0.20-\$499	1	25	\$8,750	\$350
No fee	12	306		
Total	16	717	\$735,050	\$1,025

Most journals no-fee, but most articles are expensive.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	6	548	30%	\$1,325
Ecology	2	52	100%	\$0
Biology	2	25	100%	\$0
Computer Science	1	25	0%	\$350
Education	1	22	100%	\$0
Zoology	1	14	100%	\$0
Language & Literature	1	12	100%	\$0
Engineering	1	10	100%	\$0
Physics	1	9	100%	\$0

Only medicine is expensive.

Another five journals (858 articles in 2021; \$900 average cost) in the Big Eleven.

India

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	92	7,491			\$314	-6%
Fee	36	5,183	69%	87%	\$454	-50%
No-fee	56	2,308	31%	-51%		
Biomed	48	5,124	68%	150%	\$327	-47%
Fee	22	3,764	73%	50%	\$446	-65%
No-fee	26	1,360	27%	-48%		
STEM	26	1,848	25%	-21%	\$334	-28%
Fee	10	1,211	66%	37%	\$509	-48%
No-fee	16	637	34%	-34%		
H&SS	18	519	7%	-83%	\$112	128%
Fee	4	208	40%	92%	\$281	19%
No-fee	14	311	60%	-24%		

Heavily fee-oriented, very strong biomed, very weak H&SS.

Articles and Journals by Size

	2021	2020	2019	2018	2017	2016
Journals	88	88	88	86	80	75
%No-fee	61%	60%	60%	58%	56%	56%
Articles	7,491	6,466	5,313	5,681	6,071	5,615
%No-fee	31%	35%	35%	28%	26%	25%
Change	16%	22%	-6%	-6%	8%	

Two strong years.

Article Volume

	Journals	Articles	%No-fee	\$/article
Largest: 600+	2	2,158	0%	\$593
Large: 150-599	9	2,171	9%	\$407
Med.: 60-149	26	1,839	64%	\$62
Small: 20-59	51	1,297	70%	\$59
Smallest: 0-19	4	26	85%	\$23

Highest fees in the large and largest journals.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$2,000+	1	12	\$36,000	\$3,000
\$1,000-\$1,999	2	775	\$844,332	\$1,089
\$500-\$999	5	1,247	\$774,875	\$621
\$0.20-\$499	28	3,149	\$696,924	\$221
No fee	56	2,308		
Total	92	7,491	\$2,352,131	\$314

One very expensive journal, but it's also currently very small. (If you're seeing a discrepancy with the previous table: the journal was larger in previous years.)

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	44	4,647	27%	\$321
Ecology	5	589	7%	\$584
Biology	4	477	22%	\$390
Zoology	2	438	5%	\$573
Agriculture	5	242	32%	\$30
Miscellany	3	196	0%	\$114
Language & Literature	7	173	100%	\$0
Engineering	2	162	100%	\$0
Chemistry	3	161	52%	\$88
Mathematics	2	104	98%	\$1
Computer Science	3	84	100%	\$0
Technology	3	58	100%	\$0
Library Science	1	45	100%	\$0
Education	2	40	100%	\$0
Law	2	28	57%	\$1,286
Economics	1	19	100%	\$0
Sociology	2	18	100%	\$0
Other Sciences	1	10	100%	\$0

Mostly medicine, but the highest costs are elsewhere.

The Big Eleven includes another 227 journals with 15,304 articles in 2021 and an average cost of \$200. India is one of a few countries where *most* OA publishing is by the Big Eleven.

Indonesia

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	1,560	37,280			\$54	-84%
Fee	766	23,221	62%	68%	\$86	-91%
No-fee	794	14,059	38%	-40%		
Biomed	176	5,371	14%	-47%	\$74	-88%
Fee	113	3,700	69%	40%	\$107	-92%
No-fee	63	1,671	31%	-39%		
STEM	451	11,241	30%	-3%	\$77	-83%
Fee	243	7,268	65%	35%	\$119	-88%
No-fee	208	3,973	35%	-32%		
H&SS	933	20,668	55%	34%	\$35	-28%
Fee	410	12,253	59%	184%	\$60	-75%
No-fee	523	8,415	41%	-49%		

Most Asian OA journals and the largest Asian article count. Very low fees, but lots of them. Mostly H&SS, light on biomed.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	1,464	1,521	1,490	1,414	1,320	1,107
%No-fee	50%	51%	51%	50%	51%	51%
Articles	37,280	34,974	32,770	29,408	27,224	22,793
%No-fee	38%	41%	44%	44%	46%	47%
Change	7%	7%	11%	8%	19%	

Growing every year.

Article Volume

	Journals	Articles	%No-fee	\$/article
Largest: 600+	2	1,050	28%	\$230
Large: 150-599	17	3,425	7%	\$81
Med.: 60-149	105	5,983	21%	\$80
Small: 20-59	891	20,432	39%	\$43
Smallest: 0-19	545	6,390	67%	\$17

Only the smallest journals are mostly no-fee—but only the largest journals hit even three-digit fees.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$500-\$999	2	219	\$133,658	\$610
\$0.20-\$499	764	23,002	\$1,861,100	\$81
No fee	794	14,059		
Total	1,560	37,280	\$1,994,758	\$54

No expensive journals and only two medium-priced—thus, the average \$54 cost even though most articles have fees.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Education	198	6,208	20%	\$39
Medicine	146	4,686	31%	\$74
Economics	186	3,833	50%	\$38
Language & Literature	120	2,544	43%	\$31
Religion	129	2,024	62%	\$22
Agriculture	80	1,873	29%	\$55
Computer Science	70	1,859	35%	\$48
Engineering	64	1,682	48%	\$39
Law	74	1,410	58%	\$35
Ecology	23	1,283	21%	\$210
Mathematics	56	1,090	44%	\$36
Zoology	40	1,064	14%	\$81
Sociology	42	971	43%	\$27
Anthropology	40	856	46%	\$38
Biology	30	685	29%	\$71
Political Science	38	600	56%	\$38
Miscellany	13	565	13%	\$34
Technology	23	543	46%	\$199
Psychology	32	541	50%	\$36
Chemistry	22	502	33%	\$98
Physics	27	498	50%	\$22
Other Sciences	23	425	48%	\$55
Earth Sciences	23	422	52%	\$58
Media & Communications	23	411	41%	\$72
Arts & Architecture	18	380	64%	\$25
Library Science	7	135	57%	\$14
History	9	126	33%	\$50
Philosophy	4	64	100%	\$0

Unusual: Education is the biggest subject. Only technology and psychology have three-digit average costs.

Japan

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	52	2,785			\$703	109%
Fee	28	2,137	77%	107%	\$916	1%
No-fee	24	648	23%	-63%		
Biomed	19	1,033	37%	36%	\$658	6%
Fee	14	668	65%	32%	\$1,018	-19%
No-fee	5	365	35%	-31%		
STEM	18	1,513	54%	74%	\$817	75%
Fee	12	1,413	93%	96%	\$875	-10%
No-fee	6	100	7%	-87%		
H&SS	15	239	9%	-79%	\$169	243%
Fee	2	56	23%	12%	\$723	206%
No-fee	13	183	77%	-3%		

High costs because low no-fee levels. (Fee averages are typical.) Low H&SS, high STEM.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	47	48	49	50	49	40
%No-fee	40%	42%	45%	48%	49%	55%
Articles	2,785	2,706	2,438	2,659	2,061	1,830
%No-fee	23%	22%	25%	23%	30%	30%
Change	3%	11%	-8%	29%	13%	

Modest growth in 2021 after a fairly strong 2020.

Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	7	1,278	13%	\$680
Med.: 60-149	12	850	31%	\$810
Small: 20-59	20	574	29%	\$667
Smallest: 0-19	13	83	70%	\$199

No largest journals.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$2,000+	1	81	\$177,180	\$2,187
\$1,000-\$1,999	9	514	\$700,940	\$1,364
\$500-\$999	10	1,102	\$942,774	\$856
\$0.20-\$499	8	440	\$136,499	\$310
No fee	24	648		
Total	52	2,785	\$1,957,393	\$703

One very expensive journal, but almost half of the revenue is from medium-priced journals

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	16	938	39%	\$634
Technology	3	463	0%	\$846
Physics	3	446	14%	\$728
Agriculture	2	241	0%	\$385
Earth Sciences	4	157	3%	\$1,547
Chemistry	1	104	0%	\$1,367
Anthropology	3	95	62%	\$138
Biology	3	95	0%	\$897
Education	2	68	100%	\$0
Zoology	1	53	0%	\$729
Ecology	3	49	67%	\$85
Economics	1	20	0%	\$1,367
Arts & Architecture	1	16	100%	\$0
Library Science	1	14	100%	\$0
Religion	1	13	100%	\$0
Language & Literature	2	7	100%	\$0
Psychology	1	6	100%	\$0
Engineering	1	0		
Media & Communications	1	0		
Philosophy	1	0		
Political Science	1	0		

Earth sciences, chemistry, and economics are the costliest.

The Big Eleven add three more journals (247 articles in 2021 with \$2,030 average cost).

Malaysia

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	88	3,300			\$137	-59%
Fee	15	1,685	51%	38%	\$268	-70%
No-fee	73	1,615	49%	-22%		
Biomed	12	509	15%	-44%	\$81	-87%
Fee	3	243	48%	-3%	\$170	-86%
No-fee	9	266	52%	3%		
STEM	38	1,839	56%	78%	\$177	-62%
Fee	6	1,113	61%	27%	\$292	-70%
No-fee	32	726	39%	-24%		
H&SS	38	952	29%	-30%	\$90	81%
Fee	6	329	35%	65%	\$259	10%
No-fee	32	623	65%	-17%		

Somewhat fee-heavy but with very low fees; mostly STEM.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	83	84	83	84	80	58
%No-fee	82%	82%	83%	83%	83%	78%
Articles	3,300	3,247	2,468	2,496	1,988	1,481
%No-fee	49%	51%	63%	64%	62%	52%
Change	2%	32%	-1%	26%	34%	

Almost flat 2021 after a very strong 2020.

Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	3	1,020	0%	\$302
Med.: 60-149	15	1,022	51%	\$107
Small: 20-59	43	951	82%	\$35
Smallest: 0-19	27	307	100%	\$0

No largest; the money (such as it is) is in large journals.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$0.20-\$499	15	1,685	\$451,334	\$268
No fee	73	1,615		
Total	88	3,300	\$451,334	\$137

The only fees are modest ones.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Engineering	12	921	18%	\$233
Medicine	9	419	57%	\$83
Agriculture	2	382	5%	\$289
Education	5	200	23%	\$185
Language & Literature	5	182	34%	\$199
Computer Science	5	145	100%	\$0
Anthropology	4	141	100%	\$0
Technology	2	124	100%	\$0
Economics	7	106	100%	\$0
Biology	3	90	32%	\$75
Religion	3	88	39%	\$136
Ecology	5	78	100%	\$0
Miscellany	4	74	100%	\$0
Earth Sciences	4	54	100%	\$0
Zoology	3	50	100%	\$0
Arts & Architecture	2	42	100%	\$0
History	2	40	100%	\$0
Physics	1	36	100%	\$0
Other Sciences	2	29	100%	\$0
Law	1	27	100%	\$0
Political Science	2	25	100%	\$0
Mathematics	2	20	100%	\$0
Sociology	2	16	100%	\$0
Library Science	1	11	100%	\$0

Engineering is the biggest subject, and only it and agriculture break the \$200 mark—and, unusually, both medicine and biology have low average costs.

Nepal

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	25	1,412			\$48	-86%
Fee	5	469	33%	-10%	\$145	-84%
No-fee	20	943	67%	6%		
Biomed	18	1,294	92%	235%	\$52	-92%
Fee	5	469	36%	-26%	\$145	-89%
No-fee	13	825	64%	25%		
STEM	5	88	6%	-80%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	5	88	100%	91%		
H&SS	2	30	2%	-95%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	2	30	100%	26%		

Predominantly biomed with low fees; no fees at all for STEM, H&SS.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	24	24	24	24	23	23
%No-fee	79%	79%	79%	79%	83%	83%
Articles	1,412	1,178	856	847	708	756
%No-fee	67%	78%	78%	75%	71%	76%
Change	20%	38%	1%	20%	-6%	

Two strong years in a row.

Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	3	752	57%	\$65
Med.: 60-149	4	208	100%	\$0
Small: 20-59	13	389	63%	\$49
Smallest: 0-19	5	63	100%	\$0

Another country with no very large journals...

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$0.20-\$499	5	469	\$67,798	\$145
No fee	20	943		
Total	25	1412	\$67,798	\$48

...and no substantial fees.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	17	1,276	63%	\$53
Other Sciences	1	44	100%	\$0
Agriculture	3	29	100%	\$0
Biology	1	18	100%	\$0
Education	1	17	100%	\$0
Ecology	1	15	100%	\$0
Sociology	1	13	100%	\$0

90% medicine.

Pakistan

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	78	3,886			\$152	-55%
Fee	29	2,628	68%	83%	\$225	-75%
No-fee	49	1,258	32%	-49%		
Biomed	25	2,437	63%	129%	\$188	-70%
Fee	14	1,975	81%	65%	\$232	-82%
No-fee	11	462	19%	-63%		
STEM	20	699	18%	-42%	\$106	-77%
Fee	5	333	48%	0%	\$223	-77%
No-fee	15	366	52%	0%		
H&SS	33	750	19%	-53%	\$76	54%
Fee	10	320	43%	104%	\$179	-24%
No-fee	23	430	57%	-28%		

Two-thirds fees, but with low fees. Strong biomed, weak H&SS.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	71	76	75	71	65	56
%No-fee	59%	62%	61%	59%	57%	57%
Articles	3,886	4,253	3,200	2,923	2,632	2,316
%No-fee	32%	38%	35%	33%	32%	29%
Change	-9%	33%	9%	11%	14%	

Down year after a strong 2020.

Article Volume

	Journals	Articles	%No-fee	\$/article
Largest: 600+	1	624	0%	\$52
Large: 150-599	4	786	10%	\$457
Med.: 60-149	23	1,552	35%	\$96
Small: 20-59	41	823	65%	\$61
Smallest: 0-19	9	101	100%	\$0

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$500-\$999	2	446	\$301,000	\$675
\$0.20-\$499	27	2,182	\$289,077	\$132
No fee	49	1,258		
Total	78	3,886	\$590,077	\$152

No expensive journals, but a couple of medium-priced.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	22	2,214	20%	\$182
Economics	11	327	100%	\$0
Religion	9	257	10%	\$145
Biology	3	223	13%	\$253
Engineering	3	184	56%	\$27
Mathematics	4	116	100%	\$0
Zoology	1	107	0%	\$300
Sociology	3	93	32%	\$187
Ecology	3	82	100%	\$0
Earth Sciences	3	68	22%	\$81
Agriculture	1	56	0%	\$500
Education	4	54	63%	\$37
Chemistry	1	36	0%	\$100
Computer Science	2	31	100%	\$0
Technology	1	13	100%	\$0
Language & Literature	1	7	100%	\$0
Psychology	2	7	100%	\$0
Other Sciences	1	6	100%	\$0
Library Science	1	5	0%	\$100
Miscellany	1	0		
Political Science	1	0		

Agriculture the most expensive, zoology second.

Philipp+ines

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	14	327			\$6	-98%
Fee	1	20	6%	-83%	\$100	-89%
No-fee	13	307	94%	49%		
Biomed	5	154	47%	72%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	5	154	100%	97%		
STEM	2	24	7%	-77%	\$83	-82%
Fee	1	20	83%	74%	\$100	-90%
No-fee	1	4	17%	-68%		
H&SS	7	149	46%	10%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	7	149	100%	26%		

Only one fee journal, STEM, with low fees. Very light in STEM.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	14	14	14	12	11	10
%No-fee	93%	93%	93%	92%	91%	100%
Articles	327	285	233	219	184	186
%No-fee	94%	97%	97%	97%	91%	100%
Change	15%	22%	6%	19%	-1%	

Healthy growth.

Article Volume

	Journals	Articles	%No-fee	\$/article
Med.: 60-149	1	44	100%	\$0
Small: 20-59	7	226	91%	\$9
Smallest: 0-19	6	57	100%	\$0

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$0.20-\$499	1	20	\$2,000	\$100
No fee	13	307		
Total	14	327	\$2,000	\$6

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	5	154	100%	\$0
Sociology	2	60	100%	\$0
Miscellany	2	40	100%	\$0
Philosophy	1	28	100%	\$0
Language & Literature	2	21	100%	\$0
Computer Science	1	20	0%	\$100
Other Sciences	1	4	100%	\$0

Singapore

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	20	369			\$239	-29%
Fee	8	128	35%	-6%	\$689	-24%
No-fee	12	241	65%	4%		
Biomed	7	133	36%	32%	\$614	-1%
Fee	5	110	83%	68%	\$742	-41%
No-fee	2	23	17%	-66%		
STEM	6	100	27%	-13%	\$58	-88%
Fee	2	6	6%	-87%	\$967	-1%
No-fee	4	94	94%	80%		
H&SS	7	136	37%	-11%	\$5	-89%
Fee	1	12	9%	-58%	\$59	-75%
No-fee	6	124	91%	15%		

Almost all no-fee except biomed, which is predominantly fee.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	18	20	18	14	12	10
%No-fee	56%	60%	61%	57%	58%	70%
Articles	369	404	393	312	284	242
%No-fee	65%	66%	63%	66%	53%	63%
Change	-9%	3%	26%	10%	17%	

Article Volume

	Journals	Articles	%No-fee	\$/article
Med.: 60-149	2	130	52%	\$363
Small: 20-59	10	167	81%	\$129
Smallest: 0-19	8	72	53%	\$268

No larger journals.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$1,000-\$1,999	3	23	\$29,100	\$1,265
\$500-\$999	3	78	\$55,350	\$710
\$0.20-\$499	2	27	\$3,710	\$137
No fee	12	241		
Total	20	369	\$88,160	\$239

No very expensive journals.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	6	126	18%	\$565
Education	1	67	100%	\$0
Physics	2	53	92%	\$79
Computer Science	1	27	100%	\$0
Mathematics	2	18	100%	\$0
Sociology	1	18	100%	\$0
Anthropology	1	14	100%	\$0
Economics	1	12	0%	\$59
Political Science	1	10	100%	\$0
Language & Literature	1	9	100%	\$0
Biology	1	7	0%	\$1,500
Library Science	1	6	100%	\$0
Technology	1	2	0%	\$800

Two very small journals—one biology, one technology—stand out for unusually high fees.

South Korea

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	135	8,427			\$333	-1%
Fee	62	5,100	61%	64%	\$551	-39%
No-fee	73	3,327	39%	-37%		
Biomed	86	5,644	67%	145%	\$276	-55%
Fee	32	2,818	50%	2%	\$554	-56%
No-fee	54	2,826	50%	-2%		
STEM	23	1,165	14%	-56%	\$536	15%
Fee	18	952	82%	71%	\$656	-33%
No-fee	5	213	18%	-65%		
H&SS	26	1,618	19%	-54%	\$385	680%
Fee	12	1,330	82%	294%	\$469	98%
No-fee	14	288	18%	-78%		

Fee-heavy, especially in STEM and H&SS. Rich in biomed, lean elsewhere. Unusually high H&SS fees.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	129	129	128	126	122	116
%No-fee	53%	53%	53%	52%	52%	52%
Articles	8,427	8,433	6,875	6,813	6,574	6,700
%No-fee	39%	38%	41%	40%	39%	39%
Change	0%	23%	1%	4%	-2%	

Flat in 2021 (down 0.07%) after a strong 2020.

Article Volume

	Journals	Articles	%No-fee	\$/article
Largest: 600+	1	970	0%	\$500
Large: 150-599	12	1,724	19%	\$500
Med.: 60-149	48	3,607	44%	\$336
Small: 20-59	66	2,045	64%	\$120
Smallest: 0-19	8	81	95%	\$59

The larger journals are also the most expensive.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$1,000-\$1,999	5	381	\$458,700	\$1,204
\$500-\$999	24	3,029	\$1,947,200	\$643
\$0.20-\$499	33	1,690	\$402,120	\$238
No fee	73	3,327		
Total	135	8,427	\$2,808,020	\$333

No very expensive journals.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	83	5,492	51%	\$275
Economics	8	1,174	8%	\$463
Zoology	7	562	0%	\$812
Agriculture	3	155	0%	\$524
Biology	3	152	34%	\$335
Engineering	2	139	100%	\$0
Ecology	3	108	38%	\$157
Education	3	89	13%	\$443
Earth Sciences	3	86	0%	\$271
Political Science	3	81	42%	\$128
Anthropology	3	55	40%	\$267
Language & Literature	2	49	100%	\$0
Psychology	1	49	0%	\$262
Library Science	2	44	100%	\$0
Physics	1	44	0%	\$400
Computer Science	3	38	0%	\$751
Chemistry	1	33	100%	\$0
History	2	31	58%	\$37
Media & Communications	1	30	0%	\$70
Religion	1	16	100%	\$0

Zoology, computer science, and agriculture are the only fields with \$500 or more average cost.

Sri Lanka

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	18	697			\$10	-97%
Fee	1	45	6%	-83%	\$150	-83%
No-fee	17	652	94%	49%		
Biomed	8	460	66%	141%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	8	460	100%	97%		
STEM	6	181	26%	-17%	\$37	-92%
Fee	1	45	25%	-48%	\$150	-85%
No-fee	5	136	75%	44%		
H&SS	4	56	8%	-81%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	4	56	100%	26%		

The only fees are for one small agriculture journal. Mostly medicine.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	17	17	17	17	17	17
%No-fee	94%	94%	94%	94%	94%	94%
Articles	697	512	438	461	509	375
%No-fee	94%	92%	95%	95%	95%	94%
Change	36%	17%	-5%	-9%	36%	

Strong year, although 36% in this case only means 185 articles.

Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	1	153	100%	\$0
Med.: 60-149	4	278	100%	\$0
Small: 20-59	6	174	74%	\$39
Smallest: 0-19	7	92	100%	\$0

No largest, only one (barely) large.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$0.20-\$499	1	45	\$6,750	\$150
No fee	17	652		
Total	18	697	\$6,750	\$10

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	8	460	100%	\$0
Agriculture	2	85	47%	\$79
Other Sciences	2	80	100%	\$0
Economics	2	38	100%	\$0
Law	1	18	100%	\$0
Computer Science	1	9	100%	\$0
Ecology	1	7	100%	\$0
Sociology	1	0		

Taiwan

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	28	1,103			\$473	41%
Fee	8	763	69%	87%	\$684	-25%
No-fee	20	340	31%	-51%		
Biomed	4	169	15%	-44%	\$819	32%
Fee	2	113	67%	36%	\$1,225	-3%
No-fee	2	56	33%	-35%		
STEM	12	793	72%	130%	\$480	3%
Fee	5	623	79%	64%	\$611	-37%
No-fee	7	170	21%	-59%		
H&SS	12	141	13%	-69%	\$21	-58%
Fee	1	27	19%	-8%	\$107	-55%
No-fee	11	114	81%	2%		

Mostly fee, mostly STEM.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	24	27	26	27	26	24
%No-fee	67%	70%	73%	74%	73%	71%
Articles	1,103	1,075	1,029	1,117	1,214	1,015
%No-fee	31%	35%	39%	40%	37%	40%
Change	3%	4%	-8%	-8%	20%	

Varying within a narrow range, 1,114 \pm 100.

Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	2	427	0%	\$388
Med.: 60-149	5	376	28%	\$919
Small: 20-59	11	204	75%	\$50
Smallest: 0-19	10	96	86%	\$5

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$1,000-\$1,999	2	208	\$338,702	\$1,628
\$500-\$999	1	180	\$91,616	\$509
\$0.20-\$499	5	375	\$91,537	\$244
No fee	20	340		
Total	28	1,103	\$521,855	\$473

No very large or very expensive journals.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Ecology	2	317	22%	\$234
Other Sciences	1	180	0%	\$509
Medicine	4	169	33%	\$819
Earth Sciences	1	108	0%	\$1,858
Engineering	3	88	27%	\$78
Technology	3	76	100%	\$0
Education	5	75	64%	\$39
Political Science	1	31	100%	\$0
Mathematics	1	24	0%	\$300
Library Science	2	15	100%	\$0
Economics	1	8	100%	\$0
Language & Literature	1	8	100%	\$0
Law	2	4	100%	\$0
Computer Science	1	0		

Note the single four-digit average, for earth sciences. The Big Eleven add six journals; 671 articles in 2021; \$394 average cost.

Thailand

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	28	1,084			\$28	-92%
Fee	6	195	18%	-51%	\$157	-83%
No-fee	22	889	82%	30%		
Biomed	5	272	25%	-8%	\$18	-97%
Fee	1	48	18%	-64%	\$100	-92%
No-fee	4	224	82%	62%		
STEM	18	678	63%	100%	\$21	-96%
Fee	3	55	8%	-83%	\$253	-74%
No-fee	15	623	92%	76%		
H&SS	5	134	12%	-70%	\$89	80%
Fee	2	92	69%	229%	\$130	-45%
No-fee	3	42	31%	-60%		

Mostly STEM, predominantly no-fee.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	23	25	26	26	26	25
%No-fee	78%	76%	77%	77%	77%	76%
Articles	1,084	1,257	981	1,045	1,070	970
%No-fee	82%	80%	70%	70%	74%	74%
Change	-14%	28%	-6%	-2%	10%	

Down 2021 after strong 2020; tending toward no-fee.

Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	3	456	100%	\$0
Med.: 60-149	7	219	51%	\$85
Small: 20-59	14	374	80%	\$27
Smallest: 0-19	4	35	63%	\$58

No largest, and no fees in large journals.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$0.20-\$499	6	195	\$30,618	\$157
No fee	22	889		
Total	28	1,084	\$30,618	\$28

What fees there are, are modest.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Other Sciences	10	441	94%	\$12
Medicine	5	272	82%	\$18
Ecology	2	79	63%	\$110
Education	1	79	0%	\$125
Engineering	3	74	100%	\$0
Zoology	1	45	100%	\$0
Agriculture	2	39	100%	\$0
Anthropology	1	21	100%	\$0
Law	1	21	100%	\$0
Philosophy	1	13	0%	\$156
Political Science	1	0		

Viet Nam

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	10	264			\$8	-98%
Fee	1	49	19%	-50%	\$44	-95%
No-fee	9	215	81%	29%		
Biomed	2	16	6%	-78%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	2	16	100%	97%		
STEM	2	69	26%	-16%	\$31	-93%
Fee	1	49	71%	49%	\$44	-96%
No-fee	1	20	29%	-45%		
H&SS	6	179	68%	64%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	6	179	100%	26%		

No fees except for one small STEM journal. Mostly H&SS.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	10	10	9	9	9	7
%No-fee	90%	90%	89%	89%	89%	100%
Articles	264	221	200	234	225	139
%No-fee	81%	78%	70%	74%	75%	100%
Change	19%	11%	-15%	4%	62%	

Growing last two years—but a very narrow range since 2017: 232 articles ± 32

Article Volume

	Journals	Articles	%No-fee	\$/article
Med.: 60-149	1	49	0%	\$44
Small: 20-59	8	204	100%	\$0
Smallest: 0-19	1	11	100%	\$0

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$0.20-\$499	1	49	\$2,136	\$44
No fee	9	215		
Total	10	264	\$2,136	\$8

The only fees: one inexpensive once-medium-sized journal.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Economics	3	86	100%	\$0
Miscellany	1	53	100%	\$0
Other Sciences	1	49	0%	\$44
Sociology	2	40	100%	\$0
Computer Science	1	20	100%	\$0
Biology	2	16	100%	\$0

Other Asian Countries

Three countries, nine journals.

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	9	1,269			\$3	-99%
Fee	1	43	3%	-91%	\$75	-92%
No-fee	8	1,226	97%	53%		
Biomed	3	98	8%	-72%	\$33	-95%
Fee	1	43	44%	-11%	\$75	-94%
No-fee	2	55	56%	10%		
STEM	3	44	3%	-89%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	3	44	100%	91%		
H&SS	3	1,127	89%	115%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	3	1,127	100%	26%		

Only fees: one small biomed journal with low fees. Almost all H&SS.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	9	9	8	8	7	6
%No-fee	89%	89%	88%	88%	86%	83%
Articles	1,269	1,051	191	197	234	156
%No-fee	97%	96%	83%	79%	82%	80%
Change	21%	450%	-3%	-16%	50%	

The one largest journal appeared in 2020.

Article Volume

	Journals	Articles	%No-fee	\$/article
Largest: 600+	1	1,101	100%	\$0
Med.: 60-149	2	60	100%	\$0
Small: 20-59	2	67	36%	\$48
Smallest: 0-19	4	41	100%	\$0

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$0.20-\$499	1	43	\$3,225	\$75
No fee	8	1,226		
Total	9	1,269	\$3,225	\$3

Subject

Subject	Journals	Articles	%No-fee	\$/article
Education	1	1,101	100%	\$0
Medicine	2	89	52%	\$36
Engineering	1	24	100%	\$0
Miscellany	1	14	100%	\$0
Earth Sciences	1	12	100%	\$0
Economics	1	12	100%	\$0
Biology	1	9	100%	\$0
Chemistry	1	8	100%	\$0

Country Summaries

Kyrgyzstan

Three journals, no fees, 82 articles in 2021.

Mongolia

Five journals (one with modest fees), 74 articles in 2021.

Uzbekistan

One no-fee largest journal, 1,101 articles in 2021.

Eastern Europe

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	2,950	106,495			\$116	-66%
Fee	638	35,367	33%	-10%	\$348	-62%
No-fee	2,312	71,128	67%	6%		
Biomed	419	21,891	21%	-25%	\$173	-72%
Fee	126	8,212	38%	-24%	\$461	-63%
No-fee	293	13,679	62%	23%		
STEM	921	34,505	32%	4%	\$184	-61%
Fee	245	13,318	39%	-19%	\$476	-51%
No-fee	676	21,187	61%	18%		
H&SS	1,610	50,099	47%	14%	\$44	-12%
Fee	267	13,837	28%	32%	\$158	-33%
No-fee	1,343	36,262	72%	-9%		

Low fees, lean in biomed.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	2,728	2,824	2,811	2,726	2,582	2,437
%No-fee	78%	78%	78%	79%	79%	79%
Articles	106,495	112,543	111,694	109,896	106,665	102,200
%No-fee	67%	67%	67%	68%	69%	68%
Change	-5%	1%	2%	3%	4%	

Back down to 2017 levels, but that's only a 5% drop.

Article Volume

	Journals	Articles	%No-fee	\$/article
Largest: 600+	6	2,524	18%	\$84
Large: 150-599	124	16,540	40%	\$257
Med.: 60-149	733	42,749	63%	\$136
Small: 20-59	1,612	40,568	82%	\$47
Smallest: 0-19	475	4,114	90%	\$27

Most journals are small.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$2,000+	1	200	\$473,465	\$2,367
\$1,000-\$1,999	53	3,147	\$3,950,605	\$1,255
\$500-\$999	83	5,375	\$3,787,635	\$705
\$0.20-\$499	501	26,645	\$4,098,322	\$154
No fee	2,312	71,128		
Total	2,950	106,495	\$12,310,027	\$116

Only one very expensive journal.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	358	18,973	65%	\$165
Economics	284	9,298	53%	\$75
Language & Literature	240	6,713	86%	\$29
Engineering	146	6,527	56%	\$210
Agriculture	129	5,634	56%	\$172
Anthropology	163	5,451	56%	\$73
Political Science	152	4,919	82%	\$19
Sociology	103	4,000	75%	\$28
Earth Sciences	139	3,497	84%	\$72
Ecology	94	3,284	47%	\$254
Computer Science	92	3,242	78%	\$87
Law	104	3,124	85%	\$24
Education	104	3,119	63%	\$47
History	106	3,033	86%	\$18
Biology	61	2,918	49%	\$228
Zoology	62	2,484	44%	\$316
Philosophy	78	2,374	84%	\$44
Mathematics	88	2,368	76%	\$151
Technology	56	2,187	67%	\$105
Arts & Architecture	66	2,140	67%	\$76
Chemistry	46	2,139	52%	\$383
Other Sciences	32	1,741	46%	\$154
Psychology	52	1,664	78%	\$22
Religion	49	1,510	90%	\$41
Miscellany	41	1,433	67%	\$29
Physics	37	1,402	76%	\$121
Media & Communications	38	794	89%	\$13
Library Science	30	527	95%	\$1

Only chemistry and zoology average more than \$300.

Country of Publication

Country	Journals	Articles	%no-fee	\$/article
Albania	4	108	36%	\$115
Armenia	5	189	41%	\$356
Azerbaijan	1	25	100%	\$0
Belarus	20	929	89%	\$16
Bosnia and Herzegovina	31	1,124	78%	\$129
Bulgaria	77	3,770	33%	\$386
Croatia	139	3,968	85%	\$88
Cyprus	3	104	100%	\$0
Czechia	133	3,534	67%	\$163
Estonia	28	908	42%	\$170
Georgia	4	100	100%	\$0
Hungary	49	1,298	87%	\$141
Kazakhstan	18	694	32%	\$44
Latvia	16	531	52%	\$326
Lithuania	88	2,624	56%	\$308
Moldova	37	1,176	72%	\$41
Montenegro	9	431	47%	\$96
North Macedonia	15	253	58%	\$37
Poland	738	23,450	61%	\$240
Romania	355	11,001	65%	\$60
Russia	501	26,736	85%	\$29
Serbia	202	6,068	74%	\$66
Slovakia	54	1,435	82%	\$102
Slovenia	60	1,496	91%	\$53
Turkmenistan	1	10	100%	\$0
Ukraine	362	14,533	43%	\$38

Belarus

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	20	929			\$16	-95%
Fee	1	100	11%	-71%	\$150	-83%
No-fee	19	829	89%	42%		
Biomed	2	115	12%	-55%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	2	115	100%	97%		
STEM	12	553	60%	91%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	12	553	100%	91%		
H&SS	6	261	28%	-32%	\$57	16%
Fee	1	100	38%	83%	\$150	-37%
No-fee	5	161	62%	-22%		

Only one fee journal, in H&SS. Strong STEM, not much biomed.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	20	20	20	20	19	13
%No-fee	95%	95%	95%	95%	95%	100%
Articles	929	930	1,155	1,047	932	831
%No-fee	89%	94%	91%	91%	96%	100%
Change	0%	-19%	10%	12%	12%	

Flat after a down 2020—back to 2017 levels.

Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	1	105	100%	\$0
Med.: 60-149	6	427	77%	\$35
Small: 20-59	13	397	100%	\$0

No extremes.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$0.20-\$499	1	100	\$15,000	\$150
No fee	19	829		
Total	20	929	\$15,000	\$16

One modestly-priced medium-size economics journal.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Engineering	3	179	100%	\$0
Economics	3	162	38%	\$93
Technology	2	146	100%	\$0
Medicine	2	115	100%	\$0
Computer Science	3	95	100%	\$0
Other Sciences	1	69	100%	\$0
History	1	47	100%	\$0
Miscellany	1	38	100%	\$0
Mathematics	1	30	100%	\$0
Earth Sciences	1	19	100%	\$0
Chemistry	1	15	100%	\$0
Anthropology	1	14	100%	\$0

Bosnia and Herzegovina

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	31	1,124			\$129	-61%
Fee	6	245	22%	-41%	\$594	-35%
No-fee	25	879	78%	24%		
Biomed	9	321	29%	4%	\$442	-29%
Fee	4	205	64%	30%	\$692	-45%
No-fee	5	116	36%	-29%		
STEM	8	396	35%	13%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	8	396	100%	91%		
H&SS	14	407	36%	-13%	\$9	-83%
Fee	2	40	10%	-53%	\$87	-63%
No-fee	12	367	90%	14%		

No STEM fees, and almost none in H&SS. Biomed is fee-heavy.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	28	30	30	26	24	24
%No-fee	82%	83%	80%	81%	79%	79%
Articles	1,124	992	903	649	595	505
%No-fee	78%	78%	79%	79%	78%	73%
Change	13%	10%	39%	9%	18%	

Growing every year.

Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	1	278	100%	\$0
Med.: 60-149	4	371	53%	\$352
Small: 20-59	20	429	83%	\$35
Smallest: 0-19	6	46	100%	\$0

No largest and only one large.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$1,000-\$1,999	1	90	\$105,997	\$1,178
\$0.20-\$499	5	155	\$39,416	\$254
No fee	25	879		
Total	31	1,124	\$145,413	\$129

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	8	311	34%	\$456
Engineering	4	308	100%	\$0
Sociology	2	153	100%	\$0
Language & Literature	2	77	100%	\$0
Economics	4	48	60%	\$47
Miscellany	2	45	53%	\$28
History	1	43	100%	\$0
Zoology	1	41	100%	\$0
Ecology	2	40	100%	\$0
Anthropology	1	27	100%	\$0
Library Science	1	14	100%	\$0
Biology	1	10	100%	\$0
Earth Sciences	1	7	100%	\$0
Law	1	0		

Only medicine averages more than \$50—by quite a bit.

Bulgaria

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	77	3,770			\$386	15%
Fee	37	2,522	67%	81%	\$576	-36%
No-fee	40	1,248	33%	-47%		
Biomed	17	1,347	36%	31%	\$299	-52%
Fee	11	1,087	81%	64%	\$371	-71%
No-fee	6	260	19%	-62%		
STEM	39	1,987	53%	69%	\$526	13%
Fee	25	1,405	71%	48%	\$744	-24%
No-fee	14	582	29%	-44%		
H&SS	21	436	12%	-72%	\$10	-80%
Fee	1	30	7%	-67%	\$142	-40%
No-fee	20	406	93%	18%		

Fee-heavy except for H&SS, and not much H&SS. Heavy in STEM.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	75	76	71	62	62	54
%No-fee	52%	51%	51%	48%	48%	52%
Articles	3,770	4,171	3,387	2,659	2,724	2,733
%No-fee	33%	34%	36%	32%	33%	32%
Change	-10%	23%	27%	-2%	0%	

Down after two years of strong growth.

Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	7	1,582	13%	\$554
Med.: 60-149	18	1,095	34%	\$346
Small: 20-59	40	947	62%	\$180
Smallest: 0-19	12	146	55%	\$193

No largest journals.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$1,000-\$1,999	3	166	\$186,664	\$1,124
\$500-\$999	14	1,220	\$991,075	\$812
\$0.20-\$499	20	1,136	\$275,691	\$243
No fee	40	1,248		
Total	77	3,770	\$1,453,429	\$386

No very expensive journals.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Zoology	15	994	15%	\$657
Medicine	7	736	28%	\$161
Biology	10	611	9%	\$466
Other Sciences	4	377	60%	\$156
Agriculture	5	338	28%	\$686
Economics	6	145	100%	\$0
Ecology	7	139	0%	\$562
Anthropology	4	104	71%	\$41
Computer Science	3	58	97%	\$2
Religion	1	45	100%	\$0
Earth Sciences	2	41	39%	\$595
Language & Literature	3	37	100%	\$0
History	2	33	100%	\$0
Technology	2	32	100%	\$0
Sociology	1	24	100%	\$0
Psychology	1	22	100%	\$0
Education	2	13	100%	\$0
Philosophy	1	13	100%	\$0
Physics	1	8	100%	\$0

Zoology the most common, and almost as expensive as agriculture.

Croatia

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	139	3,968			\$88	-74%
Fee	8	593	15%	-60%	\$587	-35%
No-fee	131	3,375	85%	35%		
Biomed	15	538	14%	-50%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	15	538	100%	97%		
STEM	37	1,508	38%	22%	\$218	-53%
Fee	5	555	37%	-23%	\$593	-39%
No-fee	32	953	63%	21%		
H&SS	87	1,922	48%	17%	\$10	-80%
Fee	3	38	2%	-91%	\$498	110%
No-fee	84	1,884	98%	24%		

Little fee (no biomed fees and almost no H&SS fees), light in biomed.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	127	131	134	135	133	128
%No-fee	94%	94%	94%	94%	94%	95%
Articles	3,968	3,997	3,914	3,923	3,950	4,132
%No-fee	85%	84%	86%	84%	86%	85%
Change	-1%	2%	0%	-1%	-4%	

Essentially flat since 2017 decline.

Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	2	175	34%	\$778
Med.: 60-149	21	1,139	41%	\$260
Small: 20-59	82	1,944	81%	\$73
Smallest: 0-19	28	276	100%	\$0

No very large journals.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$1,000-\$1,999	2	124	\$148,576	\$1,198
\$500-\$999	5	255	\$166,896	\$654
\$0.20-\$499	18	781	\$259,443	\$332
No fee	108	2,374		
Total	133	3,534	\$574,915	\$163

No very expensive journals, but some four-digit fees.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Agriculture	13	553	28%	\$332
Medicine	9	394	23%	\$528
Language & Literature	16	382	100%	\$0
Engineering	6	323	73%	\$128
Anthropology	12	228	100%	\$0
Economics	12	205	57%	\$178
Philosophy	8	183	100%	\$0
Education	8	181	91%	\$11
Zoology	4	181	8%	\$318
History	6	145	100%	\$0
Political Science	9	127	100%	\$0
Mathematics	4	111	100%	\$0
Psychology	4	101	100%	\$0
Sociology	4	92	100%	\$0
Religion	3	80	100%	\$0
Physics	1	50	0%	\$568
Earth Sciences	4	49	45%	\$209
Computer Science	4	46	57%	\$154
Law	1	44	100%	\$0
Ecology	2	42	100%	\$0
Technology	2	11	100%	\$0
Arts & Architecture	1	6	100%	\$0

This time, while agriculture has the most articles, physics and medicine are by far the most expensive.

Czechia

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	133	3,534			\$163	-52%
Fee	25	1,160	33%	-11%	\$496	-45%
No-fee	108	2,374	67%	7%		
Biomed	9	394	11%	-59%	\$528	-15%
Fee	5	303	77%	57%	\$687	-46%
No-fee	4	91	23%	-55%		
STEM	40	1,366	39%	24%	\$240	-48%
Fee	16	751	55%	15%	\$437	-55%
No-fee	24	615	45%	-14%		
H&SS	84	1,774	50%	21%	\$22	-56%
Fee	4	106	6%	-71%	\$364	54%
No-fee	80	1,668	94%	19%		

Relatively light in biomed. Low fees.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	127	129	129	126	127	119
%No-fee	80%	81%	81%	83%	82%	82%
Articles	3,534	3,632	3,693	3,766	4,045	3,624
%No-fee	67%	67%	65%	66%	68%	67%
Change	-3%	-2%	-2%	-7%	12%	

Slow decline since 2017.

Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	2	175	34%	\$778
Med.: 60-149	21	1,139	41%	\$260
Small: 20-59	82	1,944	81%	\$73
Smallest: 0-19	28	276	100%	\$0

No largest, and most articles are in small journals.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$1,000-\$1,999	2	124	\$148,576	\$1,198
\$500-\$999	5	255	\$166,896	\$654
\$0.20-\$499	18	781	\$259,443	\$332
No fee	108	2,374		
Total	133	3,534	\$574,915	\$163

No very expensive journals.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Agriculture	13	553	28%	\$332
Medicine	9	394	23%	\$528
Language & Literature	16	382	100%	\$0
Engineering	6	323	73%	\$128
Anthropology	12	228	100%	\$0
Economics	12	205	57%	\$178
Philosophy	8	183	100%	\$0
Education	8	181	91%	\$11
Zoology	4	181	8%	\$318
History	6	145	100%	\$0
Political Science	9	127	100%	\$0
Mathematics	4	111	100%	\$0
Psychology	4	101	100%	\$0
Sociology	4	92	100%	\$0
Religion	3	80	100%	\$0
Physics	1	50	0%	\$568
Earth Sciences	4	49	45%	\$209
Computer Science	4	46	57%	\$154
Law	1	44	100%	\$0
Ecology	2	42	100%	\$0
Technology	2	11	100%	\$0
Arts & Architecture	1	6	100%	\$0

Another country with more agriculture than medicine—but medicine and physics are the only subjects averaging more than \$340.

Estonia

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	28	908			\$170	-49%
Fee	10	525	58%	56%	\$294	-68%
No-fee	18	383	42%	-33%		
Biomed	3	144	16%	-42%	\$114	-82%
Fee	3	144	100%	104%	\$114	-91%
No-fee	0	0	0%	-100%		
STEM	8	402	44%	42%	\$327	-30%
Fee	5	332	83%	73%	\$396	-59%
No-fee	3	70	17%	-67%		
H&SS	17	362	40%	-4%	\$18	-63%
Fee	2	49	14%	-35%	\$136	-42%
No-fee	15	313	86%	9%		

Heavily fee-oriented except for H&SS, but the fees are low.

Articles and Journals by Size

	2021	2020	2019	2018	2017	2016
Journals	28	28	28	28	26	24
%No-fee	64%	64%	64%	64%	62%	67%
Articles	908	938	907	866	859	739
%No-fee	42%	41%	43%	40%	39%	39%
Change	-3%	3%	5%	1%	16%	

Mostly flat since 2017.

Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	1	163	0%	\$355
Med.: 60-149	3	200	23%	\$183
Small: 20-59	18	481	58%	\$121
Smallest: 0-19	6	64	92%	\$23

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$500-\$999	2	75	\$44,387	\$592
\$0.20-\$499	8	450	\$110,081	\$245
No fee	18	383		
Total	28	908	\$154,468	\$170

No expensive journals.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Agriculture	3	213	23%	\$272
Language & Literature	6	131	100%	\$0
Medicine	2	98	0%	\$112
Engineering	1	78	0%	\$355
Other Sciences	1	57	0%	\$592
Miscellany	2	56	21%	\$93
Biology	1	46	0%	\$118
Economics	1	46	100%	\$0
Anthropology	3	45	89%	\$33
Technology	2	36	56%	\$39
Education	1	27	100%	\$0
Law	1	21	100%	\$0
History	1	19	100%	\$0
Earth Sciences	1	18	0%	\$592
Political Science	1	14	100%	\$0
Philosophy	1	3	100%	\$0

Hungary

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	49	1,298			\$141	-58%
Fee	5	170	13%	-65%	\$1,079	19%
No-fee	44	1,128	87%	38%		
Biomed	6	141	11%	-60%	\$716	16%
Fee	2	100	71%	44%	\$1,009	-20%
No-fee	4	41	29%	-43%		
STEM	22	648	50%	60%	\$86	-81%
Fee	2	45	7%	-85%	\$1,242	27%
No-fee	20	603	93%	78%		
H&SS	21	509	39%	-5%	\$52	6%
Fee	1	25	5%	-76%	\$1,065	350%
No-fee	20	484	95%	20%		

Mostly STEM. Few fees, but what fees there are, are on the high side.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	45	47	48	46	39	38
%No-fee	89%	89%	90%	89%	90%	89%
Articles	1,298	1,333	1,527	1,359	1,198	1,210
%No-fee	87%	84%	84%	80%	81%	83%
Change	-3%	-13%	12%	13%	-1%	

Two down years after two up years. Little overall movement.

Article Volume

	Journals	Articles	%No-fee	\$/article
Med.: 60-149	9	536	81%	\$195
Small: 20-59	31	692	90%	\$114
Smallest: 0-19	9	70	100%	\$0

No large or largest journals.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$1,000-\$1,999	5	170	\$183,413	\$1,079
No fee	44	1,128		
Total	49	1,298	\$183,413	\$141

Peculiar: all fees are at the bottom of the expensive range.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Engineering	5	198	82%	\$237
History	3	168	100%	\$0
Medicine	6	141	29%	\$716
Technology	1	96	100%	\$0
Mathematics	1	94	100%	\$0
Ecology	5	83	100%	\$0
Education	2	83	100%	\$0
Language & Literature	6	76	100%	\$0
Earth Sciences	3	56	100%	\$0
Agriculture	3	54	100%	\$0
Sociology	3	54	54%	\$493
Chemistry	2	43	79%	\$209
Miscellany	1	31	100%	\$0
Zoology	1	24	100%	\$0
Arts & Architecture	1	21	100%	\$0
Economics	1	20	100%	\$0
Anthropology	1	16	100%	\$0
Psychology	1	16	100%	\$0
Media & Communications	1	13	100%	\$0
Political Science	1	11	100%	\$0
Physics	1	0		

Only medicine and sociology have substantial average costs.

Kazakhstan

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	18	694			\$44	-87%
Fee	12	469	68%	83%	\$66	-93%
No-fee	6	225	32%	-49%		
Biomed	2	118	17%	-38%	\$2	-100%
Fee	1	23	19%	-60%	\$12	-99%
No-fee	1	95	81%	58%		
STEM	9	269	39%	24%	\$31	-93%
Fee	5	176	65%	37%	\$48	-95%
No-fee	4	93	35%	-34%		
H&SS	7	307	44%	7%	\$72	45%
Fee	6	270	88%	321%	\$82	-65%
No-fee	1	37	12%	-85%		

Low in biomed. Fee-heavy in STEM and, especially, H&SS. The fees are all very low.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	18	18	15	15	13	11
%No-fee	33%	33%	27%	27%	31%	18%
Articles	694	736	714	748	705	685
%No-fee	32%	29%	16%	21%	22%	8%
Change	-6%	3%	-5%	6%	3%	

Nearly flat over the years.

Article Volume

	Journals	Articles	%No-fee	\$/article
Med.: 60-149	8	405	23%	\$56
Small: 20-59	8	257	45%	\$31
Smallest: 0-19	2	32	47%	\$6

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$500-\$999	1	33	\$16,500	\$500
\$0.20-\$499	11	436	\$14,284	\$33
No fee	6	225		
Total	18	694	\$30,784	\$44

One (barely-)medium-priced, other fees all pretty nominal.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	2	118	81%	\$2
Economics	2	95	0%	\$41
Chemistry	3	92	0%	\$81
Physics	3	88	55%	\$5
Political Science	2	82	0%	\$208
Religion	1	52	0%	\$12
Mathematics	1	44	0%	\$12
Law	1	41	0%	\$12
Philosophy	1	37	100%	\$0
Computer Science	1	30	100%	\$0
Ecology	1	15	100%	\$0

Unusual: political science has the only three-digit average cost.

Latvia

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	16	531			\$326	-3%
Fee	5	256	48%	30%	\$677	-25%
No-fee	11	275	52%	-18%		
Biomed	1	27	5%	-81%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	1	27	100%	97%		
STEM	6	200	38%	21%	\$286	-39%
Fee	2	98	49%	3%	\$584	-40%
No-fee	4	102	51%	-2%		
H&SS	9	304	57%	38%	\$382	673%
Fee	3	158	52%	149%	\$735	211%
No-fee	6	146	48%	-39%		

Very little biomed (and no biomed fees).

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	15	16	14	13	11	12
%No-fee	67%	69%	79%	77%	73%	75%
Articles	531	514	523	566	421	452
%No-fee	52%	51%	47%	40%	51%	54%
Change	3%	-2%	-8%	34%	-7%	

Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	1	92	0%	\$1,184
Med.: 60-149	2	98	0%	\$584
Small: 20-59	10	322	83%	\$21
Smallest: 0-19	3	19	47%	\$31

The one large journal was large in previous years.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$1,000-\$1,999	2	122	\$144,407	\$1,184
\$0.20-\$499	3	134	\$28,952	\$216
No fee	11	275		
Total	16	531	\$173,359	\$326

Unusual: no medium fees but two fairly expensive journals.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Economics	3	159	7%	\$727
Other Sciences	1	68	0%	\$320
Law	1	57	100%	\$0
Computer Science	2	50	40%	\$710
Physics	1	46	100%	\$0
Sociology	1	37	100%	\$0
Engineering	1	36	100%	\$0
Education	2	32	69%	\$18
Biology	1	27	100%	\$0
History	1	10	100%	\$0
Language & Literature	1	9	100%	\$0
Earth Sciences	1	0		

Economics and computer science are the only pricey subjects.

Lithuania

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	88	2,624			\$308	-8%
Fee	23	1,165	44%	20%	\$694	-23%
No-fee	65	1,459	56%	-12%		
Biomed	7	149	6%	-79%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	7	149	100%	97%		
STEM	25	1,032	39%	26%	\$584	25%
Fee	12	710	69%	44%	\$849	-13%
No-fee	13	322	31%	-40%		
H&SS	56	1,443	55%	33%	\$142	188%
Fee	11	455	32%	51%	\$452	91%
No-fee	45	988	68%	-13%		

No biomed fees (and few biomed articles). Mostly H&SS.

Articles and Journals per Year

	2021	2020	2019	2018	2017	2016
Journals	79	82	85	79	77	78
%No-fee	71%	72%	74%	75%	75%	76%
Articles	2,624	2,677	2,629	2,550	2,579	2,685
%No-fee	56%	51%	54%	54%	56%	59%
Change	-2%	2%	3%	-1%	-4%	

Essentially flat at around 2,600 articles (2,608±78).

Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	3	459	36%	\$786
Med.: 60-149	14	787	30%	\$408
Small: 20-59	55	1,296	76%	\$97
Smallest: 0-19	16	82	90%	\$9

No largest.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$1,000-\$1,999	1	167	\$247,090	\$1,480
\$500-\$999	11	661	\$460,741	\$697
\$0.20-\$499	11	337	\$100,189	\$297
No fee	65	1,459		
Total	88	2,624	\$808,019	\$308

No very expensive, but the one expensive journal is fairly large.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Economics	13	422	18%	\$410
Ecology	4	302	4%	\$1,012
Engineering	5	270	0%	\$783
Language & Literature	11	210	100%	\$0
Miscellany	2	183	100%	\$0
Mathematics	6	163	94%	\$13
Medicine	7	149	100%	\$0
Education	3	118	100%	\$0
Political Science	4	107	39%	\$252
Law	4	93	100%	\$0
Technology	2	87	0%	\$606
Sociology	5	75	43%	\$75
Computer Science	3	70	23%	\$439
Earth Sciences	3	61	100%	\$0
Agriculture	1	48	100%	\$0
Arts & Architecture	2	46	100%	\$0
Psychology	2	38	100%	\$0
Philosophy	1	33	100%	\$0
Anthropology	2	31	100%	\$0
Other Sciences	1	31	100%	\$0
History	2	28	100%	\$0
Library Science	2	27	100%	\$0
Media & Communications	2	16	100%	\$0
Religion	1	16	100%	\$0

Ecology as the only four-digit cost is unusual.

Moldova

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	37	1,176			\$41	-88%
Fee	10	333	28%	-23%	\$147	-84%
No-fee	27	843	72%	14%		
Biomed	4	160	14%	-50%	\$269	-57%
Fee	3	129	81%	64%	\$333	-74%
No-fee	1	31	19%	-62%		
STEM	8	305	26%	-17%	\$1	-100%
Fee	1	27	9%	-81%	\$14	-99%
No-fee	7	278	91%	74%		
H&SS	25	711	60%	46%	\$8	-85%
Fee	6	177	25%	19%	\$31	-87%
No-fee	19	534	75%	-5%		

Light in biomed, heavy in H&SS, mostly no-fee.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	34	37	32	33	30	27
%No-fee	74%	73%	72%	73%	70%	78%
Articles	1,176	1,436	1,160	1,393	1,117	1,091
%No-fee	72%	65%	71%	64%	64%	68%
Change	-18%	24%	-17%	25%	2%	

Erratic within a fairly narrow range.

Article Volume

	Journals	Articles	%No-fee	\$/article
Med.: 60-149	13	573	48%	\$84
Small: 20-59	24	603	94%	\$1

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$0.20-\$499	10	333	\$48,792	\$147
No fee	27	843		
Total	37	1,176	\$48,792	\$41

No high fees (one medical journal is \$498, nothing else over \$150).

Subject

Subject	Journals	Articles	%No-fee	\$/article
Anthropology	4	143	100%	\$0
Medicine	3	133	23%	\$321
Sociology	4	128	79%	\$3
Engineering	2	121	100%	\$0
Arts & Architecture	1	90	0%	\$46
Miscellany	2	63	89%	\$2
History	2	59	66%	\$5
Law	3	51	100%	\$0
Economics	3	49	100%	\$0
Chemistry	1	44	100%	\$0
Technology	1	42	100%	\$0
Zoology	1	40	100%	\$0
Psychology	2	34	100%	\$0
Education	1	33	0%	\$14
Language & Literature	2	32	100%	\$0
Political Science	1	29	100%	\$0
Biology	1	27	0%	\$14
Other Sciences	1	27	0%	\$14
Computer Science	1	23	100%	\$0
Physics	1	8	100%	\$0

Only medicine exceeds \$50 average cost.

North Macedonia

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	15	253			\$37	-89%
Fee	5	105	42%	12%	\$89	-90%
No-fee	10	148	58%	-7%		
Biomed	2	9	4%	-87%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	2	9	100%	97%		
STEM	5	100	40%	27%	\$14	-97%
Fee	1	12	12%	-75%	\$118	-88%
No-fee	4	88	88%	68%		
H&SS	8	144	57%	37%	\$55	11%
Fee	4	93	65%	209%	\$85	-64%
No-fee	4	51	35%	-55%		

Mostly fee-heavy H&SS (but the fees are low). Barely any biomed.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	11	13	13	14	12	13
%No-fee	64%	62%	62%	64%	67%	69%
Articles	253	422	257	236	248	236
%No-fee	58%	65%	61%	64%	82%	77%
Change	-40%	64%	9%	-5%	5%	

One medical journal had one big year in 2020. That basically accounts for the spike in an otherwise-flat picture.

Article Volume

	Journals	Articles	%No-fee	\$/article
Med.: 60-149	3	100	32%	\$72
Small: 20-59	9	134	81%	\$5
Smallest: 0-19	3	19	37%	\$75

Journals can be erratic.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$0.20-\$499	5	105	\$9,306	\$89
No fee	10	148		
Total	15	253	\$9,306	\$37

Subject

Subject	Journals	Articles	%No-fee	\$/article
Political Science	3	91	25%	\$79
Chemistry	1	42	100%	\$0
Earth Sciences	2	35	66%	\$41
Zoology	1	23	100%	\$0
Language & Literature	1	21	100%	\$0
Sociology	3	20	35%	\$8
Law	1	12	0%	\$47
Medicine	2	9	100%	\$0
Other Sciences	1	0		

No subject averaged three-digit costs.

Poland

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	738	23,450			\$240	-29%
Fee	164	9,111	39%	5%	\$617	-32%
No-fee	574	14,339	61%	-3%		
Biomed	98	5,083	22%	-21%	\$457	-26%
Fee	42	2,946	58%	18%	\$788	-38%
No-fee	56	2,137	42%	-17%		
STEM	217	7,391	32%	1%	\$373	-20%
Fee	79	4,062	55%	15%	\$679	-30%
No-fee	138	3,329	45%	-14%		
H&SS	423	10,976	47%	13%	\$49	0%
Fee	43	2,103	19%	-8%	\$257	8%
No-fee	380	8,873	81%	2%		

The most journals and second-most articles in Eastern Europe. Light in biomed, mildly rich in H&SS.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	664	702	715	700	671	633
%No-fee	76%	77%	77%	78%	78%	77%
Articles	23,450	24,643	24,790	25,046	25,523	23,400
%No-fee	61%	63%	62%	62%	63%	63%
Change	-5%	-1%	-1%	-2%	9%	

Dropping slowly over the past four years.

Article Volume

	Journals	Articles	%No-fee	\$/article
Largest: 600+	1	503	0%	\$52
Large: 150-599	17	2,392	28%	\$663
Med.: 60-149	161	9,213	49%	\$334
Small: 20-59	429	10,284	80%	\$85
Smallest: 0-19	130	1,058	92%	\$51

The large journals tend to have the highest fees.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$2,000+	1	200	\$473,465	\$2,367
\$1,000-\$1,999	38	2,252	\$2,874,803	\$1,277
\$500-\$999	36	2,012	\$1,355,844	\$674
\$0.20-\$499	89	4,647	\$914,478	\$197
No fee	574	14,339		
Total	738	23,450	\$5,618,591	\$240

Only one very expensive journal, but it's large.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	84	4,643	42%	\$428
Language & Literature	79	1,939	97%	\$14
Anthropology	50	1,762	51%	\$81
Engineering	36	1,426	31%	\$420
Economics	63	1,334	65%	\$100
Political Science	45	1,290	95%	\$18
Ecology	29	1,255	42%	\$243
Mathematics	32	853	54%	\$413
Computer Science	19	754	78%	\$181
Technology	14	752	42%	\$152
Law	25	739	93%	\$7
Religion	22	675	93%	\$82
Earth Sciences	27	670	57%	\$298
Sociology	26	666	83%	\$37
Chemistry	13	654	5%	\$1,117
Education	22	584	76%	\$110
Agriculture	26	534	63%	\$272
Philosophy	25	493	91%	\$54
Biology	14	440	41%	\$759
History	20	417	100%	\$0
Zoology	14	295	52%	\$203
Miscellany	8	260	40%	\$64
Media & Communications	7	233	100%	\$0
Arts & Architecture	9	210	81%	\$11
Psychology	9	205	73%	\$85
Physics	7	198	46%	\$587
Library Science	13	169	100%	\$0

Medicine by far the largest; only chemistry hits four-digit average costs, with biology and physics the only others over \$500.

Romania

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	355	11,001			\$60	-82%
Fee	67	3,903	35%	-4%	\$170	-81%
No-fee	288	7,098	65%	2%		
Biomed	37	1,995	18%	-34%	\$94	-85%
Fee	15	1,073	54%	9%	\$175	-86%
No-fee	22	922	46%	-9%		
STEM	100	3,092	28%	-10%	\$79	-83%
Fee	18	1,009	33%	-32%	\$242	-75%
No-fee	82	2,083	67%	29%		
H&SS	218	5,914	54%	30%	\$39	-21%
Fee	34	1,821	31%	47%	\$127	-46%
No-fee	184	4,093	69%	-13%		

Mostly H&SS. Light in biomed. Generally low fees

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	318	332	333	330	322	322
%No-fee	80%	81%	80%	80%	80%	80%
Articles	11,001	11,838	11,240	10,398	10,500	10,982
%No-fee	65%	67%	68%	66%	68%	65%
Change	-7%	5%	8%	-1%	-4%	

Down slightly after a good 2020—now back to essentially 2016 levels.

Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	16	2,520	22%	\$135
Med.: 60-149	70	4,059	65%	\$64
Small: 20-59	169	3,626	88%	\$15
Smallest: 0-19	100	796	89%	\$13

No largest.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$500-\$999	2	226	\$141,093	\$624
\$0.20-\$499	65	3,677	\$522,615	\$142
No fee	288	7,098		
Total	355	11,001	\$663,707	\$60

No expensive journals.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	34	1,907	44%	\$98
Economics	54	1,627	64%	\$26
Anthropology	33	1,393	36%	\$102
Agriculture	19	1,149	61%	\$113
Political Science	29	679	96%	\$1
Language & Literature	25	513	82%	\$19
Engineering	17	487	81%	\$7
Sociology	10	404	68%	\$38
Law	12	312	77%	\$66
Computer Science	13	277	55%	\$225
Education	12	220	94%	\$8
Ecology	10	201	82%	\$11
Chemistry	2	200	20%	\$189
Arts & Architecture	8	190	100%	\$0
History	9	179	97%	\$1
Earth Sciences	17	156	100%	\$0
Mathematics	9	155	95%	\$3
Philosophy	9	139	100%	\$0
Other Sciences	3	125	27%	\$34
Media & Communications	9	116	100%	\$0
Zoology	4	116	60%	\$40
Technology	3	114	100%	\$0
Physics	3	112	100%	\$0
Miscellany	4	111	100%	\$0
Biology	3	88	100%	\$0
Psychology	2	17	100%	\$0
Library Science	2	14	100%	\$0

Only computer science and chemistry average more than \$113 cost.

Russia

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	501	26,736			\$29	-91%
Fee	60	4,025	15%	-59%	\$195	-79%
No-fee	441	22,711	85%	35%		
Biomed	117	7,511	28%	3%	\$17	-97%
Fee	11	660	9%	-82%	\$198	-84%
No-fee	106	6,851	91%	79%		
STEM	149	6,964	26%	-17%	\$28	-94%
Fee	16	1,207	17%	-64%	\$162	-83%
No-fee	133	5,757	83%	58%		
H&SS	235	12,261	46%	11%	\$37	-24%
Fee	33	2,158	18%	-16%	\$212	-10%
No-fee	202	10,103	82%	4%		

The most articles in Eastern Europe. Predominantly no-fee.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	482	490	480	451	418	395
%No-fee	88%	88%	88%	89%	89%	89%
Articles	26,736	28,199	28,654	28,229	26,275	25,261
%No-fee	85%	84%	84%	87%	87%	87%
Change	-5%	-2%	2%	7%	4%	

Largely flat overall since 2017.

Article Volume

	Journals	Articles	%No-fee	\$/article
Largest: 600+	2	451	100%	\$0
Large: 150-599	43	5,469	72%	\$58
Med.: 60-149	214	13,559	86%	\$28
Small: 20-59	222	7,086	91%	\$13
Smallest: 0-19	20	171	97%	\$4

Interesting that the two [once-]largest journals are both no-fee.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$500-\$999	4	295	\$166,947	\$566
\$0.20-\$499	56	3,730	\$616,421	\$165
No fee	441	22,711		
Total	501	26,736	\$783,369	\$29

No expensive journals, and the few medium-priced barely qualify as medium-priced.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	105	6,863	94%	\$15
Language & Literature	37	2,267	74%	\$64
Agriculture	21	1,475	58%	\$51
Sociology	22	1,448	88%	\$12
Economics	33	1,445	93%	\$10
Earth Sciences	35	1,421	97%	\$1
Political Science	24	1,399	100%	\$0
History	25	1,054	81%	\$37
Computer Science	19	887	100%	\$0
Arts & Architecture	12	845	52%	\$160
Law	19	732	94%	\$3
Psychology	14	700	88%	\$10
Engineering	17	688	90%	\$7
Biology	12	648	63%	\$47
Education	12	614	52%	\$89
Philosophy	10	586	100%	\$0
Other Sciences	9	531	51%	\$55
Ecology	12	493	86%	\$65
Mathematics	12	422	93%	\$3
Religion	9	414	100%	\$0
Anthropology	7	375	83%	\$68
Technology	10	355	62%	\$145
Physics	6	289	100%	\$0
Miscellany	5	264	52%	\$27
Chemistry	4	231	100%	\$0
Zoology	4	172	100%	\$0
Media & Communications	5	110	35%	\$91
Library Science	1	8	100%	\$0

Medicine most common. Oddly, arts & architecture is the most expensive field, although still not very expensive.

Serbia

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	202	6,068			\$66	-80%
Fee	20	1,561	26%	-30%	\$256	-72%
No-fee	182	4,507	74%	18%		
Biomed	23	784	13%	-53%	\$46	-93%
Fee	5	234	30%	-39%	\$155	-88%
No-fee	18	550	70%	38%		
STEM	77	2,928	48%	54%	\$116	-75%
Fee	10	1,157	40%	-17%	\$293	-70%
No-fee	67	1,771	60%	16%		
H&SS	102	2,356	39%	-6%	\$10	-80%
Fee	5	170	7%	-65%	\$139	-41%
No-fee	97	2,186	93%	17%		

Strong in STEM, light in biomed, more no-fee than most.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	192	197	196	195	190	184
%No-fee	90%	90%	90%	90%	89%	90%
Articles	6,068	6,081	6,398	5,942	5,848	5,960
%No-fee	74%	75%	75%	77%	79%	79%
Change	0%	-5%	8%	2%	-2%	

Flat in 2021 and generally overall.

Article Volume

	Journals	Articles	%No-fee	\$/article
Largest: 600+	1	468	0%	\$213
Large: 150-599	3	489	10%	\$312
Med.: 60-149	28	1,837	80%	\$47
Small: 20-59	120	2,814	91%	\$21
Smallest: 0-19	50	460	95%	\$3

Mostly medium and small.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$500-\$999	1	43	\$24,431	\$568
\$0.20-\$499	19	1,518	\$375,061	\$247
No fee	182	4,507		
Total	202	6,068	\$399,492	\$66

No expensive journals.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Engineering	21	1,114	58%	\$90
Medicine	19	592	60%	\$61
Economics	22	502	91%	\$19
Other Sciences	6	328	23%	\$362
Chemistry	6	311	63%	\$108
Agriculture	13	286	74%	\$37
Sociology	5	278	71%	\$28
Law	10	273	84%	\$23
Language & Literature	9	227	100%	\$0
Anthropology	14	211	100%	\$0
Ecology	5	206	31%	\$286
Earth Sciences	9	195	100%	\$0
Biology	4	192	100%	\$0
History	8	177	100%	\$0
Education	7	169	100%	\$0
Arts & Architecture	9	150	100%	\$0
Computer Science	4	128	100%	\$0
Philosophy	2	124	100%	\$0
Technology	4	116	81%	\$11
Zoology	4	96	58%	\$89
Physics	2	94	51%	\$87
Political Science	5	76	100%	\$0
Psychology	4	58	100%	\$0
Mathematics	3	54	100%	\$0
Religion	3	54	100%	\$0
Media & Communications	2	25	100%	\$0
Library Science	1	17	100%	\$0
Miscellany	1	15	100%	\$0

Unusual: engineering by far the most common; other sciences, ecology, and chemistry have the only three-digit average costs.

Slovakia

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	54	1,435			\$102	-69%
Fee	9	262	18%	-51%	\$561	-38%
No-fee	45	1,173	82%	30%		
Biomed	5	266	19%	-32%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	5	266	100%	97%		
STEM	24	624	43%	39%	\$207	-56%
Fee	5	184	29%	-38%	\$701	-28%
No-fee	19	440	71%	35%		
H&SS	25	545	38%	-8%	\$33	-33%
Fee	4	78	14%	-31%	\$231	-2%
No-fee	21	467	86%	8%		

Very few fees in general and none in biomed. Strong in STEM.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	47	49	48	48	47	44
%No-fee	81%	84%	81%	81%	81%	80%
Articles	1,435	1,449	1,138	1,100	1,092	1,003
%No-fee	82%	79%	74%	77%	76%	75%
Change	-1%	27%	3%	1%	9%	

Down slightly after a strong 2020.

Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	1	198	100%	\$0
Med.: 60-149	3	276	58%	\$395
Small: 20-59	34	835	86%	\$34
Smallest: 0-19	16	126	74%	\$77

No largest, and the large one is no-fee.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$500-\$999	1	115	\$108,897	\$947
\$0.20-\$499	8	147	\$38,025	\$259
No fee	45	1,173		
Total	54	1,435	\$146,922	\$102

One medium-priced agriculture journal, the bulk of all revenue.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Biology	1	198	100%	\$0
Agriculture	4	186	21%	\$626
Earth Sciences	7	153	100%	\$0
Engineering	5	117	91%	\$31
Zoology	2	105	100%	\$0
Anthropology	4	83	100%	\$0
Arts & Architecture	3	79	71%	\$69
Law	4	72	100%	\$0
Medicine	4	68	100%	\$0
Political Science	3	45	100%	\$0
Miscellany	1	41	100%	\$0
Philosophy	1	39	100%	\$0
Psychology	1	36	100%	\$0
Media & Communications	1	33	100%	\$0
Library Science	1	28	100%	\$0
Economics	1	24	0%	\$237
Technology	1	20	0%	\$373
Computer Science	2	18	67%	\$79
History	1	17	100%	\$0
Sociology	2	17	100%	\$0
Religion	1	16	0%	\$296
Education	1	15	0%	\$142
Ecology	2	14	100%	\$0
Mathematics	1	11	100%	\$0

Slovenia

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	60	1,496			\$53	-84%
Fee	4	128	9%	-77%	\$622	-31%
No-fee	56	1,368	91%	45%		
Biomed	6	228	15%	-44%	\$262	-58%
Fee	1	56	25%	-50%	\$1,065	-16%
No-fee	5	172	75%	48%		
STEM	12	388	26%	-17%	\$52	-89%
Fee	3	72	19%	-61%	\$278	-72%
No-fee	9	316	81%	56%		
H&SS	42	880	59%	42%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	42	880	100%	26%		

Mostly H&SS with no fees; very little biomed.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	58	59	58	57	54	53
%No-fee	93%	93%	93%	93%	93%	92%
Articles	1,496	1,782	1,644	1,692	1,497	1,367
%No-fee	91%	86%	85%	87%	82%	86%
Change	-16%	8%	-3%	13%	10%	

Down 2021 returns to 2017 level—but with even fewer fee articles.

Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	1	25	0%	\$355
Med.: 60-149	6	418	87%	\$143
Small: 20-59	39	899	95%	\$12
Smallest: 0-19	14	154	100%	\$0

No largest, and the large (but not in 2021!) has no fees.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$1,000-\$1,999	1	56	\$59,657	\$1,065
\$0.20-\$499	3	72	\$20,004	\$278
No fee	56	1,368		
Total	60	1,496	\$79,661	\$53

No medium-priced journals; one small expensive medical journal.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	5	192	71%	\$311
Language & Literature	11	191	100%	\$0
Education	4	144	100%	\$0
Economics	6	110	100%	\$0
Chemistry	1	108	100%	\$0
Agriculture	2	95	100%	\$0
Miscellany	2	76	100%	\$0
Arts & Architecture	4	69	100%	\$0
Earth Sciences	3	64	100%	\$0
Engineering	2	55	0%	\$291
Sociology	3	47	100%	\$0
Political Science	2	44	100%	\$0
History	1	42	100%	\$0
Religion	2	41	100%	\$0
Biology	1	36	100%	\$0
Philosophy	2	33	100%	\$0
Anthropology	2	32	100%	\$0
Technology	1	28	100%	\$0
Ecology	2	21	100%	\$0
Law	1	17	100%	\$0
Media & Communications	1	17	100%	\$0
Physics	1	17	0%	\$237
Psychology	1	17	100%	\$0

Only medicine, engineering, and physics have three-digit average costs—or, for that matter, any fees at all.

Ukraine

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	362	14,533			\$38	-89%
Fee	161	8,326	57%	55%	\$66	-93%
No-fee	201	6,207	43%	-32%		
Biomed	55	2,525	17%	-37%	\$52	-92%
Fee	22	1,216	48%	-2%	\$107	-92%
No-fee	33	1,309	52%	2%		
STEM	118	4,084	28%	-10%	\$17	-96%
Fee	39	1,395	34%	-28%	\$49	-95%
No-fee	79	2,689	66%	26%		
H&SS	189	7,924	55%	32%	\$45	-10%
Fee	100	5,715	72%	245%	\$62	-74%
No-fee	89	2,209	28%	-65%		

Mostly H&SS (but more fees than usual), light in biomed.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	333	342	339	325	285	249
%No-fee	55%	55%	56%	57%	56%	58%
Articles	14,533	15,931	16,352	17,005	15,918	14,707
%No-fee	43%	45%	46%	46%	49%	46%
Change	-9%	-3%	-4%	7%	8%	

Down the past three years, now below 2016 levels.

Article Volume

	Journals	Articles	%No-fee	\$/article
Largest: 600+	2	1,102	0%	\$79
Large: 150-599	25	2,186	20%	\$31
Med.: 60-149	125	6,106	42%	\$46
Small: 20-59	184	4,874	61%	\$24
Smallest: 0-19	26	265	73%	\$13

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$500-\$999	2	105	\$66,452	\$633
\$0.20-\$499	159	8,221	\$485,947	\$59
No fee	201	6,207		
Total	362	14,533	\$552,399	\$38

No expensive journals; nearly all fees are low.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Economics	36	2,524	9%	\$54
Medicine	43	1,930	56%	\$62
Education	24	844	26%	\$25
Political Science	16	761	22%	\$23
Computer Science	15	737	60%	\$11
Anthropology	14	605	20%	\$113
Biology	12	595	39%	\$18
Physics	10	492	84%	\$24
Engineering	14	465	58%	\$23
History	14	459	56%	\$32
Earth Sciences	17	413	60%	\$7
Language & Literature	17	409	48%	\$31
Law	11	401	49%	\$102
Philosophy	12	381	39%	\$30
Zoology	10	378	58%	\$8
Sociology	6	373	4%	\$24
Mathematics	14	371	75%	\$6
Agriculture	11	344	45%	\$60
Arts & Architecture	10	338	59%	\$11
Technology	8	304	100%	\$0
Psychology	8	299	22%	\$44
Ecology	8	228	35%	\$34
Chemistry	7	224	87%	\$4
Library Science	7	217	89%	\$2
Other Sciences	4	128	67%	\$5
Miscellany	4	121	45%	\$33
Media & Communications	5	101	85%	\$2
Religion	5	91	67%	\$13

Only anthropology and law average three-digit costs.

Other Eastern European Countries

Seven countries with 27 journals.

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	27	967			\$125	-63%
Fee	6	408	42%	14%	\$296	-67%
No-fee	21	559	58%	-8%		
Biomed	1	36	4%	-86%	\$237	-62%
Fee	1	36	100%	104%	\$237	-81%
No-fee	0	0	0%	-100%		
STEM	5	268	28%	-11%	\$80	-83%
Fee	1	121	45%	-5%	\$178	-82%
No-fee	4	147	55%	5%		
H&SS	21	663	69%	66%	\$137	177%
Fee	4	251	38%	81%	\$362	53%
No-fee	17	412	62%	-21%		

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	27	26	23	23	22	16
%No-fee	78%	77%	74%	74%	82%	81%
Articles	967	842	709	722	639	597
%No-fee	58%	61%	65%	72%	82%	77%
Change	15%	19%	-2%	13%	7%	

Article Volume

	Journals	Articles	%No-fee	\$/article
Med.: 60-149	8	564	49%	\$180
Small: 20-59	10	307	61%	\$64
Smallest: 0-19	9	96	100%	\$0

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$500-\$999	1	112	\$67,200	\$600
\$0.20-\$499	5	296	\$53,608	\$181
No fee	21	559		
Total	27	967	\$120,808	\$125

Subject

Subject	Journals	Articles	%No-fee	\$/article
Anthropology	4	177	68%	\$71
Ecology	1	121	0%	\$178
Philosophy	1	112	0%	\$600
Economics	3	90	100%	\$0
Agriculture	1	86	100%	\$0
Sociology	3	74	55%	\$53
Law	2	63	100%	\$0
Miscellany	1	50	0%	\$142
Medicine	1	36	0%	\$237
Language & Literature	3	34	100%	\$0
Technology	1	25	100%	\$0
Computer Science	1	23	100%	\$0
Psychology	1	23	100%	\$0
Education	1	19	100%	\$0
Political Science	1	14	100%	\$0
Mathematics	1	13	100%	\$0
History	1	7	100%	\$0

Country Summaries

Albania

Four journals, 108 articles in 2021; one small \$237 journal and one small \$118 journal, otherwise no-fee.

Armenia

Five journals, 189 2021 articles; one medium-sized \$600 philosophy journal, otherwise no-fee.

Azerbaijan

One no-fee technology journal with 25 articles in 2021.

Cyprus

Three no-fee H&SS journals; 104 articles in 2021.

Georgia

Four no-fee journals; 100 articles in 2021.

Montenegro

Nine journals; 431 articles in 2021; three of the journals (all medium-sized) have fees in the \$140-\$225 range.

Turkmenistan

One no-fee economics journal with ten articles in 2021.

Latin America

The most journals and second-most articles of any region in the long tail—and Latin America is *entirely* in the long tail.

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	3,115	121,480			\$40	-88%
Fee	168	14,449	12%	-68%	\$333	-63%
No-fee	2,947	107,031	88%	40%		
Biomed	412	26,826	22%	-19%	\$95	-85%
Fee	51	5,467	20%	-59%	\$466	-63%
No-fee	361	21,359	80%	57%		
STEM	621	23,641	19%	-38%	\$79	-83%
Fee	93	6,845	29%	-39%	\$272	-72%
No-fee	528	16,796	71%	36%		
H&SS	2,082	71,013	58%	41%	\$6	-88%
Fee	24	2,137	3%	-86%	\$191	-19%
No-fee	2,058	68,876	97%	23%		

More than half H&SS, light in STEM, very few fees and those are low.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	2,925	3,036	3,036	2,991	2,911	2,791
%No-fee	94%	95%	95%	95%	95%	95%
Articles	121,480	126,013	113,745	110,097	105,494	96,738
%No-fee	88%	88%	88%	87%	87%	87%
Change	-4%	11%	3%	4%	9%	

Down slightly after a strong 2020 and four up years.

Article Volume

	Journals	Articles	%No-fee	\$/article
Largest: 600+	6	4,362	42%	\$229
Large: 150-599	119	20,375	72%	\$111
Med.: 60-149	652	40,762	88%	\$30
Small: 20-59	1,959	51,963	98%	\$7
Smallest: 0-19	379	4,018	98%	\$3

Only the largest journals are mostly fee-based.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$2,000+	1	41	\$123,000	\$3,000
\$1,000-\$1,999	6	865	\$1,253,300	\$1,449
\$500-\$999	17	2,463	\$1,633,947	\$663
\$0.20-\$499	144	11,080	\$1,804,187	\$163
No fee	2,947	107,031		
Total	3,115	121,480	\$4,814,434	\$40

Only one very expensive journal in the whole region, and it's small.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	381	25,196	80%	\$91
Education	294	16,179	95%	\$13
Language & Literature	209	7,800	100%	\$1
Agriculture	135	6,182	52%	\$158
Sociology	204	6,005	99%	\$0
Anthropology	183	5,555	93%	\$12
Economics	212	5,021	100%	\$0
Law	166	4,597	100%	\$0
History	142	4,470	100%	\$0
Miscellany	87	3,947	86%	\$11
Earth Sciences	105	3,887	88%	\$12
Political Science	146	3,787	99%	\$3
Arts & Architecture	99	3,207	99%	\$1
Media & Communications	96	3,149	100%	\$0
Ecology	89	2,974	73%	\$35
Zoology	57	2,660	41%	\$163
Philosophy	90	2,653	98%	\$23
Engineering	80	2,535	84%	\$47
Psychology	87	2,526	96%	\$3
Biology	31	1,630	73%	\$158
Other Sciences	48	1,608	91%	\$6
Mathematics	38	1,297	100%	\$0
Library Science	36	1,213	100%	\$0
Religion	31	904	100%	\$0
Technology	23	689	98%	\$0
Chemistry	15	683	39%	\$175
Computer Science	20	621	100%	\$0
Physics	11	505	80%	\$100

Medicine is the largest subject. No subject exceeds \$180 average cost.

Country of Publication

Country	Journals	Articles	%no-fee	\$/article
Argentina	326	7,784	97%	\$6
Bahamas	1	16	100%	\$0
Barbados	1	50	100%	\$0
Bolivia	7	141	100%	\$0
Brazil	1,574	76,854	83%	\$57
Chile	141	4,150	83%	\$53
Colombia	405	10,369	99%	\$2
Costa Rica	74	2,087	99%	\$1
Cuba	115	7,059	100%	\$0
Dominican Republic	7	193	100%	\$0
Ecuador	71	1,953	100%	\$0
El Salvador	3	18	100%	\$0
Guadeloupe	1	11	100%	\$0
Guam	1	4	0%	\$350
Guatemala	2	21	100%	\$0
Honduras	3	47	100%	\$0
Mexico	183	5,412	92%	\$16
Nicaragua	8	134	100%	\$0
Panama	3	86	100%	\$0
Paraguay	25	536	100%	\$0
Peru	97	2,805	96%	\$7
Puerto Rico	4	22	100%	\$0
Trinidad and Tobago	1	21	100%	\$0
Uruguay	32	780	100%	\$0
Venezuela	30	927	99%	\$5

Argentina

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	326	7,784			\$6	-98%
Fee	10	204	3%	-93%	\$215	-76%
No-fee	316	7,580	97%	55%		
Biomed	20	761	10%	-64%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	20	761	100%	97%		
STEM	53	1,041	13%	-57%	\$42	-91%
Fee	9	191	18%	-62%	\$228	-77%
No-fee	44	850	82%	56%		
H&SS	253	5,982	77%	86%	\$0	-100%
Fee	1	13	0%	-99%	\$28	-88%
No-fee	252	5,969	100%	26%		

Almost no fees, and those low. Predominantly H&SS.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	305	323	319	311	306	284
%No-fee	97%	97%	97%	97%	97%	96%
Articles	7,784	8,514	7,319	7,126	6,589	5,923
%No-fee	97%	97%	97%	97%	96%	96%
Change	-9%	16%	3%	8%	11%	

Down in 2021 after four years of growth.

Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	3	410	100%	\$0
Med.: 60-149	18	1,029	91%	\$35
Small: 20-59	217	5,396	98%	\$1
Smallest: 0-19	88	949	97%	\$1

No largest, mostly small.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$500-\$999	1	58	\$29,000	\$500
\$0.20-\$499	9	146	\$14,846	\$102
No fee	316	7,580		
Total	326	7,784	\$43,846	\$6

Subject

Subject	Journals	Articles	%No-fee	\$/article
History	37	903	100%	\$0
Medicine	17	706	100%	\$0
Sociology	32	701	100%	\$0
Anthropology	32	696	98%	\$1
Language & Literature	22	670	100%	\$0
Education	20	662	100%	\$0
Political Science	19	474	100%	\$0
Agriculture	16	388	58%	\$105
Media & Communications	13	368	100%	\$0
Arts & Architecture	17	349	100%	\$0
Law	11	288	100%	\$0
Economics	20	268	100%	\$0
Psychology	7	211	100%	\$0
Philosophy	13	173	100%	\$0
Earth Sciences	10	171	94%	\$1
Zoology	7	147	100%	\$0
Religion	5	94	100%	\$0
Ecology	5	88	100%	\$0
Miscellany	3	73	100%	\$0
Mathematics	3	69	100%	\$0
Other Sciences	3	56	100%	\$0
Biology	3	55	100%	\$0
Library Science	2	52	100%	\$0
Engineering	4	49	100%	\$0
Computer Science	2	34	100%	\$0
Technology	1	20	100%	\$0
Physics	2	19	0%	\$142

History most prolific, and only physics and agriculture have significant cost averages, even those low.

Brazil

Half of journals and almost two-thirds of Latin America OA articles.

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	1,574	76,854			\$57	-83%
Fee	135	12,775	17%	-55%	\$346	-62%
No-fee	1,439	64,079	83%	32%		
Biomed	198	17,771	23%	-16%	\$138	-78%
Fee	48	5,277	30%	-40%	\$465	-63%
No-fee	150	12,494	70%	38%		
STEM	302	14,992	20%	-38%	\$110	-76%
Fee	68	5,900	39%	-18%	\$280	-71%
No-fee	234	9,092	61%	16%		
H&SS	1,074	44,091	57%	39%	\$7	-86%
Fee	19	1,598	4%	-83%	\$192	-19%
No-fee	1,055	42,493	96%	22%		

Mostly H&SS, predominantly no-fee, light in STEM.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	1,461	1,529	1,530	1,515	1,479	1,435
%No-fee	91%	91%	92%	92%	92%	91%
Articles	76,854	80,165	72,277	70,889	67,991	61,760
%No-fee	83%	83%	83%	83%	82%	82%
Change	-4%	11%	2%	4%	10%	

Slightly down after four years of growth.

Article Volume

	Journals	Articles	%No-fee	\$/article
Largest: 600+	5	3,905	47%	\$246
Large: 150-599	94	16,412	65%	\$137
Med.: 60-149	488	30,023	86%	\$32
Small: 20-59	911	25,765	97%	\$9
Smallest: 0-19	76	749	98%	\$4

The larger the journal, the more likely it is to have fees.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$2,000+	1	41	\$123,000	\$3,000
\$1,000-\$1,999	5	825	\$1,193,300	\$1,446
\$500-\$999	14	2,291	\$1,515,747	\$662
\$0.20-\$499	115	9,618	\$1,582,468	\$165
No fee	1,439	64,079		
Total	1,574	76,854	\$4,414,515	\$57

One very expensive small journal, but most fees are modest,

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	184	16,667	71%	\$132
Education	178	11,075	92%	\$19
Language & Literature	136	5,733	100%	\$0
Agriculture	66	4,014	41%	\$214
Anthropology	86	3,236	88%	\$20
Sociology	87	3,126	98%	\$1
Law	84	2,811	100%	\$0
Earth Sciences	65	2,803	86%	\$15
Economics	96	2,663	99%	\$0
History	66	2,440	100%	\$0
Media & Communications	58	2,084	100%	\$0
Miscellany	38	2,070	95%	\$3
Arts & Architecture	47	2,027	98%	\$1
Political Science	62	1,888	99%	\$5
Ecology	51	1,867	59%	\$53
Zoology	28	1,828	26%	\$198
Philosophy	47	1,725	100%	\$0
Psychology	46	1,683	94%	\$5
Engineering	20	1,147	65%	\$104
Biology	14	1,104	61%	\$233
Mathematics	23	1,009	100%	\$0
Library Science	24	866	100%	\$0
Other Sciences	19	794	86%	\$10
Religion	19	664	100%	\$0
Chemistry	7	535	23%	\$224
Technology	11	425	97%	\$0
Physics	4	397	80%	\$121
Computer Science	8	173	100%	\$0

Only biology, chemistry, and agriculture average more than \$200.

Chile

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	141	4,150			\$53	-84%
Fee	6	721	17%	-53%	\$307	-66%
No-fee	135	3,429	83%	31%		
Biomed	13	509	12%	-55%	\$168	-73%
Fee	2	122	24%	-51%	\$702	-44%
No-fee	11	387	76%	49%		
STEM	21	691	17%	-47%	\$56	-88%
Fee	2	102	15%	-69%	\$382	-61%
No-fee	19	589	85%	63%		
H&SS	107	2,950	71%	72%	\$33	-34%
Fee	2	497	17%	-19%	\$194	-18%
No-fee	105	2,453	83%	5%		

More than two-thirds H&SS; six-sevenths no-fee.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	137	139	138	136	129	123
%No-fee	96%	96%	96%	96%	95%	95%
Articles	4,150	4,762	4,191	3,614	3,187	3,062
%No-fee	83%	75%	82%	84%	87%	86%
Change	-13%	14%	16%	13%	4%	

Back to 2019 levels.

Article Volume

	Journals	Articles	%No-fee	\$/article
Largest: 600+	1	457	0%	\$80
Large: 150-599	1	99	100%	\$0
Med.: 60-149	10	707	76%	\$150
Small: 20-59	105	2,603	96%	\$30
Smallest: 0-19	24	284	100%	\$0

The largest and large journals qualified based on 2020 data.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$1,000-\$1,999	1	40	\$60,000	\$1,500
\$500-\$999	2	114	\$89,200	\$782
\$0.20-\$499	3	567	\$72,060	\$127
No fee	135	3,429		
Total	141	4,150	\$221,260	\$53

No very expensive journals.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Miscellany	5	534	14%	\$68
Medicine	12	509	76%	\$168
Language & Literature	9	264	100%	\$0
History	10	255	100%	\$0
Political Science	12	254	100%	\$0
Law	10	241	100%	\$0
Arts & Architecture	10	236	100%	\$0
Anthropology	10	227	100%	\$0
Philosophy	9	227	82%	\$264
Sociology	10	226	100%	\$0
Zoology	2	168	52%	\$167
Education	6	155	100%	\$0
Agriculture	3	134	84%	\$82
Engineering	4	127	100%	\$0
Earth Sciences	5	119	100%	\$0
Psychology	4	101	100%	\$0
Media & Communications	3	96	100%	\$0
Economics	5	71	100%	\$0
Religion	4	63	100%	\$0
Ecology	3	57	100%	\$0
Mathematics	2	50	100%	\$0
Technology	1	36	100%	\$0
Biology	1	0		
Computer Science	1	0		

Unusual: only philosophy exceeds \$170 average cost.

Colombia

Second largest number of OA journals and articles in Latin America.

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	405	10,369			\$2	-99%
Fee	3	138	1%	-96%	\$138	-85%
No-fee	402	10,231	99%	57%		
Biomed	51	1,785	17%	-37%	\$4	-99%
Fee	1	68	4%	-92%	\$100	-92%
No-fee	50	1,717	96%	89%		
STEM	89	2,182	21%	-33%	\$6	-99%
Fee	2	70	3%	-93%	\$174	-82%
No-fee	87	2,112	97%	85%		
H&SS	265	6,402	62%	49%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	265	6,402	100%	26%		

Mostly H&SS with no fees at all. Lightest in biomed.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	378	390	400	391	389	380
%No-fee	99%	99%	99%	99%	99%	99%
Articles	10,369	10,481	10,031	9,682	9,994	9,611
%No-fee	99%	99%	99%	99%	99%	99%
Change	-1%	4%	4%	-3%	4%	

Down trivially after two years of modest growth.

Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	5	725	100%	\$0
Med.: 60-149	29	1,672	96%	\$4
Small: 20-59	305	7,259	99%	\$2
Smallest: 0-19	66	713	100%	\$0

No largest, mostly small.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$0.20-\$499	3	138	\$19,000	\$138
No fee	402	10,231		
Total	405	10,369	\$19,000	\$2

What few fees there are, are relatively modest.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	46	1,655	96%	\$4
Education	31	1,164	100%	\$0
Economics	46	911	100%	\$0
Engineering	28	637	100%	\$0
Law	34	636	100%	\$0
Sociology	26	590	100%	\$0
Political Science	21	504	100%	\$0
Miscellany	17	432	100%	\$0
Language & Literature	16	400	100%	\$0
Anthropology	16	399	100%	\$0
Agriculture	14	393	95%	\$5
Earth Sciences	9	336	100%	\$0
History	12	309	100%	\$0
Philosophy	12	282	100%	\$0
Arts & Architecture	9	241	100%	\$0
Other Sciences	10	230	100%	\$0
Psychology	13	217	100%	\$0
Zoology	6	193	73%	\$54
Ecology	7	175	100%	\$0
Media & Communications	8	172	100%	\$0
Biology	5	130	100%	\$0
Library Science	2	94	100%	\$0
Technology	4	75	100%	\$0
Mathematics	5	73	100%	\$0
Religion	2	51	100%	\$0
Chemistry	2	34	100%	\$0
Physics	2	22	100%	\$0
Computer Science	2	14	100%	\$0

Zoology is the only subject with a significant (but low) average cost.

Costa Rica

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	74	2,087			\$1	-100%
Fee	1	30	1%	-96%	\$75	-92%
No-fee	73	2,057	99%	56%		
Biomed	7	194	9%	-66%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	7	194	100%	97%		
STEM	21	671	32%	3%	\$3	-99%
Fee	1	30	4%	-91%	\$75	-92%
No-fee	20	641	96%	83%		
H&SS	46	1,222	59%	41%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	46	1,222	100%	26%		

Mostly H&SS. One low-fee STEM journal, otherwise all no-fee.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	74	74	74	74	74	73
%No-fee	99%	99%	99%	99%	99%	99%
Articles	2,087	2,162	1,962	1,895	1,791	1,902
%No-fee	99%	98%	96%	97%	98%	98%
Change	-3%	10%	4%	6%	-6%	

Down a little after three years of growth.

Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	1	159	100%	\$0
Med.: 60-149	12	704	96%	\$3
Small: 20-59	38	971	100%	\$0
Smallest: 0-19	23	253	100%	\$0

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$0.20-\$499	1	30	\$2,250	\$75
No fee	73	2,057		
Total	74	2,087	\$2,250	\$1

Subject

Subject	Journals	Articles	%No-fee	\$/article
Education	7	374	100%	\$0
Ecology	4	211	100%	\$0
Medicine	7	194	100%	\$0
Agriculture	6	176	100%	\$0
Miscellany	2	128	100%	\$0
Engineering	3	112	100%	\$0
Sociology	6	110	100%	\$0
Language & Literature	4	107	100%	\$0
Political Science	5	107	100%	\$0
Anthropology	5	92	100%	\$0
Other Sciences	2	74	59%	\$30
Earth Sciences	3	65	100%	\$0
History	2	52	100%	\$0
Law	2	50	100%	\$0
Psychology	3	42	100%	\$0
Economics	3	37	100%	\$0
Arts & Architecture	2	36	100%	\$0
Religion	1	32	100%	\$0
Library Science	2	30	100%	\$0
Philosophy	2	25	100%	\$0
Zoology	2	17	100%	\$0
Mathematics	1	16	100%	\$0

The only fee is in other sciences.

Cuba

No fees.

Key Facts

	Journals	Articles	Art%	Rel%
All	115	7,059		
Biomed	45	3,016	43%	56%
STEM	37	1,330	19%	-40%
H&SS	33	2,713	38%	-7%

Light in STEM.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	113	114	111	111	5,650	105
Articles	7,059	6,621	5,720	5,650	5,297	5,088
Change	7%	16%	1%	7%	4%	

Growth every year.

Article Volume

	Journals	Articles	Percent	Art/Jrn
Large: 150-599	9	1,859	26%	207
Med.: 60-149	42	3,286	47%	78
Small: 20-59	62	1,914	27%	31
Smallest: 0-19	1	0		

Subject

Subject	Journals	Articles	Art/Jrn
Medicine	43	2,976	69
Education	15	1,853	124
Agriculture	11	340	31
Anthropology	6	337	56
Computer Science	3	319	106
Sociology	3	235	78
Engineering	6	178	30
Earth Sciences	4	127	32
Other Sciences	1	94	94
Ecology	3	90	30
Economics	3	89	30
Media & Communications	2	89	45
Technology	2	55	28
Chemistry	2	52	26
Zoology	2	44	22
Library Science	1	41	41
Biology	2	40	20
Language & Literature	1	36	36
Arts & Architecture	1	33	33
Physics	2	31	16

Medicine and agriculture account for a majority of articles.

Ecuador

No fees.

Key Facts

	Journals	Articles	Art%	Rel%
All	71	1,953		
Biomed	9	310	16%	-42%
STEM	16	343	18%	-44%
H&SS	46	1,300	67%	61%

Two-thirds H&SS.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	70	71	71	69	1,515	53
Articles	1,953	1,982	1,852	1,515	1,334	1,139
Change	-1%	7%	22%	14%	17%	

Down trivially (29 articles!) after four years of growth.

Article Volume

	Journals	Articles	Percent	Art/Jrn
Large: 150-599	1	96	5%	96
Med.: 60-149	7	465	24%	66
Small: 20-59	54	1,290	66%	24
Smallest: 0-19	8	102	5%	13

The large journal had at least 150 articles some time since 2015.

Subject

Subject	Journals	Articles	Art/Jrn
Miscellany	7	336	48
Economics	8	227	28
Sociology	8	211	26
Medicine	8	178	22
Arts & Architecture	6	157	26
Education	5	148	30
Biology	1	132	132
Law	5	115	23
Other Sciences	4	113	28
Agriculture	4	75	19
Technology	2	52	26
Media & Communications	1	39	39
Engineering	2	38	19
Political Science	2	31	16
Chemistry	1	25	25
Computer Science	2	22	11
Philosophy	1	20	20
Earth Sciences	1	18	18
Anthropology	2	16	8

Mexico

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	183	5,412			\$16	-95%
Fee	9	460	8%	-77%	\$193	-79%
No-fee	174	4,952	92%	45%		
Biomed	21	689	13%	-53%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	21	689	100%	97%		
STEM	33	1,355	25%	-20%	\$65	-86%
Fee	8	441	33%	-32%	\$201	-79%
No-fee	25	914	67%	29%		
H&SS	129	3,368	62%	50%	\$0	-100%
Fee	1	19	1%	-97%	\$7	-97%
No-fee	128	3,349	99%	26%		

Very few fees (none in biomed), very little biomed, mostly H&SS.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	175	177	178	175	167	160
%No-fee	95%	95%	95%	95%	95%	95%
Articles	5,412	5,348	5,139	5,045	4,826	4,398
%No-fee	92%	91%	92%	90%	92%	95%
Change	1%	4%	2%	5%	10%	

Growing (slowly) every year.

Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	3	257	82%	\$8
Med.: 60-149	26	1,797	82%	\$41
Small: 20-59	121	3,015	97%	\$4
Smallest: 0-19	33	343	96%	\$8

No largest.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$0.20-\$499	9	460	\$88,652	\$193
No fee	174	4,952		
Total	183	5,412	\$88,652	\$16

What fees there are, are modest.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	20	647	100%	\$0
Political Science	18	443	96%	\$0
Sociology	14	428	100%	\$0
History	12	427	100%	\$0
Language & Literature	14	397	100%	\$0
Agriculture	6	390	28%	\$114
Economics	18	359	100%	\$0
Anthropology	14	351	100%	\$0
Education	11	293	100%	\$0
Ecology	6	259	88%	\$23
Earth Sciences	6	244	78%	\$24
Zoology	4	201	61%	\$162
Philosophy	5	182	100%	\$0
Other Sciences	5	173	100%	\$0
Miscellany	5	120	100%	\$0
Media & Communications	4	97	100%	\$0
Law	5	75	100%	\$0
Arts & Architecture	3	69	100%	\$0
Library Science	2	64	100%	\$0
Psychology	4	63	100%	\$0
Engineering	3	48	100%	\$0
Biology	1	42	100%	\$0
Chemistry	2	25	100%	\$0
Mathematics	1	15	100%	\$0

As with some other countries, zoology and agriculture have the only three-digit average costs.

Paraguay

No fees.

Key Facts

	Journals	Articles	Art%	Rel%
All	25	536		
Biomed	12	321	60%	119%
STEM	4	58	11%	-65%
H&SS	9	157	29%	-29%

Mostly biomed.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	24	23	24	21	443	18
Articles	536	489	475	443	427	358
Change	10%	3%	7%	4%	19%	

Growing every year.

Article Volume

	Journals	Articles	Percent	Art/Jrn
Small: 20-59	18	459	86%	26
Smallest: 0-19	6	77	14%	13

All small.

Subject

Subject	Journals	Articles	Art/Jrn
Medicine	11	321	29
Sociology	4	73	18
Law	2	36	18
Miscellany	1	23	23
Other Sciences	1	22	22
Economics	1	17	17
Agriculture	1	16	16
Mathematics	1	14	14
Political Science	1	8	8
Zoology	1	6	6

Mostly medicine, otherwise varied for such a small overall set.

Peru

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	97	2,805			\$7	-98%
Fee	2	107	4%	-90%	\$178	-80%
No-fee	95	2,698	96%	53%		
Biomed	20	1,003	36%	31%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	20	1,003	100%	97%		
STEM	22	529	19%	-40%	\$36	-92%
Fee	2	107	20%	-58%	\$178	-82%
No-fee	20	422	80%	53%		
H&SS	55	1,273	45%	10%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	55	1,273	100%	26%		

No fees except for two agriculture journals.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	94	96	92	88	84	80
%No-fee	98%	98%	98%	98%	98%	98%
Articles	2,805	3,000	2,584	2,305	2,284	2,100
%No-fee	96%	96%	97%	96%	98%	97%
Change	-6%	16%	12%	1%	9%	

Down after two strong years.

Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	1	157	100%	\$0
Med.: 60-149	13	670	90%	\$25
Small: 20-59	66	1,765	98%	\$1
Smallest: 0-19	17	213	100%	\$0

No largest.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$0.20-\$499	2	107	\$19,011	\$178
No fee	95	2,698		
Total	97	2,805	\$19,011	\$7

One (barely-)medium \$150 journal, one small \$52 journal.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	17	886	100%	\$0
Law	8	216	100%	\$0
Agriculture	5	185	42%	\$103
Education	5	156	100%	\$0
Language & Literature	4	135	100%	\$0
Psychology	6	134	100%	\$0
Media & Communications	4	132	100%	\$0
Economics	7	124	100%	\$0
Biology	3	117	100%	\$0
Engineering	6	116	100%	\$0
Miscellany	5	115	100%	\$0
Ecology	5	103	100%	\$0
Anthropology	5	83	100%	\$0
History	2	51	100%	\$0
Sociology	3	50	100%	\$0
Mathematics	1	37	100%	\$0
Physics	1	36	100%	\$0
Arts & Architecture	2	28	100%	\$0
Zoology	2	25	100%	\$0
Library Science	1	23	100%	\$0
Philosophy	1	19	100%	\$0
Other Sciences	1	14	100%	\$0
Computer Science	1	13	100%	\$0
Political Science	2	7	100%	\$0

Uruguay

No fees.

Key Facts

	Journals	Articles	Art%	Rel%
All	32	780		
Biomed	7	201	26%	-6%
STEM	6	154	20%	-37%
H&SS	19	425	54%	32%

Mostly H&SS.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	30	30	30	31	30	23
Articles	780	738	673	586	605	447
Change	6%	10%	15%	-3%	35%	

Three years of growth.

Article Volume

	Journals	Articles	Percent	Art/Jrn
Med.: 60-149	2	107	14%	54
Small: 20-59	21	583	75%	28
Smallest: 0-19	7	90	12%	13

Mostly small.

Subject

Subject	Journals	Articles	Art/Jrn
Medicine	6	201	34
Law	2	72	36
Psychology	2	70	35
Ecology	1	53	53
Education	3	50	17
Miscellany	2	50	25
Media & Communications	2	43	22
Agriculture	1	39	39
Library Science	1	34	34
Anthropology	2	31	16
Engineering	2	30	15
Language & Literature	1	22	22
Sociology	1	21	21
Arts & Architecture	1	20	20
Technology	1	18	18
Zoology	1	14	14
Political Science	1	12	12

Another case of wide variety for a relatively small set of journals.

Venezuela

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	30	927			\$5	-99%
Fee	1	10	1%	-97%	\$450	-50%
No-fee	29	917	99%	57%		
Biomed	4	108	12%	-57%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	4	108	100%	97%		
STEM	5	74	8%	-74%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	5	74	100%	91%		
H&SS	21	745	80%	94%	\$6	-88%
Fee	1	10	1%	-94%	\$450	90%
No-fee	20	735	99%	25%		

One smallest \$450 journal in language and literature; no other fees.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	27	30	30	30	29	29
%No-fee	96%	97%	97%	97%	97%	97%
Articles	927	924	752	630	626	516
%No-fee	99%	98%	99%	100%	97%	98%
Change	0%	23%	19%	1%	21%	

Flat after two good years; no down years.

Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	1	201	100%	\$0
Med.: 60-149	5	302	100%	\$0
Small: 20-59	13	312	100%	\$0
Smallest: 0-19	11	112	91%	\$40

Fees and revenue redundant: one \$450 journal with ten articles.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Economics	3	244	100%	\$0
Sociology	6	207	100%	\$0
Medicine	4	108	100%	\$0
Education	3	86	100%	\$0
Miscellany	2	66	100%	\$0
Engineering	1	37	100%	\$0
Language & Literature	2	36	72%	\$125
Political Science	2	36	100%	\$0
History	1	33	100%	\$0
Law	1	26	100%	\$0
Mathematics	1	14	100%	\$0
Chemistry	1	12	100%	\$0
Arts & Architecture	1	11	100%	\$0
Technology	1	8	100%	\$0
Zoology	1	3	100%	\$0

Slightly unusual that economics and sociology are the largest subjects.

Other Latin American Countries

Thirteen countries, 42 journals.

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	42	764			\$2	-99%
Fee	1	4	1%	-99%	\$350	-61%
No-fee	41	760	99%	58%		
Biomed	5	158	21%	-24%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	5	158	100%	97%		
STEM	12	221	29%	-7%	\$6	-99%
Fee	1	4	2%	-96%	\$350	-64%
No-fee	11	217	98%	88%		
H&SS	25	385	50%	22%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	25	385	100%	26%		

All no-fee except one \$350 earth sciences journal with four articles.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	37	40	39	39	34	28
%No-fee	97%	98%	97%	97%	97%	96%
Articles	764	827	770	717	543	434
%No-fee	99%	100%	99%	99%	99%	99%
Change	-8%	7%	7%	32%	25%	

Down a bit after four growth years.

Article Volume

	Journals	Articles	%No-fee	\$/article
Small: 20-59	26	631	100%	\$0
Smallest: 0-19	16	133	97%	\$11

Fees and revenue: one \$350 earth sciences with four articles.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Education	9	163	100%	\$0
Medicine	4	148	100%	\$0
Anthropology	4	87	100%	\$0
Ecology	4	71	100%	\$0
Computer Science	1	46	100%	\$0
Other Sciences	2	38	100%	\$0
Agriculture	2	32	100%	\$0
Law	2	31	100%	\$0
Media & Communications	1	29	100%	\$0
Sociology	3	27	100%	\$0
Political Science	1	23	100%	\$0
Engineering	1	16	100%	\$0
Zoology	1	14	100%	\$0
Economics	2	11	100%	\$0
Biology	1	10	100%	\$0
Library Science	1	9	100%	\$0
Psychology	2	5	100%	\$0
Earth Sciences	1	4	0%	\$350

Country Profiles**Bahamas**

One no-fee anthropology journal with 16 articles in 2021.

Barbados

One no-fee education journal with 50 articles in 2021.

Bolivia

Seven no-fee journals with a total of 141 articles in 2021.

Dominican Republic

Seven no-fee articles with a total of 193 articles in 2021.

El Salvador

Three no-fee journals (two active in 2021), 18 articles in 2021.

Guadeloupe

One no-fee journal with eleven articles in 2021.

Guam

One \$350 earth sciences journal with four articles in 2021.

Guatemala

Two no-fee journals (one active in 2021), 21 articles in 2021.

Honduras

Three no-fee journals, 47 articles in 2021.

Nicaragua

Eight no-fee journals (six active in 2021), 134 articles in 2021.

Panama

Three no-fee journals, 86 articles in 2021.

Puerto Rico

Four no-fee journals (three active in 2021), 22 articles in 2021.

Trinidad and Tobago

One no-fee journal with 21 articles in 2021.

3Middle East

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	1,245	52,121			\$82	-76%
Fee	351	19,663	38%	2%	\$216	-76%
No-fee	894	32,458	62%	-1%		
Biomed	417	19,391	37%	36%	\$104	-83%
Fee	101	6,018	31%	-37%	\$335	-73%
No-fee	316	13,373	69%	36%		
STEM	347	13,830	27%	-15%	\$37	-92%
Fee	106	5,166	37%	-22%	\$98	-90%
No-fee	241	8,664	63%	20%		
H&SS	481	18,900	36%	-12%	\$91	85%
Fee	144	8,479	45%	115%	\$204	-14%
No-fee	337	10,421	55%	-30%		

Heavy in biomed. Generally low fees.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	1,185	1,214	1,191	1,158	1,099	1,021
%No-fee	72%	72%	72%	71%	71%	71%
Articles	52,121	49,903	46,770	45,253	42,266	40,045
%No-fee	62%	63%	62%	61%	61%	60%
Change	4%	7%	3%	7%	6%	

Modest growth every year.

Article Volume

	Journals	Articles	%No-fee	\$/article
Largest: 600+	4	3,187	32%	\$170
Large: 150-599	58	8,900	38%	\$141
Med.: 60-149	259	17,121	62%	\$93
Small: 20-59	782	21,460	76%	\$38
Smallest: 0-19	142	1,453	85%	\$25

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$2,000+	3	106	\$225,200	\$2,125
\$1,000-\$1,999	2	130	\$219,000	\$1,685
\$500-\$999	24	1,488	\$1,032,231	\$694
\$0.20-\$499	322	17,939	\$2,775,272	\$155
No fee	894	32,458		
Total	1,245	52,121	\$4,251,703	\$82

Very few pricey journals.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	386	18,465	71%	\$102
Language & Literature	46	3,006	22%	\$184
Agriculture	64	2,823	46%	\$37
Economics	76	2,565	43%	\$145
Education	72	2,479	73%	\$54
Engineering	49	2,345	81%	\$17
Zoology	39	2,014	41%	\$67
Anthropology	47	1,823	38%	\$160
Ecology	44	1,664	50%	\$58
Sociology	40	1,606	64%	\$19
Library Science	10	1,165	98%	\$4
Earth Sciences	35	1,070	70%	\$30
Arts & Architecture	26	1,052	29%	\$200
Religion	42	1,027	84%	\$11
Mathematics	31	969	95%	\$5
Law	20	961	65%	\$20
Other Sciences	25	953	62%	\$61
Biology	31	926	35%	\$151
Miscellany	17	788	63%	\$56
History	22	681	82%	\$12
Chemistry	19	645	70%	\$31
Technology	11	606	85%	\$6
Psychology	20	552	53%	\$46
Political Science	20	544	85%	\$12
Computer Science	20	506	73%	\$20
Media & Communications	14	389	72%	\$17
Philosophy	9	262	39%	\$40
Physics	10	235	90%	\$7

Oddly, the subjects averaging more than \$155 are all H&SS.

Country of Publication

Country	Journals	Articles	%no-fee	\$/article
Bahrain	1	300	100%	\$0
Egypt	42	2,110	13%	\$167
Iran	654	24,586	61%	\$84
Iraq	66	4,349	12%	\$139
Israel	3	100	100%	\$0
Jordan	3	129	22%	\$130
Lebanon	2	171	9%	\$137
Oman	7	336	100%	\$0
Pakistan	1	35	0%	\$92
Palestine	1	8	100%	\$0
Qatar	11	527	98%	\$25
Saudi Arabia	7	196	100%	\$0
Syria	2	15	100%	\$0
Turkey	429	18,885	79%	\$61
United Arab Emirates	10	294	67%	\$65
Yemen	6	80	43%	\$63

Egypt

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	42	2,110			\$167	-50%
Fee	30	1,828	87%	134%	\$192	-79%
No-fee	12	282	13%	-79%		
Biomed	16	518	25%	-10%	\$108	-83%
Fee	12	414	80%	63%	\$135	-89%
No-fee	4	104	20%	-61%		
STEM	19	1,025	49%	56%	\$104	-78%
Fee	13	878	86%	79%	\$121	-88%
No-fee	6	147	14%	-73%		
H&SS	7	567	27%	-35%	\$334	576%
Fee	5	536	95%	353%	\$353	49%
No-fee	2	31	5%	-93%		

Heavily fee-oriented throughout. Strong in STEM.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	38	38	38	35	33	29
%No-fee	26%	32%	32%	26%	21%	17%
Articles	2,110	1,677	1,639	1,422	1,057	812
%No-fee	13%	15%	15%	13%	13%	10%
Change	26%	2%	15%	35%	30%	

Growth every year, strong growth most years; doubled since 2017.

Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	5	1,158	0%	\$232
Med.: 60-149	3	222	4%	\$127
Small: 20-59	25	648	42%	\$69
Smallest: 0-19	9	82	0%	\$127

Half of the articles are in large fee journals.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$500-\$999	1	0	\$0	
\$0.20-\$499	29	1,828	\$351,623	\$192
No fee	12	282		
Total	42	2,110	\$351,623	\$167

Mostly modest fees; one medium-fee journal had no 2021 articles.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Zoology	8	617	9%	\$109
Arts & Architecture	2	446	2%	\$393
Medicine	8	277	26%	\$123
Biology	8	241	13%	\$90
Ecology	3	211	4%	\$96
Agriculture	3	158	37%	\$108
Anthropology	3	76	0%	\$165
Earth Sciences	1	24	100%	\$0
Library Science	1	23	100%	\$0
Miscellany	1	22	0%	\$70
Engineering	1	15	0%	\$120
Chemistry	1	0		
Mathematics	1	0		
Physics	1	0		

Arts & architecture is by far the most expensive subject. The Big Eleven adds eight journals; 1,166 articles in 2021; \$657 average cost.

Iran

Half of all Middle Eastern OA journals; 47% of 2021 articles.

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	654	24,586			\$84	-75%
Fee	216	9,599	39%	5%	\$215	-76%
No-fee	438	14,987	61%	-3%		
Biomed	271	11,967	49%	78%	\$134	-78%
Fee	65	4,501	38%	-23%	\$357	-72%
No-fee	206	7,466	62%	23%		
STEM	193	6,791	28%	-12%	\$32	-93%
Fee	57	2,494	37%	-23%	\$87	-91%
No-fee	136	4,297	63%	21%		
H&SS	190	5,828	24%	-43%	\$41	-16%
Fee	94	2,604	45%	114%	\$92	-61%
No-fee	96	3,224	55%	-30%		

Strong in biomed, light in H&SS, low-fee in general.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	623	643	629	620	597	576
%No-fee	67%	67%	66%	67%	66%	66%
Articles	24,586	24,583	23,641	23,006	22,881	22,871
%No-fee	61%	59%	57%	57%	56%	56%
Change	0%	4%	3%	1%	0%	

Flat to slow gains across the board.

Article Volume

	Journals	Articles	%No-fee	\$/article
Largest: 600+	2	1,419	63%	\$146
Large: 150-599	19	2,479	40%	\$171
Med.: 60-149	115	7,120	48%	\$123
Small: 20-59	479	13,191	71%	\$42
Smallest: 0-19	39	377	73%	\$27

Mostly small journals, but the larger ones have most of the fees.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$500-\$999	15	1,027	\$760,376	\$740
\$0.20-\$499	201	8,572	\$1,306,043	\$152
No fee	438	14,987		
Total	654	24,586	\$2,066,419	\$84

No expensive journals.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	253	11,344	64%	\$131
Ecology	38	1,359	53%	\$57
Agriculture	35	1,190	44%	\$29
Library Science	5	1,041	100%	\$0
Engineering	23	954	78%	\$23
Economics	37	889	42%	\$46
Zoology	14	748	46%	\$48
Education	20	672	60%	\$49
Language & Literature	26	648	45%	\$37
Biology	18	623	38%	\$189
Earth Sciences	22	596	69%	\$26
Anthropology	18	569	37%	\$81
Mathematics	16	528	95%	\$5
Chemistry	14	513	65%	\$38
Computer Science	13	372	80%	\$14
Sociology	15	342	49%	\$31
Psychology	13	335	22%	\$76
Religion	18	333	61%	\$25
Physics	9	235	90%	\$7
Philosophy	6	225	28%	\$47
Technology	7	216	59%	\$18
Law	8	203	84%	\$15
Political Science	7	180	56%	\$37
History	7	175	51%	\$40
Arts & Architecture	6	147	0%	\$155
Other Sciences	2	80	100%	\$0
Media & Communications	3	45	38%	\$44
Miscellany	1	24	100%	\$0

Nearly half medicine. No subject breaks the \$200 level for average fee.

Iraq

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	66	4,349			\$139	-59%
Fee	51	3,807	88%	137%	\$159	-82%
No-fee	15	542	12%	-80%		
Biomed	16	447	10%	-62%	\$128	-79%
Fee	14	426	95%	94%	\$134	-89%
No-fee	2	21	5%	-91%		
STEM	33	1,483	34%	9%	\$101	-78%
Fee	26	1,168	79%	65%	\$128	-87%
No-fee	7	315	21%	-59%		
H&SS	17	2,419	56%	34%	\$165	234%
Fee	11	2,213	91%	338%	\$180	-24%
No-fee	6	206	9%	-89%		

Very fee-oriented. Mostly H&SS, light in biomed.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	62	64	63	60	50	44
%No-fee	24%	23%	22%	18%	20%	18%
Articles	4,349	2,984	2,911	3,094	2,587	2,227
%No-fee	12%	19%	20%	12%	18%	18%
Change	46%	3%	-6%	20%	16%	

Up sharply in 2021.

Article Volume

	Journals	Articles	%No-fee	\$/article
Largest: 600+	1	1,664	0%	\$200
Large: 150-599	5	516	20%	\$121
Med.: 60-149	24	1,386	13%	\$114
Small: 20-59	32	750	33%	\$67
Smallest: 0-19	4	33	30%	\$62

More than one-third of the articles are in one very large \$200 journal.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$0.20-\$499	51	3,807	\$605,163	\$159
No fee	15	542		
Total	66	4,349	\$605,163	\$139

No moderate or high fees.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Language & Literature	2	1,722	3%	\$193
Other Sciences	12	514	37%	\$84
Medicine	15	437	3%	\$131
Zoology	5	232	0%	\$137
Agriculture	3	214	0%	\$171
Engineering	7	210	0%	\$80
Miscellany	5	167	43%	\$96
Education	2	134	0%	\$118
Earth Sciences	1	133	0%	\$125
Technology	2	127	100%	\$0
Arts & Architecture	2	115	3%	\$83
Anthropology	2	108	0%	\$100
History	1	74	100%	\$0
Law	1	50	0%	\$100
Computer Science	2	41	0%	\$93
Economics	1	27	0%	\$150
Library Science	1	22	0%	\$200
Chemistry	1	12	0%	\$60
Biology	1	10	100%	\$0

Library science as the most expensive? An artifact of overall averages.

Qatar

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	11	527			\$25	-93%
Fee	1	13	2%	-93%	\$995	10%
No-fee	10	514	98%	55%		
Biomed	3	132	25%	-8%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	3	132	100%	97%		
STEM	1	13	2%	-92%	\$995	114%
Fee	1	13	100%	109%	\$995	2%
No-fee	0	0	0%	-100%		
H&SS	7	382	72%	75%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	7	382	100%	26%		

One smallest \$995 fee STEM journal, otherwise all no-fee.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	11	11	10	7	7	7
%No-fee	91%	91%	90%	86%	86%	86%
Articles	527	363	315	151	170	306
%No-fee	98%	99%	98%	99%	94%	94%
Change	45%	15%	109%	-11%	-44%	

Three good years, tripling 2017 figures.

Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	2	205	100%	\$0
Med.: 60-149	2	143	100%	\$0
Small: 20-59	3	139	100%	\$0
Smallest: 0-19	4	40	68%	\$323

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$500-\$999	1	13	\$12,935	\$995
No fee	10	514		
Total	11	527	\$12,935	\$25

Subject

Subject	Journals	Articles	%No-fee	\$/article
Law	2	163	100%	\$0
Medicine	3	132	100%	\$0
Religion	1	75	100%	\$0
Miscellany	1	68	100%	\$0
Education	1	52	100%	\$0
Other Sciences	1	13	0%	\$995
Economics	1	12	100%	\$0
Library Science	1	12	100%	\$0

Turkey

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	429	18,885			\$61	-82%
Fee	41	3,983	21%	-43%	\$288	-68%
No-fee	388	14,902	79%	25%		
Biomed	100	5,745	30%	11%	\$48	-92%
Fee	8	581	10%	-79%	\$473	-63%
No-fee	92	5,164	90%	77%		
STEM	87	4,018	21%	-32%	\$4	-99%
Fee	4	565	14%	-71%	\$30	-97%
No-fee	83	3,453	86%	65%		
H&SS	242	9,122	48%	17%	\$94	90%
Fee	29	2,837	31%	49%	\$302	28%
No-fee	213	6,285	69%	-13%		

Few fees, light in STEM. Second largest Middle East OA program.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	416	424	417	402	378	332
%No-fee	90%	90%	90%	90%	90%	91%
Articles	18,885	18,975	17,225	16,388	14,407	12,625
%No-fee	79%	78%	79%	79%	78%	77%
Change	0%	10%	5%	14%	14%	

Flat after four years of moderate growth.

Article Volume

	Journals	Articles	%No-fee	\$/article
Largest: 600+	1	104	100%	\$0
Large: 150-599	25	4,086	42%	\$117
Med.: 60-149	105	7,515	82%	\$68
Small: 20-59	226	6,384	95%	\$25
Smallest: 0-19	72	796	100%	\$0

That largest journal had 740 articles in 2019.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$2,000+	2	106	\$225,200	\$2,125
\$1,000-\$1,999	2	130	\$219,000	\$1,685
\$500-\$999	3	448	\$258,920	\$578
\$0.20-\$499	34	3,299	\$444,890	\$135
No fee	388	14,902		
Total	429	18,885	\$1,148,010	\$61

A few expensive journals, but most are modestly-priced or no-fee.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	97	5,700	90%	\$48
Economics	35	1,558	46%	\$201
Education	43	1,424	81%	\$61
Sociology	25	1,264	68%	\$15
Agriculture	22	1,253	56%	\$13
Anthropology	24	1,070	45%	\$207
Engineering	14	841	100%	\$0
Language & Literature	17	615	50%	\$320
Religion	21	584	100%	\$0
Law	7	504	50%	\$22
History	14	432	91%	\$2
Zoology	11	400	100%	\$0
Mathematics	12	377	100%	\$0
Political Science	13	364	100%	\$0
Media & Communications	11	344	76%	\$13
Miscellany	6	332	100%	\$0
Arts & Architecture	15	322	84%	\$8
Earth Sciences	11	317	100%	\$0
Other Sciences	6	289	100%	\$0
Technology	2	263	100%	\$0
Psychology	6	205	100%	\$0
Chemistry	3	120	100%	\$0
Ecology	3	94	100%	\$0
Library Science	2	67	100%	\$0
Computer Science	3	64	70%	\$17
Biology	3	45	100%	\$0
Philosophy	3	37	100%	\$0

Another case where language & literature is most expensive.

United Arab Emirates

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	10	294			\$65	-81%
Fee	6	96	33%	-12%	\$200	-78%
No-fee	4	198	67%	7%		
Biomed	3	149	51%	85%	\$129	-79%
Fee	2	96	64%	31%	\$200	-84%
No-fee	1	53	36%	-30%		
STEM	3	0	0%	-100%		
Fee	3	0				
No-fee	0	0				
H&SS	4	145	49%	19%	\$0	-100%
Fee	1	0	0%	-100%	\$0	-100%
No-fee	3	145	100%	26%		

Most journals have fees but most articles are in no-fee journals.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	5	4	8	8	8	7
%No-fee	80%	50%	25%	25%	25%	14%
Articles	294	172	163	221	255	274
%No-fee	67%	40%	25%	22%	15%	6%
Change	71%	6%	-26%	-13%	-7%	

Most *active* journals don't have fees.

Article Volume

	Journals	Articles	%No-fee	\$/article
Med.: 60-149	4	270	64%	\$71
Small: 20-59	2	0		
Smallest: 0-19	4	24	100%	\$0

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$2,000+	1	0		
\$500-\$999	4	0		
\$0.20-\$499	1	96	\$19,200	\$200
No fee	4	198		
Total	10	294	\$19,200	\$65

There's only one fee journal with any 2021 articles.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	3	149	36%	\$129
Education	3	145	100%	\$0
Computer Science	1	0		
Economics	1	0		
Engineering	1	0		
Other Sciences	1	0		

Other Middle Eastern Countries

Nine countries, 33 journals.

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	33	1,370			\$35	-89%
Fee	6	337	25%	-34%	\$143	-84%
No-fee	27	1,033	75%	20%		
Biomed	8	433	32%	15%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	8	433	100%	97%		
STEM	11	500	36%	17%	\$9	-98%
Fee	2	48	10%	-80%	\$89	-91%
No-fee	9	452	90%	73%		
H&SS	14	437	32%	-23%	\$101	104%
Fee	4	289	66%	217%	\$153	-35%
No-fee	10	148	34%	-57%		

Odd: H&SS mostly fee, STEM mostly no-fee, biomed all no-fee.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	30	30	26	26	26	26
%No-fee	80%	80%	85%	88%	88%	88%
Articles	1,370	1,149	876	971	909	930
%No-fee	75%	76%	87%	89%	90%	95%
Change	19%	31%	-10%	7%	-2%	

Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	2	456	66%	\$51
Med.: 60-149	6	465	83%	\$31
Small: 20-59	15	348	71%	\$30
Smallest: 0-19	10	101	100%	\$0

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$0.20-\$499	6	337	\$48,353	\$143
No fee	27	1,033		
Total	33	1,370	\$48,353	\$35

Subjects

Subject	Journals	Articles	%No-fee	\$/article
Medicine	7	426	100%	\$0
Engineering	3	325	100%	\$0
Miscellany	3	175	0%	\$150
Economics	1	79	0%	\$185
Mathematics	2	64	67%	\$33
Other Sciences	3	57	53%	\$38
Education	3	52	100%	\$0
Law	2	41	100%	\$0
Religion	2	35	0%	\$92
Computer Science	1	29	100%	\$0
Arts & Architecture	1	22	100%	\$0
Language & Literature	1	21	100%	\$0
Zoology	1	17	100%	\$0
Psychology	1	12	100%	\$0
Agriculture	1	8	100%	\$0
Biology	1	7	100%	\$0

Country Summaries

Bahrain

One no-fee engineering journal with 300 articles in 2021.

Israel

Three no-fee journals, 100 articles in 2021.

Jordan

Three journals, two with low fees, 129 articles in 2021.

Lebanon

Two journals, one with \$150 fees, 171 articles in 2021.

Oman

Seven no-fee journals, 336 articles in 2021.

Pakistan

One \$92 religion journal with 35 articles in 2021.

Palestine

One no-fee engineering journal with eight articles in 2021.

Saudi Arabia

Seven no-fee journals, five active, 196 articles in 2021. The big eleven adds nine journals with 2,042 articles and \$924 average cost.

Syria

Two no-fee journals with 15 articles in 2021.

Yemen

Six journals, two with modest fees, total of 80 articles in 2021.

Pacific/English

Australia, Canada, New Zealand and the United States.

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	954	61,230			\$1,409	320%
Fee	201	40,385	66%	78%	\$2,137	136%
No-fee	753	20,845	34%	-46%		
Biomed	203	23,765	39%	42%	\$1,851	199%
Fee	87	18,809	79%	61%	\$2,339	85%
No-fee	116	4,956	21%	-59%		
STEM	194	24,444	40%	28%	\$1,696	264%
Fee	86	19,884	81%	70%	\$2,084	114%
No-fee	108	4,560	19%	-64%		
H&SS	557	13,021	21%	-49%	\$66	33%
Fee	28	1,692	13%	-38%	\$505	113%
No-fee	529	11,329	87%	10%		

Expensive and mostly fee—except H&SS, predominantly no-fee.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	874	894	856	817	786	721
%No-fee	78%	79%	79%	79%	80%	81%
Articles	61,230	60,859	50,667	42,827	38,732	33,472
%No-fee	34%	34%	35%	40%	45%	48%
Change	1%	20%	18%	11%	16%	

Almost no growth in 2021 after four strong years.

Article Volume

	Journals	Articles	%No-fee	\$/article
Largest: 600+	17	24,668	2%	\$2,268
Large: 150-599	67	14,626	26%	\$1,609
Med.: 60-149	127	8,506	62%	\$522
Small: 20-59	472	11,304	81%	\$194
Smallest: 0-19	271	2,126	93%	\$83

The bigger the journal, the costlier the articles—dramatically so.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$2,000+	58	21,834	\$63,904,938	\$2,927
\$1,000-\$1,999	61	14,488	\$20,637,167	\$1,424
\$500-\$999	24	1,713	\$1,173,350	\$685
\$0.20-\$499	58	2,350	\$583,507	\$248
No fee	753	20,845		
Total	954	61,230	\$86,298,963	\$1,409

Country of Publication

Country	Journals	Articles	%no-fee	\$/article
Australia	80	4,426	49%	\$1,035
Canada	195	7,206	59%	\$856
New Zealand	16	309	97%	\$6
United States	663	49,289	29%	\$1,533

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	173	17,946	24%	\$1,874
Physics	17	7,104	5%	\$2,249
Biology	30	5,819	10%	\$1,783
Chemistry	11	4,173	5%	\$1,390
Other Sciences	12	3,939	3%	\$2,981
Education	104	3,023	91%	\$44
Mathematics	25	2,608	47%	\$546
Computer Science	31	2,168	63%	\$621
Sociology	58	1,404	75%	\$105
Ecology	31	1,380	46%	\$646
Earth Sciences	21	1,207	22%	\$1,375
Anthropology	43	1,178	69%	\$35
Economics	38	1,139	90%	\$47
Language & Literature	58	1,088	94%	\$19
Agriculture	16	855	5%	\$1,873
Philosophy	36	762	93%	\$7
Library Science	32	759	100%	\$0
Media & Communications	35	701	100%	\$0
Political Science	30	649	100%	\$0
Psychology	14	607	23%	\$744
History	30	499	100%	\$0
Arts & Architecture	26	437	100%	\$0
Engineering	14	382	56%	\$225
Technology	8	347	6%	\$2,143
Law	21	336	100%	\$0
Zoology	8	281	36%	\$633
Religion	15	226	100%	\$0
Miscellany	17	213	100%	\$0

Australia

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	80	4,426			\$1,035	209%
Fee	8	2,270	51%	39%	\$2,019	123%
No-fee	72	2,156	49%	-23%		
Biomed	20	2,721	61%	125%	\$1,677	171%
Fee	6	2,135	78%	60%	\$2,137	69%
No-fee	14	586	22%	-58%		
STEM	9	691	16%	-50%	\$13	-97%
Fee	1	59	9%	-82%	\$150	-85%
No-fee	8	632	91%	75%		
H&SS	51	1,014	23%	-45%	\$11	-77%
Fee	1	76	7%	-64%	\$150	-37%
No-fee	50	938	93%	17%		

Mostly high-fee biomed—but STEM and H&SS are almost all no-fee.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	68	75	74	72	74	68
%No-fee	88%	89%	89%	92%	93%	93%
Articles	4,426	4,317	3,784	3,310	3,129	2,485
%No-fee	49%	48%	51%	56%	63%	70%
Change	3%	14%	14%	6%	26%	

Growth every year.

Article Volume

	Journals	Articles	%No-fee	\$/article
Largest: 600+	2	1,312	0%	\$2,253
Large: 150-599	4	1,300	40%	\$1,222
Med.: 60-149	10	736	90%	\$15
Small: 20-59	37	884	88%	\$30
Smallest: 0-19	27	194	100%	\$0

Classic correlation between size and cost.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$2,000+	3	1,642	\$3,700,076	\$2,253
\$1,000-\$1,999	1	450	\$845,023	\$1,878
\$0.20-\$499	4	178	\$37,526	\$211
No fee	72	2,156		
Total	80	4,426	\$4,582,625	\$1,035

No medium-priced journals at all.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	15	2,291	22%	\$1,665
Biology	5	430	21%	\$1,741
Computer Science	2	327	100%	\$0
Mathematics	1	230	100%	\$0
Education	9	222	100%	\$0
Sociology	5	173	56%	\$66
Law	8	130	100%	\$0
Media & Communications	6	95	100%	\$0
Engineering	3	91	35%	\$97
Philosophy	3	78	100%	\$0
Economics	4	60	100%	\$0
History	4	54	100%	\$0
Religion	2	51	100%	\$0
Anthropology	2	42	100%	\$0
Language & Literature	3	38	100%	\$0
Earth Sciences	2	30	100%	\$0
Miscellany	1	30	100%	\$0
Political Science	2	22	100%	\$0
Arts & Architecture	1	13	100%	\$0
Ecology	1	13	100%	\$0
Library Science	1	6	100%	\$0

Only medicine and biology have significant costs, but that's most of the articles. The big eleven add 31 journals with 2,568 articles in 2021 at an average cost of \$2,373.

Canada

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	195	7,206			\$856	155%
Fee	36	2,973	41%	11%	\$2,074	129%
No-fee	159	4,233	59%	-7%		
Biomed	45	2,990	41%	52%	\$1,697	174%
Fee	21	2,124	71%	45%	\$2,389	89%
No-fee	24	866	29%	-43%		
STEM	23	729	10%	-68%	\$1,022	119%
Fee	10	461	63%	32%	\$1,617	66%
No-fee	13	268	37%	-30%		
H&SS	127	3,487	48%	17%	\$100	102%
Fee	5	388	11%	-47%	\$898	280%
No-fee	122	3,099	89%	12%		

Light in STEM, strong elsewhere. Fee-heavy in biomed and STEM.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	180	187	183	181	168	153
%No-fee	81%	81%	81%	80%	82%	83%
Articles	7,206	8,363	6,721	6,173	5,548	4,962
%No-fee	59%	53%	56%	57%	61%	64%
Change	-14%	24%	9%	11%	12%	

Down 2021 after four years of growth—and still higher than 2019.

Article Volume

	Journals	Articles	%No-fee	\$/article
Largest: 600+	2	1,264	0%	\$2,628
Large: 150-599	9	1,513	36%	\$1,172
Med.: 60-149	21	1,275	78%	\$385
Small: 20-59	111	2,726	86%	\$195
Smallest: 0-19	52	428	85%	\$116

The same price:size correlation.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$2,000+	7	1,862	\$4,914,034	\$2,639
\$1,000-\$1,999	19	645	\$1,106,402	\$1,715
\$0.20-\$499	10	466	\$146,898	\$315
No fee	159	4,233		
Total	195	7,206	\$6,167,333	\$856

Like Australia, Canada has no medium-priced journals.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	43	2,970	28%	\$1,708
Economics	10	637	100%	\$0
Education	24	637	100%	\$0
Psychology	4	389	6%	\$873
Anthropology	13	294	97%	\$12
Sociology	12	293	100%	\$0
Computer Science	6	290	12%	\$1,969
Political Science	9	250	100%	\$0
Philosophy	12	203	93%	\$26
Language & Literature	11	191	100%	\$0
Library Science	5	151	100%	\$0
Media & Communications	7	125	100%	\$0
Ecology	5	123	37%	\$452
History	7	100	100%	\$0
Mathematics	2	81	100%	\$0
Engineering	3	75	39%	\$202
Other Sciences	2	75	0%	\$1,350
Religion	3	59	100%	\$0
Law	3	57	100%	\$0
Miscellany	4	56	100%	\$0
Chemistry	2	46	100%	\$0
Arts & Architecture	3	45	100%	\$0
Earth Sciences	2	32	100%	\$0
Biology	2	20	100%	\$0
Zoology	1	7	0%	\$319

A bit unusual: computer science has the highest average fees.

New Zealand

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	16	309			\$6	-98%
Fee	1	9	3%	-92%	\$200	-78%
No-fee	15	300	97%	54%		
Biomed	1	16	5%	-81%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	1	16	100%	97%		
STEM	5	87	28%	-10%	\$21	-96%
Fee	1	9	10%	-78%	\$200	-79%
No-fee	4	78	90%	72%		
H&SS	10	206	67%	61%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	10	206	100%	26%		

Other than one small \$200 zoology journal, entirely no-fee.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	15	15	14	15	15	13
%No-fee	93%	93%	100%	100%	100%	100%
Articles	309	365	312	297	318	232
%No-fee	97%	94%	100%	100%	100%	100%
Change	-15%	17%	5%	-7%	37%	

Down in 2021 after strong 2020.

Article Volume

	Journals	Articles	%No-fee	\$/article
Med.: 60-149	1	28	100%	\$0
Small: 20-59	10	245	96%	\$7
Smallest: 0-19	5	36	100%	\$0

Almost all smaller journals.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$0.20-\$499	1	9	\$1,800	\$200
No fee	15	300		
Total	16	309	\$1,800	\$6

Subject

Subject	Journals	Articles	%No-fee	\$/article
Education	4	126	100%	\$0
Mathematics	2	62	100%	\$0
Media & Communications	1	28	100%	\$0
Economics	3	24	100%	\$0
Philosophy	1	21	100%	\$0
Biology	1	16	100%	\$0
Ecology	1	15	100%	\$0
Zoology	1	9	0%	\$200
Political Science	1	7	100%	\$0
Computer Science	1	1	100%	\$0

No medical OA journals.

The big eleven add one no-fee journal with 44 articles in 2021.

United States

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	663	49,289			\$1,533	357%
Fee	156	35,133	71%	93%	\$2,150	137%
No-fee	507	14,156	29%	-54%		
Biomed	137	18,038	37%	34%	\$1,905	207%
Fee	60	14,550	81%	64%	\$2,362	87%
No-fee	77	3,488	19%	-62%		
STEM	157	22,937	47%	49%	\$1,774	281%
Fee	74	19,355	84%	77%	\$2,102	116%
No-fee	83	3,582	16%	-70%		
H&SS	369	8,314	17%	-59%	\$59	20%
Fee	22	1,228	15%	-29%	\$403	70%
No-fee	347	7,086	85%	8%		

Heavy in STEM, very light in H&SS, heavy in fees (except H&SS).

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	611	617	585	549	529	487
%No-fee	75%	76%	77%	77%	78%	79%
Articles	49,289	47,814	39,850	33,047	29,737	25,793
%No-fee	29%	29%	30%	35%	40%	42%
Change	3%	20%	21%	11%	15%	

Growing every year, if slowly in 2021.

Article Volume

	Journals	Articles	%No-fee	\$/article
Largest: 600+	13	22,092	3%	\$2,249
Large: 150-599	54	11,813	23%	\$1,708
Med.: 60-149	95	6,467	56%	\$609
Small: 20-59	314	7,449	78%	\$219
Smallest: 0-19	187	1,468	95%	\$86

The fairly common fee:size correlation.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$2,000+	48	18,330	\$55,290,828	\$3,016
\$1,000-\$1,999	41	13,393	\$18,685,742	\$1,395
\$500-\$999	24	1,713	\$1,173,350	\$685
\$0.20-\$499	43	1,697	\$397,284	\$234
No fee	507	14,156		
Total	663	49,289	\$75,547,204	\$1,533

The very expensive journals are *very* expensive!

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	115	12,685	24%	\$1,950
Physics	17	7,104	5%	\$2,249
Biology	22	5,353	9%	\$1,799
Chemistry	9	4,127	4%	\$1,405
Other Sciences	10	3,864	3%	\$3,012
Mathematics	20	2,235	38%	\$637
Education	67	2,038	86%	\$66
Computer Science	22	1,550	65%	\$500
Ecology	24	1,229	45%	\$680
Earth Sciences	17	1,145	18%	\$1,450
Sociology	41	938	71%	\$145
Language & Literature	44	859	93%	\$24
Agriculture	16	855	5%	\$1,873
Anthropology	28	842	58%	\$45
Library Science	26	602	100%	\$0
Philosophy	20	460	92%	\$1
Media & Communications	21	453	100%	\$0
Economics	21	418	73%	\$129
Arts & Architecture	22	379	100%	\$0
Political Science	18	370	100%	\$0
Technology	8	347	6%	\$2,143
History	19	345	100%	\$0
Zoology	6	265	38%	\$656
Psychology	10	218	51%	\$512
Engineering	8	216	71%	\$287
Law	10	149	100%	\$0
Miscellany	12	127	100%	\$0
Religion	10	116	100%	\$0

One subject over \$3,000 average—and eight with no fees at all. The big eleven add 290 journals with 84,373 articles in 2021 and an average cost of \$2,013. (Yes, that would more than double article count. See Switzerland and the United Kingdom in Western Europe!)

Western Europe

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	2,981	140,570			\$464	38%
Fee	482	47,195	34%	-9%	\$1,383	53%
No-fee	2,499	93,375	66%	5%		
Biomed	390	34,415	24%	-11%	\$1,043	68%
Fee	173	19,348	56%	14%	\$1,856	47%
No-fee	217	15,067	44%	-14%		
STEM	498	53,689	38%	22%	\$482	3%
Fee	162	21,737	40%	-15%	\$1,191	22%
No-fee	336	31,952	60%	14%		
H&SS	2,093	52,466	37%	-10%	\$66	34%
Fee	147	6,110	12%	-44%	\$570	141%
No-fee	1,946	46,356	88%	12%		

Slightly rich in STEM; tends toward no-fee except for biomed.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	2,792	2,833	2,757	2,651	2,501	2,340
%No-fee	83%	84%	84%	84%	85%	85%
Articles	140,570	129,701	115,015	118,752	105,447	89,327
%No-fee	66%	66%	68%	68%	67%	73%
Change	8%	13%	-3%	13%	18%	

Growing the last two years.

Article Volume

	Journals	Articles	%No-fee	\$/article
Largest: 600+	32	47,831	59%	\$656
Large: 150-599	103	20,523	36%	\$881
Med.: 60-149	398	25,638	68%	\$401
Small: 20-59	1,650	39,302	86%	\$121
Smallest: 0-19	798	7,276	88%	\$104

Large journals average *more* expensive than largest ones.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$2,000+	62	12,487	\$32,361,599	\$2,592
\$1,000-\$1,999	151	20,496	\$26,881,559	\$1,312
\$500-\$999	112	5,705	\$4,068,381	\$713
\$0.20-\$499	157	8,507	\$1,952,359	\$230
No fee	2,499	93,375		
Total	2,981	140,570	\$65,263,899	\$464

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	358	29,561	48%	\$909
Ecology	62	18,918	78%	\$351
Chemistry	17	8,691	35%	\$604
Language & Literature	393	7,446	92%	\$24
Physics	27	5,682	68%	\$605
Anthropology	214	5,367	80%	\$133
Education	184	5,215	87%	\$67
History	215	5,189	96%	\$17
Biology	32	4,854	21%	\$1,862
Arts & Architecture	202	4,659	87%	\$104
Earth Sciences	107	4,593	46%	\$680
Miscellany	46	3,883	90%	\$122
Computer Science	72	3,774	46%	\$184
Sociology	137	3,675	88%	\$94
Media & Communications	132	3,471	91%	\$52
Law	122	3,160	99%	\$10
Technology	21	2,871	82%	\$119
Other Sciences	24	2,474	12%	\$1,196
Engineering	33	2,429	21%	\$1,031
Political Science	109	2,259	91%	\$95
Agriculture	54	2,129	80%	\$164
Religion	55	1,930	65%	\$29
Philosophy	81	1,887	99%	\$5
Economics	102	1,645	86%	\$67
Psychology	56	1,509	55%	\$164
Library Science	45	1,171	99%	\$3
Zoology	44	1,164	75%	\$337
Mathematics	37	964	80%	\$193

Heavy in medicine, but biology averages much higher fees.

Country of Publication

Country	Journals	Articles	%no-fee	\$/article
Åland Islands	1	4	100%	\$0
Austria	53	1,360	64%	\$232
Belgium	48	701	95%	\$19
Denmark	33	592	95%	\$20
Finland	63	1,806	81%	\$237
France	257	25,169	97%	\$26
Germany	259	17,348	45%	\$519
Greece	39	1,492	71%	\$231
Iceland	6	314	100%	\$0
Ireland	15	324	100%	\$0
Italy	458	16,173	69%	\$237
Luxembourg	2	12	100%	\$0
Malta	2	32	100%	\$0
Netherlands	79	2,009	83%	\$177
Norway	118	2,825	93%	\$63
Portugal	144	4,357	82%	\$146
Spain	843	23,217	91%	\$38
Sweden	43	1,378	61%	\$710
Switzerland	76	3,771	51%	\$742
United Kingdom	442	37,686	34%	\$1,190

Austria

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	53	1,360			\$232	-31%
Fee	12	496	36%	-1%	\$635	-30%
No-fee	41	864	64%	1%		
Biomed	4	104	8%	-72%	\$1,032	67%
Fee	3	104	100%	104%	\$1,032	-18%
No-fee	1	0	0%	-100%		
STEM	11	480	35%	13%	\$373	-20%
Fee	5	336	70%	47%	\$532	-45%
No-fee	6	144	30%	-43%		
H&SS	38	776	57%	38%	\$37	-25%
Fee	4	56	7%	-65%	\$511	116%
No-fee	34	720	93%	17%		

Little biomed, strong in H&SS.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	46	51	49	49	49	44
%No-fee	76%	76%	76%	78%	78%	80%
Articles	1,360	1,447	1,305	1,226	1,185	1,191
%No-fee	64%	68%	73%	69%	71%	74%
Change	-6%	11%	6%	3%	-1%	

Slightly down after three years of growth.

Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	1	234	0%	\$533
Med.: 60-149	5	296	90%	\$138
Small: 20-59	30	688	66%	\$216
Smallest: 0-19	17	142	99%	\$5

No largest, mostly small.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$1,000-\$1,999	3	65	\$96,327	\$1,482
\$500-\$999	5	358	\$198,838	\$555
\$0.20-\$499	4	73	\$19,714	\$270
No fee	41	864		
Total	53	1,360	\$314,879	\$232

No very expensive journals.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Physics	1	234	0%	\$533
Media & Communications	4	165	100%	\$0
History	6	108	100%	\$0
Earth Sciences	5	99	27%	\$405
Political Science	7	97	100%	\$0
Education	3	91	98%	\$8
Religion	3	84	100%	\$0
Philosophy	3	80	100%	\$0
Computer Science	1	76	100%	\$0
Biology	2	52	0%	\$1,409
Medicine	2	52	0%	\$656
Arts & Architecture	2	37	100%	\$0
Agriculture	1	30	0%	\$473
Mathematics	1	30	100%	\$0
Miscellany	1	27	0%	\$105
Language & Literature	3	21	100%	\$0
Library Science	1	21	100%	\$0
Law	2	18	100%	\$0
Economics	1	14	0%	\$142
Anthropology	1	13	0%	\$1,775
Engineering	1	6	100%	\$0
Ecology	1	5	100%	\$0
Sociology	1	0		

Anthropology and biology have the only four-digit average costs, in both cases with relatively few articles.

Belgium

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	48	701			\$19	-94%
Fee	3	33	5%	-87%	\$395	-56%
No-fee	45	668	95%	51%		
Biomed	2	26	4%	-86%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	2	26	100%	97%		
STEM	21	337	48%	54%	\$19	-96%
Fee	1	6	2%	-96%	\$1,065	9%
No-fee	20	331	98%	88%		
H&SS	25	338	48%	16%	\$20	-60%
Fee	2	27	8%	-62%	\$246	4%
No-fee	23	311	92%	16%		

Almost no fees, very little biomed, strong STEM.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	38	43	44	44	46	45
%No-fee	92%	93%	93%	93%	93%	93%
Articles	701	866	781	881	820	926
%No-fee	95%	91%	97%	96%	96%	97%
Change	-19%	11%	-11%	7%	-11%	

Erratic within a narrow band, 813 ± 113 .

Article Volume

	Journals	Articles	%No-fee	\$/article
Med.: 60-149	2	102	100%	\$0
Small: 20-59	35	527	94%	\$22
Smallest: 0-19	11	72	94%	\$16

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$1,000-\$1,999	1	6	\$6,392	\$1,065
\$0.20-\$499	2	27	\$6,629	\$246
No fee	45	668		
Total	48	701	\$13,020	\$19

Oddly, no medium-priced journals.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Language & Literature	9	147	100%	\$0
Technology	4	118	100%	\$0
Earth Sciences	4	90	100%	\$0
Computer Science	8	71	100%	\$0
Media & Communications	2	64	100%	\$0
Agriculture	3	43	100%	\$0
Education	4	41	44%	\$133
Medicine	2	26	100%	\$0
Religion	1	21	100%	\$0
Arts & Architecture	2	20	100%	\$0
Political Science	2	15	100%	\$0
Law	1	13	100%	\$0
Zoology	1	9	100%	\$0
Sociology	1	8	100%	\$0
Ecology	1	6	0%	\$1,065
Economics	2	5	100%	\$0
Psychology	1	4	0%	\$296

One ecological journal (actually history of ecology) is pricey.

Denmark

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	33	592			\$20	-94%
Fee	1	28	5%	-87%	\$414	-54%
No-fee	32	564	95%	51%		
Biomed	none					
STEM	3	65	11%	-65%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	3	65	100%	108%		
H&SS	30	527	89%	78%	\$22	-55%
Fee	1	28	5%	-76%	\$414	75%
No-fee	29	499	95%	20%		

No biomed, almost all H&SS, just one small fee journal.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	30	31	31	31	28	30
%No-fee	97%	97%	97%	97%	96%	97%
Articles	592	520	556	502	484	500
%No-fee	95%	96%	95%	94%	92%	95%
Change	14%	-6%	11%	4%	-3%	

Article Volume

	Journals	Articles	%No-fee	\$/article
Small: 20-59	20	480	94%	\$24
Smallest: 0-19	13	112	100%	\$0

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$0.20-\$499	1	28	\$11,600	\$414
No fee	32	564		
Total	33	592	\$11,600	\$20

No moderate or high fees.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Media & Communications	5	90	100%	\$0
Anthropology	4	87	100%	\$0
Economics	3	84	67%	\$138
Education	4	64	100%	\$0
Philosophy	1	49	100%	\$0
Sociology	2	45	100%	\$0
Ecology	1	33	100%	\$0
Earth Sciences	2	32	100%	\$0
Political Science	2	29	100%	\$0
Miscellany	1	22	100%	\$0
Arts & Architecture	2	21	100%	\$0
Religion	1	16	100%	\$0
Language & Literature	1	14	100%	\$0
Law	2	6	100%	\$0
History	1	0		
Psychology	1	0		

Finland

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	63	1,806			\$237	-29%
Fee	6	342	19%	-49%	\$1,252	38%
No-fee	57	1,464	81%	29%		
Biomed	9	453	25%	-8%	\$746	20%
Fee	4	253	56%	14%	\$1,335	6%
No-fee	5	200	44%	-13%		
STEM	12	436	24%	-23%	\$208	-55%
Fee	2	89	20%	-57%	\$1,018	4%
No-fee	10	347	80%	52%		
H&SS	42	917	51%	23%	\$0	-100%
Fee	0	0	0%	-100%	\$0	-100%
No-fee	42	917	100%	26%		

Tends away from fees and toward H&SS (entirely no-fee).

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	60	61	59	57	53	52
%No-fee	90%	90%	90%	89%	89%	88%
Articles	1,806	1,742	1,591	1,532	1,336	1,331
%No-fee	81%	82%	81%	79%	78%	80%
Change	4%	9%	4%	15%	0%	

Growing almost every year.

Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	1	210	100%	\$0
Med.: 60-149	5	329	33%	\$994
Small: 20-59	37	1,081	89%	\$94
Smallest: 0-19	20	186	100%	\$0

No largest.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$2,000+	1	71	\$193,292	\$2,722
\$1,000-\$1,999	1	49	\$52,200	\$1,065
\$500-\$999	3	201	\$176,640	\$879
\$0.20-\$499	1	21	\$6,214	\$296
No fee	57	1,464		
Total	63	1,806	\$428,346	\$237

One very expensive medium-sized journal.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	7	292	68%	\$683
Computer Science	2	210	100%	\$0
Biology	2	161	0%	\$859
Anthropology	11	154	100%	\$0
History	5	151	100%	\$0
Earth Sciences	5	103	61%	\$373
Language & Literature	5	103	100%	\$0
Religion	5	94	100%	\$0
Education	2	74	100%	\$0
Agriculture	2	70	30%	\$746
Media & Communications	2	58	100%	\$0
Arts & Architecture	3	51	100%	\$0
Sociology	1	50	100%	\$0
Economics	2	46	100%	\$0
Political Science	1	44	100%	\$0
Ecology	1	41	100%	\$0
Philosophy	3	36	100%	\$0
Library Science	1	29	100%	\$0
Miscellany	1	27	100%	\$0
Engineering	1	10	100%	\$0
Other Sciences	1	2	100%	\$0

Biology, agriculture, and medicine the only fields above \$400—but then, earth sciences is the only other field with any fees at all.

France

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	257	25,169			\$26	-92%
Fee	22	716	3%	-92%	\$915	1%
No-fee	235	24,453	97%	54%		
Biomed	8	1,205	5%	-83%	\$159	-74%
Fee	4	185	15%	-69%	\$1,034	-18%
No-fee	4	1,020	85%	66%		
STEM	63	17,334	69%	120%	\$27	-94%
Fee	17	519	3%	-94%	\$892	-9%
No-fee	46	16,815	97%	86%		
H&SS	186	6,630	26%	-36%	\$0	-100%
Fee	1	12	0%	-99%	\$41	-82%
No-fee	185	6,618	100%	26%		

Mostly STEM, very low on fees.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	233	243	242	238	227	223
%No-fee	91%	91%	92%	92%	92%	92%
Articles	25,169	20,749	19,161	24,169	15,864	13,141
%No-fee	97%	97%	97%	98%	97%	96%
Change	21%	8%	-21%	52%	21%	

Strong growth in 2021.

Article Volume

	Journals	Articles	%No-fee	\$/article
Largest: 600+	5	18,412	100%	\$0
Large: 150-599	4	620	100%	\$0
Med.: 60-149	43	2,440	85%	\$154
Small: 20-59	144	3,288	90%	\$81
Smallest: 0-19	61	409	94%	\$36

Largest journals publish more than two-thirds of articles, mostly as conference proceedings.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$1,000-\$1,999	11	384	\$469,796	\$1,223
\$500-\$999	3	163	\$132,080	\$810
\$0.20-\$499	8	169	\$53,052	\$314
No fee	235	24,453		
Total	257	25,169	\$654,928	\$26

No very expensive journals.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Ecology	8	12,694	99%	\$6
Miscellany	9	2,604	100%	\$0
Technology	3	1,500	95%	\$63
Physics	4	1,257	94%	\$64
Language & Literature	63	917	100%	\$0
Biology	2	897	96%	\$25
Sociology	17	635	100%	\$0
History	23	634	100%	\$0
Anthropology	25	576	100%	\$0
Earth Sciences	12	549	79%	\$254
Computer Science	9	383	100%	\$0
Arts & Architecture	11	316	100%	\$0
Medicine	6	308	51%	\$550
Agriculture	8	296	100%	\$0
Media & Communications	9	269	96%	\$2
Zoology	4	265	100%	\$0
Political Science	8	186	100%	\$0
Education	6	179	100%	\$0
Mathematics	6	147	97%	\$10
Engineering	5	131	0%	\$485
Philosophy	6	113	100%	\$0
Law	4	109	100%	\$0
Economics	3	89	100%	\$0
Chemistry	2	88	100%	\$0
Other Sciences	2	24	88%	\$133
Religion	2	3	100%	\$0

Medicine and engineering the only fields over \$260. The big eleven add 12 journals with 1,768 articles in 2021 and \$2,481 average cost per article.

Germany

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	259	17,348			\$519	55%
Fee	84	9,571	55%	49%	\$940	4%
No-fee	175	7,777	45%	-29%		
Biomed	39	3,270	19%	-31%	\$763	23%
Fee	21	1,229	38%	-24%	\$2,030	61%
No-fee	18	2,041	62%	23%		
STEM	104	10,478	60%	93%	\$575	23%
Fee	51	6,926	66%	38%	\$870	-11%
No-fee	53	3,552	34%	-35%		
H&SS	116	3,600	21%	-50%	\$133	169%
Fee	12	1,416	39%	88%	\$338	43%
No-fee	104	2,184	61%	-23%		

Fee-heavy, STEM-heavy.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	245	251	231	223	211	196
%No-fee	67%	67%	66%	66%	65%	63%
Articles	17,348	17,819	15,428	16,300	13,772	13,818
%No-fee	45%	48%	50%	44%	48%	49%
Change	-3%	15%	-5%	18%	0%	

Erratic pattern but growing over time.

Article Volume

	Journals	Articles	%No-fee	\$/article
Largest: 600+	7	5,969	49%	\$235
Large: 150-599	19	4,691	17%	\$1,086
Med.: 60-149	49	3,132	51%	\$474
Small: 20-59	133	3,199	69%	\$303
Smallest: 0-19	51	357	84%	\$130

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$2,000+	12	1,071	\$2,739,663	\$2,558
\$1,000-\$1,999	28	4,023	\$4,936,556	\$1,227
\$500-\$999	18	769	\$607,752	\$790
\$0.20-\$499	26	3,708	\$716,482	\$193
No fee	175	7,777		
Total	259	17,348	\$9,000,454	\$519

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	35	3,170	62%	\$776
Ecology	10	2,430	2%	\$1,079
Earth Sciences	32	2,074	26%	\$844
Computer Science	11	2,035	17%	\$82
Physics	6	1,381	75%	\$520
Agriculture	8	805	96%	\$17
Religion	6	760	14%	\$51
Education	12	737	32%	\$332
Chemistry	5	478	62%	\$291
Technology	6	428	25%	\$367
Anthropology	11	357	80%	\$384
Zoology	10	289	30%	\$1,240
Language & Literature	19	284	100%	\$0
Sociology	8	244	81%	\$11
Engineering	6	242	7%	\$413
Mathematics	5	229	100%	\$0
Psychology	11	213	87%	\$27
Arts & Architecture	5	175	51%	\$145
Law	7	166	100%	\$0
Media & Communications	8	162	86%	\$113
History	7	157	100%	\$0
Library Science	4	153	100%	\$0
Political Science	9	117	100%	\$0
Biology	4	100	67%	\$367
Other Sciences	5	87	100%	\$0
Philosophy	3	29	100%	\$0
Miscellany	2	27	100%	\$0
Economics	4	19	74%	\$311

An odd couple, zoology and ecology, average four-digit costs. The big eleven add 54 journals with 8,592 articles in 2021 at an average cost of \$1,239.

Greece

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	39	1,492			\$231	-31%
Fee	7	426	29%	-23%	\$809	-11%
No-fee	32	1,066	71%	13%		
Biomed	11	614	41%	50%	\$343	-45%
Fee	4	170	28%	-44%	\$1,238	-2%
No-fee	7	444	72%	42%		
STEM	5	442	30%	-5%	\$295	-37%
Fee	1	220	50%	4%	\$592	-39%
No-fee	4	222	50%	-4%		
H&SS	23	436	29%	-29%	\$9	-83%
Fee	2	36	8%	-60%	\$104	-56%
No-fee	21	400	92%	16%		

Rich in biomed, tending toward no-fee, somewhat low fees.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	36	38	38	38	37	33
%No-fee	81%	82%	82%	82%	81%	85%
Articles	1,492	1,655	1,675	1,593	1,440	1,134
%No-fee	71%	73%	67%	71%	70%	77%
Change	-10%	-1%	5%	11%	27%	

Down the last two years.

Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	5	735	57%	\$448
Med.: 60-149	4	204	87%	\$29
Small: 20-59	25	511	84%	\$18
Smallest: 0-19	5	42	100%	\$0

No largest journals.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$2,000+	1	96	\$198,855	\$2,071
\$500-\$999	1	220	\$130,203	\$592
\$0.20-\$499	5	110	\$15,390	\$140
No fee	32	1,066		
Total	39	1,492	\$344,448	\$231

Most revenue is from the single (barely-)very expensive journal.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	11	614	72%	\$343
Engineering	2	343	36%	\$380
Arts & Architecture	4	91	100%	\$0
Sociology	2	78	100%	\$0
Zoology	1	72	100%	\$0
Economics	5	66	45%	\$56
History	4	60	100%	\$0
Language & Literature	3	55	100%	\$0
Education	3	46	100%	\$0
Anthropology	1	20	100%	\$0
Media & Communications	1	20	100%	\$0
Earth Sciences	1	18	100%	\$0
Mathematics	1	9	100%	\$0

Only medicine and engineering have significant fees. The big eleven add one no-fee journal with 115 articles in 2021.

Ireland

No fees.

Key Facts

	Journals	Articles	Art%	Rel%
All	15	324		
Biomed	3	67	21%	-24%
STEM	2	17	5%	-83%
H&SS	10	240	74%	79%

Three-quarters H&SS.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	13	14	13	13	256	12
Articles	324	325	347	256	198	198
Change	0%	-6%	36%	29%	0%	

Article Volume

	Journals	Articles	Percent	Art/Jrn
Med.: 60-149	3	137	42%	46
Small: 20-59	5	129	40%	26
Smallest: 0-19	5	58	18%	12

No larger journals.

Subject

Subject	Journals	Articles	Art/Jrn
Media & Communications	2	76	38
Medicine	2	67	34
Religion	1	67	67
Education	2	38	19
Language & Literature	2	33	17
Earth Sciences	1	17	17
Arts & Architecture	1	13	13
Economics	1	7	7
Anthropology	1	6	6
Ecology			

The big eleven add two fee journals with 308 articles in 2021 and average costs of \$1,718.

Italy

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	458	16,173			\$237	-29%
Fee	67	4,938	31%	-18%	\$776	-14%
No-fee	391	11,235	69%	10%		
Biomed	59	3,850	24%	-13%	\$728	18%
Fee	29	2,796	73%	48%	\$1,003	-20%
No-fee	30	1,054	27%	-46%		
STEM	65	3,984	25%	-21%	\$235	-49%
Fee	16	1,546	39%	-19%	\$607	-38%
No-fee	49	2,438	61%	17%		
H&SS	334	8,339	52%	25%	\$11	-79%
Fee	22	596	7%	-66%	\$148	-37%
No-fee	312	7,743	93%	17%		

Mostly H&SS, mostly no-fee (except biomed).

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	432	442	428	401	380	351
%No-fee	85%	85%	85%	86%	85%	85%
Articles	16,173	16,832	13,872	13,644	13,124	11,887
%No-fee	69%	68%	75%	71%	70%	73%
Change	-4%	21%	2%	4%	10%	

Down slightly after a strong year and four years of growth.

Article Volume

	Journals	Articles	%No-fee	\$/article
Largest: 600+	3	3,079	38%	\$541
Large: 150-599	12	2,102	55%	\$585
Med.: 60-149	59	3,442	72%	\$148
Small: 20-59	281	6,536	84%	\$60
Smallest: 0-19	103	1,014	93%	\$31

More articles in small journals, but most fees in larger ones.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$2,000+	1	441	\$1,043,991	\$2,367
\$1,000-\$1,999	9	1,310	\$1,503,957	\$1,148
\$500-\$999	13	1,224	\$783,622	\$640
\$0.20-\$499	44	1,963	\$498,238	\$254
No fee	391	11,235		
Total	458	16,173	\$3,829,808	\$237

One very expensive large journal.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	51	3,628	27%	\$764
Language & Literature	75	1,959	84%	\$15
Physics	2	1,189	100%	\$0
Arts & Architecture	47	1,075	88%	\$29
Chemistry	2	936	0%	\$628
Law	26	892	100%	\$0
History	37	848	91%	\$5
Philosophy	26	544	100%	\$0
Anthropology	26	541	100%	\$0
Agriculture	17	506	53%	\$310
Education	12	505	100%	\$0
Sociology	17	365	100%	\$0
Media & Communications	14	353	100%	\$0
Earth Sciences	10	330	86%	\$121
Political Science	16	310	100%	\$0
Psychology	12	290	89%	\$52
Ecology	6	277	51%	\$135
Library Science	6	238	100%	\$0
Biology	8	222	38%	\$138
Economics	12	192	75%	\$45
Mathematics	8	172	76%	\$20
Zoology	9	159	91%	\$28
Engineering	1	143	100%	\$0
Other Sciences	5	140	27%	\$700
Religion	4	120	100%	\$0
Miscellany	4	107	100%	\$0
Computer Science	4	98	100%	\$0
Technology	1	34	0%	\$275

Medicine is biggest and most expensive. The big eleven add two journals with 761 articles in 2021 and \$752 average cost.

Netherlands

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	79	2,009			\$177	-47%
Fee	17	351	17%	-53%	\$1,014	12%
No-fee	62	1,658	83%	31%		
Biomed	6	99	5%	-82%	\$974	57%
Fee	4	73	74%	50%	\$1,320	5%
No-fee	2	26	26%	-48%		
STEM	12	546	27%	-13%	\$198	-58%
Fee	4	119	22%	-54%	\$908	-7%
No-fee	8	427	78%	50%		
H&SS	61	1,364	68%	64%	\$111	125%
Fee	9	159	12%	-44%	\$952	302%
No-fee	52	1,205	88%	12%		

Two-thirds H&SS, four-fifths no-fee.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	75	77	76	71	65	64
%No-fee	77%	78%	78%	77%	77%	78%
Articles	2,009	2,300	2,069	2,314	2,583	1,781
%No-fee	83%	83%	85%	83%	63%	86%
Change	-13%	11%	-11%	-10%	45%	

Down more than it was up in 2020.

Article Volume

	Journals	Articles	%No-fee	\$/article
Largest: 600+	1	32	0%	\$2,000
Large: 150-599	2	318	100%	\$0
Med.: 60-149	9	478	89%	\$14
Small: 20-59	41	929	81%	\$230
Smallest: 0-19	26	252	63%	\$285

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$2,000+	3	65	\$139,754	\$2,150
\$1,000-\$1,999	4	105	\$128,918	\$1,228
\$500-\$999	7	95	\$68,886	\$725
\$0.20-\$499	3	86	\$18,210	\$212
No fee	62	1,658		
Total	79	2,009	\$355,769	\$177

Subject

Subject	Journals	Articles	%No-fee	\$/article
Physics	4	326	100%	\$0
History	6	210	100%	\$0
Language & Literature	11	201	86%	\$54
Arts & Architecture	10	178	76%	\$369
Anthropology	3	157	100%	\$0
Religion	3	108	100%	\$0
Sociology	3	100	100%	\$0
Medicine	6	99	26%	\$974
Library Science	3	98	100%	\$0
Law	6	80	100%	\$0
Political Science	5	75	39%	\$560
Media & Communications	4	70	100%	\$0
Computer Science	2	64	86%	\$141
Zoology	2	62	0%	\$453
Education	4	49	45%	\$523
Earth Sciences	2	48	0%	\$1,480
Engineering	1	23	100%	\$0
Mathematics	1	23	100%	\$0
Philosophy	1	22	100%	\$0
Economics	1	16	0%	\$450
Psychology	1	0		

Earth sciences the only four-digit average. The big eleven add 270 journals with 33,522 articles in 2021 and \$1,440 average cost.

Norway

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	118	2,825			\$63	-81%
Fee	16	197	7%	-81%	\$903	0%
No-fee	102	2,628	93%	48%		
Biomed	8	1,032	37%	33%	\$10	-98%
Fee	1	21	2%	-96%	\$473	-62%
No-fee	7	1,011	98%	93%		
STEM	9	90	3%	-90%	\$273	-41%
Fee	2	32	36%	-26%	\$768	-21%
No-fee	7	58	64%	23%		
H&SS	101	1,703	60%	46%	\$84	70%
Fee	13	144	8%	-60%	\$995	321%
No-fee	88	1,559	92%	16%		

Mostly H&SS, predominantly no-fee,

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	107	109	107	105	98	78
%No-fee	88%	87%	88%	88%	87%	86%
Articles	2,825	2,968	2,813	2,916	2,739	2,535
%No-fee	93%	92%	91%	91%	93%	93%
Change	-5%	6%	-4%	6%	8%	

Fluctuating within a fairly narrow range since 2017.

Article Volume

	Journals	Articles	%No-fee	\$/article
Largest: 600+	1	908	100%	\$0
Med.: 60-149	3	171	100%	\$0
Small: 20-59	64	1,356	89%	\$91
Smallest: 0-19	50	390	87%	\$140

No large, but one no-fee largest—and all medium are no-fee.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$1,000-\$1,999	6	70	\$101,933	\$1,456
\$500-\$999	6	72	\$56,951	\$791
\$0.20-\$499	4	55	\$18,972	\$345
No fee	102	2,628		
Total	118	2,825	\$177,856	\$63

No very expensive journals.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	8	1,032	98%	\$10
Education	18	353	93%	\$61
Sociology	12	243	89%	\$25
Arts & Architecture	11	212	75%	\$335
Language & Literature	16	171	100%	\$0
Anthropology	9	161	100%	\$0
History	6	152	100%	\$0
Religion	7	114	88%	\$100
Media & Communications	4	84	100%	\$0
Law	6	49	67%	\$475
Political Science	2	49	100%	\$0
Economics	3	43	100%	\$0
Philosophy	2	34	62%	\$294
Other Sciences	2	32	0%	\$768
Zoology	5	26	100%	\$0
Library Science	3	20	100%	\$0
Earth Sciences	1	18	100%	\$0
Computer Science	1	14	100%	\$0
Miscellany	1	13	100%	\$0
Psychology	1	5	100%	\$0

Only other sciences exceeds \$500.

Portugal

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	144	4,357			\$146	-56%
Fee	16	778	18%	-52%	\$820	-10%
No-fee	128	3,579	82%	30%		
Biomed	22	965	22%	-19%	\$4	-99%
Fee	1	20	2%	-96%	\$178	-86%
No-fee	21	945	98%	93%		
STEM	9	239	5%	-82%	\$18	-96%
Fee	1	24	10%	-79%	\$178	-82%
No-fee	8	215	90%	72%		
H&SS	113	3,153	72%	75%	\$200	304%
Fee	14	734	23%	11%	\$858	263%
No-fee	99	2,419	77%	-3%		

Predominantly no-fee, rich in H&SS, not much STEM.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	137	140	136	133	127	118
%No-fee	90%	89%	88%	89%	91%	91%
Articles	4,357	4,682	3,818	3,965	3,527	3,271
%No-fee	82%	80%	81%	82%	84%	86%
Change	-7%	23%	-4%	12%	8%	

Down after a strong 2020.

Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	4	656	77%	\$264
Med.: 60-149	23	1,493	68%	\$282
Small: 20-59	84	1,835	94%	\$13
Smallest: 0-19	33	373	88%	\$50

No largest.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$1,000-\$1,999	4	518	\$582,481	\$1,124
\$500-\$999	1	19	\$11,245	\$592
\$0.20-\$499	11	241	\$43,884	\$182
No fee	128	3,579		
Total	144	4,357	\$637,610	\$146

No very expensive journals.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	22	965	98%	\$4
Media & Communications	15	423	73%	\$300
Arts & Architecture	12	335	58%	\$407
History	13	331	94%	\$34
Miscellany	4	325	100%	\$0
Anthropology	16	295	80%	\$43
Education	11	286	100%	\$0
Sociology	7	248	45%	\$621
Political Science	4	242	36%	\$716
Language & Literature	11	152	100%	\$0
Library Science	3	139	100%	\$0
Earth Sciences	3	123	100%	\$0
Psychology	4	122	30%	\$62
Philosophy	5	96	100%	\$0
Economics	4	87	82%	\$65
Computer Science	3	47	100%	\$0
Engineering	1	44	100%	\$0
Law	2	36	72%	\$49
Religion	2	36	100%	\$0
Agriculture	1	24	0%	\$178
Technology	1	1	100%	\$0

Unusual: all the over-\$200 fields are H&SS.

Spain

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	844	23,240			\$38	-89%
Fee	33	2,126	9%	-75%	\$414	-54%
No-fee	811	21,114	91%	44%		
Biomed	64	2,732	12%	-57%	\$103	-83%
Fee	3	303	11%	-77%	\$925	-27%
No-fee	61	2,429	89%	75%		
STEM	74	2,048	9%	-72%	\$89	-81%
Fee	6	251	12%	-74%	\$727	-25%
No-fee	68	1,797	88%	68%		
H&SS	706	18,460	79%	92%	\$23	-54%
Fee	24	1,572	9%	-59%	\$265	12%
No-fee	682	16,888	91%	16%		

Predominantly H&SS and no-fee.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	806	806	809	794	772	744
%No-fee	96%	96%	96%	96%	96%	96%
Articles	23,240	22,308	21,328	20,685	20,899	19,469
%No-fee	91%	93%	92%	92%	92%	92%
Change	4%	5%	3%	-1%	7%	

Growing (if slowly) almost every year.

Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	9	1,488	30%	\$202
Med.: 60-149	100	5,956	89%	\$66
Small: 20-59	530	13,663	98%	\$9
Smallest: 0-19	205	2,133	95%	\$30

No largest—and *lots* of small journals.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$1,000-\$1,999	2	184	\$247,421	\$1,345
\$500-\$999	8	393	\$250,948	\$639
\$0.20-\$499	23	1,549	\$380,790	\$246
No fee	811	21,114		
Total	844	23,240	\$879,160	\$38

No very expensive journals.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	62	2,730	89%	\$103
Anthropology	85	2,537	72%	\$71
Language & Literature	131	2,535	100%	\$0
History	86	2,229	97%	\$5
Education	73	2,058	96%	\$19
Arts & Architecture	68	1,818	96%	\$15
Law	41	1,338	100%	\$0
Media & Communications	45	1,302	87%	\$26
Sociology	41	1,096	97%	\$5
Philosophy	25	815	100%	\$0
Political Science	34	803	100%	\$0
Psychology	17	699	39%	\$153
Earth Sciences	20	427	100%	\$0
Economics	26	426	98%	\$7
Religion	11	341	100%	\$0
Agriculture	10	302	100%	\$0
Ecology	8	293	78%	\$222
Miscellany	12	264	95%	\$35
Computer Science	9	263	100%	\$0
Zoology	8	201	94%	\$6
Library Science	11	199	100%	\$0
Mathematics	8	181	72%	\$229
Engineering	6	141	66%	\$199
Other Sciences	2	130	100%	\$0
Technology	3	110	32%	\$422
Biology	2	2	100%	\$0

Only technology exceeds \$230 average. The big eleven add 31 journals with 4,899 articles in 2021 and \$544 average cost.

Sweden

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	42	1,355			\$723	115%
Fee	10	537	40%	7%	\$1,823	101%
No-fee	32	818	60%	-4%		
Biomed	5	716	53%	93%	\$1,303	110%
Fee	4	466	65%	32%	\$2,002	59%
No-fee	1	250	35%	-31%		
STEM	3	23	2%	-95%	\$157	-66%
Fee	1	5	22%	-54%	\$722	-26%
No-fee	2	18	78%	50%		
H&SS	34	616	45%	10%	\$69	40%
Fee	5	66	11%	-49%	\$646	173%
No-fee	29	550	89%	13%		

Rich in biomed, almost no STEM.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	40	39	39	38	37	36
%No-fee	75%	77%	77%	76%	76%	78%
Articles	1,355	1,692	1,284	1,245	1,212	1,293
%No-fee	60%	64%	63%	60%	64%	57%
Change	-20%	32%	3%	3%	-6%	

Down after three up years.

Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	2	517	48%	\$1,039
Med.: 60-149	4	256	32%	\$1,484
Small: 20-59	17	435	87%	\$86
Smallest: 0-19	19	147	75%	\$165

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$2,000+	2	330	\$705,049	\$2,137
\$1,000-\$1,999	1	112	\$212,112	\$1,894
\$500-\$999	7	95	\$61,851	\$651
No fee	32	818		
Total	42	1,355	\$979,013	\$723

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	5	716	35%	\$1,303
Sociology	5	95	54%	\$296
Language & Literature	6	93	100%	\$0
Political Science	3	71	100%	\$0
Education	6	67	84%	\$98
Media & Communications	2	57	100%	\$0
Library Science	1	55	100%	\$0
Economics	3	46	76%	\$173
Arts & Architecture	2	31	100%	\$0
Religion	1	30	100%	\$0
History	2	25	100%	\$0
Psychology	2	24	100%	\$0
Philosophy	1	22	100%	\$0
Computer Science	1	18	100%	\$0
Earth Sciences	1	5	0%	\$722
Agriculture	1	0		

The big eleven add one \$2,200 journal with 48 articles in 2021.

Switzerland

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	76	3,771			\$742	121%
Fee	34	1,843	49%	32%	\$1,517	67%
No-fee	42	1,928	51%	-19%		
Biomed	39	2,844	75%	176%	\$961	55%
Fee	28	1,754	62%	26%	\$1,558	24%
No-fee	11	1,090	38%	-25%		
STEM	8	434	12%	-63%	\$135	-71%
Fee	4	78	18%	-62%	\$751	-23%
No-fee	4	356	82%	57%		
H&SS	29	493	13%	-68%	\$9	-82%
Fee	2	11	2%	-89%	\$409	73%
No-fee	27	482	98%	24%		

Rich in high-fee biomed, lean and mostly no-fee for STEM and H&SS.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	72	70	69	62	55	49
%No-fee	54%	56%	57%	58%	62%	63%
Articles	3,771	3,196	2,885	3,033	3,005	2,803
%No-fee	51%	57%	60%	62%	65%	69%
Change	18%	11%	-5%	1%	7%	

Up solidly in 2020 and 2021.

Article Volume

	Journals	Articles	%No-fee	\$/article
Large: 150-599	8	1,503	63%	\$522
Med.: 60-149	16	1,325	45%	\$920
Small: 20-59	29	714	33%	\$988
Smallest: 0-19	23	229	64%	\$388

No largest journals.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$2,000+	5	371	\$1,191,550	\$3,212
\$1,000-\$1,999	16	1,192	\$1,388,418	\$1,165
\$500-\$999	9	229	\$200,634	\$876
\$0.20-\$499	4	51	\$15,979	\$313
No fee	42	1,928		
Total	76	3,771	\$2,796,581	\$742

The very expensive journals are, indeed, *very* expensive.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	37	2,804	39%	\$957
Chemistry	1	247	100%	\$0
Media & Communications	2	106	100%	\$0
Language & Literature	3	82	100%	\$0
Education	2	81	100%	\$0
Computer Science	1	66	100%	\$0
Law	5	65	100%	\$0
Earth Sciences	1	44	0%	\$750
Biology	2	40	0%	\$1,279
Religion	1	32	100%	\$0
Arts & Architecture	3	29	100%	\$0
Engineering	1	29	0%	\$820
Sociology	4	29	66%	\$122
Ecology	2	28	86%	\$51
Mathematics	1	19	100%	\$0
Anthropology	2	17	100%	\$0
Political Science	1	16	100%	\$0
Economics	1	14	100%	\$0
Library Science	1	12	100%	\$0
Philosophy	1	9	100%	\$0
Agriculture	1	1	0%	\$355
Miscellany	2	1	0%	\$950
History	1	0		

Biology is the only field to average four digits. The big eleven add 421 journals, with 320,336 articles in 2021 and \$2,426 average cost. (No, those are not typos: 98.8% of gold OA showing Switzerland as country of publication is from the big eleven.)

United Kingdom

Key Facts

	Journals	Articles	Art%	Rel%	\$/Art	Rel%
All	442	37,686			\$1,190	255%
Fee	154	24,813	66%	78%	\$1,807	99%
No-fee	288	12,873	34%	-46%		
Biomed	110	16,228	43%	57%	\$1,584	156%
Fee	67	11,974	74%	50%	\$2,146	70%
No-fee	43	4,254	26%	-48%		
STEM	97	16,736	44%	42%	\$1,055	127%
Fee	51	11,586	69%	45%	\$1,524	56%
No-fee	46	5,150	31%	-41%		
H&SS	235	4,722	13%	-70%	\$313	534%
Fee	36	1,253	27%	27%	\$1,180	399%
No-fee	199	3,469	73%	-7%		

Very high fees. Light in H&SS—and even there, the fees are high.

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	411	407	375	343	293	256
%No-fee	64%	64%	64%	65%	66%	66%
Articles	37,686	30,249	25,912	24,134	22,932	13,587
%No-fee	34%	27%	26%	24%	23%	35%
Change	25%	17%	7%	5%	69%	

Growing every year.

Article Volume

	Journals	Articles	%No-fee	\$/article
Largest: 600+	15	19,431	25%	\$1,453
Large: 150-599	35	7,239	22%	\$1,314
Med.: 60-149	71	5,810	47%	\$882
Small: 20-59	172	3,900	70%	\$417
Smallest: 0-19	149	1,306	77%	\$261

Half the articles are in the largest journals.

Fees and Revenue

	Journals	Articles	Revenue	\$/article
\$2,000+	37	10,042	\$26,149,444	\$2,604
\$1,000-\$1,999	65	12,478	\$17,155,049	\$1,375
\$500-\$999	31	1,867	\$1,388,731	\$744
\$0.20-\$499	21	426	\$147,203	\$346
No fee	288	12,873		
Total	442	37,686	\$44,840,427	\$1,190

Most revenue is from very expensive journals.

Subject

Subject	Journals	Articles	%No-fee	\$/article
Medicine	100	12,848	33%	\$1,324
Chemistry	7	6,942	35%	\$651
Biology	10	3,380	0%	\$2,569
Ecology	23	3,111	51%	\$1,232
Other Sciences	7	2,059	1%	\$1,376
Engineering	8	1,317	4%	\$1,638
Physics	10	1,295	9%	\$1,943
Technology	3	680	98%	\$50
Language & Literature	34	669	66%	\$205
Earth Sciences	7	616	12%	\$1,632
Education	21	531	96%	\$8
Economics	31	491	90%	\$111
Miscellany	9	466	29%	\$990
Anthropology	18	442	54%	\$818
Computer Science	20	429	20%	\$1,204
Sociology	15	422	65%	\$350
Law	20	388	96%	\$19
History	17	276	83%	\$216
Arts & Architecture	19	257	63%	\$489
Library Science	11	207	96%	\$16
Media & Communications	13	172	100%	\$0
Mathematics	6	154	40%	\$906
Psychology	5	137	28%	\$809
Political Science	11	122	100%	\$0
Religion	7	104	90%	\$53
Zoology	4	81	100%	\$0
Agriculture	2	52	0%	\$2,060
Philosophy	4	38	100%	\$0

Biology and agriculture both over \$2,000. The big would add 1,414 journals with 221,261 articles in 2021 and \$2,421 average costs. (Again, not typos: 85% of UK gold OA articles from the big eleven.)

Other Western European Countries

Four countries, eleven journals, no fees.

Key Facts

	Journals	Articles	Art%	Rel%
All	11	362	58%	
Biomed	1	210	51%	89%
STEM	none			
H&SS	10	152	42%	2%

Articles and Journals by Year

	2021	2020	2019	2018	2017	2016
Journals	11	11	11	11	357	9
Articles	362	351	190	357	327	462
Change	3%	85%	-47%	9%	-29%	

Article Volume

	Journals	Articles	Percent	Art/Jrn
Large: 150-599	1	210	58%	210
Med.: 60-149	2	67	19%	34
Small: 20-59	3	31	9%	10
Smallest: 0-19	5	54	15%	11

Subject

Subject	Journals	Articles	Art/Jrn
Medicine	3	99	33
Political Science	2	43	22
Sociology	2	28	14
Education	1	16	16
Psychology	1	16	16
Anthropology	1	14	14
Earth Sciences	1	9	9
History	1	6	6

Country Profiles

Åland Islands

One political science journal, four articles in 2021.

Iceland

Six journals (one medical, five H&SS), 314 articles in 2021.

Luxembourg

Two H&SS journals, 12 articles in 2021.

Malta

Two H&SS journals, 32 articles in 2021.

Appendix: The Heatmap

The world map on the front cover was generated at [GunnMap](http://gunnmap.herokuapp.com/). <http://gunnmap.herokuapp.com/>. Colors range from dark green for the lowest level of activity (when there was activity in 2021) to red for the highest level.

The numbers used appear here. Some countries and territories may not appear on the map. “Pop” is population (as provided by Worldometer) divided by 100,000.

Country	Articles	Pop	Art/100K
Åland Islands	4	0.30	13.28
Albania	108	28.78	3.75
Algeria	527	438.51	1.20
Angola	69	328.66	0.21
Argentina	7,784	451.96	17.22
Armenia	189	29.63	6.38
Australia	4,426	255.00	17.36
Austria	1,360	90.06	15.10
Azerbaijan	25	101.39	0.25
Bahamas	16	3.93	4.07
Bahrain	300	17.02	17.63
Bangladesh	933	1,646.89	0.57
Barbados	50	2.87	17.40
Belarus	929	94.49	9.83
Belgium	701	115.90	6.05
Bolivia	141	116.73	1.21
Bosnia and Herzegovina	1,124	32.81	34.26
Brazil	76,854	2,125.59	36.16

Country	Articles	Pop	Art/100K
Bulgaria	3,770	69.48	54.26
Cameroon	326	265.46	1.23
Canada	7,206	377.42	19.09
Chile	4,150	191.16	21.71
China	8,535	14,393.24	0.59
Colombia	10,369	508.83	20.38
Costa Rica	2,087	50.94	40.97
Côte d'Ivoire	101	263.78	0.38
Croatia	3,968	41.05	96.66
Cuba	7,059	113.27	62.32
Cyprus	104	12.07	8.61
Czechia	3,534	107.09	33.00
Denmark	592	57.92	10.22
Dominican Republic	193	108.48	1.78
Ecuador	1,953	176.43	11.07
Egypt	2,110	1,023.34	2.06
El Salvador	18	64.86	0.28
Estonia	908	13.27	68.45
Ethiopia	127	1,149.64	0.11
Finland	1,806	55.41	32.60
France	25,169	652.74	38.56
Georgia	100	39.89	2.51
Germany	17,348	837.84	20.71
Ghana	118	310.73	0.38
Greece	1,492	104.23	14.31
Guadeloupe	11	4.00	2.75
Guam	4	1.69	2.37
Guatemala	21	179.16	0.12
Honduras	47	99.05	0.47
Hong Kong	717	74.97	9.56
Hungary	1,298	96.60	13.44
Iceland	314	3.41	92.02

Country	Articles	Pop	Art/100K
India	7,491	13,800.04	0.54
Indonesia	37,280	2,735.24	13.63
Iran	24,586	839.93	29.27
Iraq	4,349	402.22	10.81
Ireland	324	49.38	6.56
Israel	100	86.56	1.16
Italy	16,173	604.62	26.75
Japan	2,785	1,264.76	2.20
Jordan	129	102.03	1.26
Kazakhstan	694	187.77	3.70
Kenya	168	537.71	0.31
Kyrgyzstan	82	65.24	1.26
Latvia	531	18.86	28.15
Lebanon	171	68.25	2.51
Libya	172	68.71	2.50
Lithuania	2,624	27.22	96.39
Luxembourg	12	6.26	1.92
Malawi	40	191.30	0.21
Malaysia	3,300	323.66	10.20
Mali	25	202.51	0.12
Malta	32	4.42	7.25
Mexico	5,412	1,289.33	4.20
Moldova	1,176	40.34	29.15
Mongolia	86	32.78	2.62
Montenegro	431	6.28	68.62
Morocco	658	369.11	1.78
Nepal	1,412	291.37	4.85
Netherlands	2,009	171.35	11.72
New Zealand	309	48.22	6.41
Nicaragua	134	66.25	2.02
Nigeria	756	2,061.40	0.37
North Macedonia	253	20.83	12.14

Country	Articles	Pop	Art/100K
Norway	2,825	54.21	52.11
Oman	336	51.07	6.58
Pakistan	3,921	2,208.92	1.78
Palestine	8	51.59	0.16
Paraguay	536	71.33	7.51
Peru	2,805	329.72	8.51
Philippines	327	1,095.81	0.30
Poland	23,450	378.47	61.96
Portugal	4,357	101.97	42.73
Puerto Rico	22	28.61	0.77
Qatar	527	28.81	18.29
Romania	11,001	192.38	57.18
Russia	26,736	1,459.34	18.32
Rwanda	27	129.52	0.21
Saudi Arabia	196	348.14	0.56
Serbia	6,068	87.37	69.45
Singapore	369	58.50	6.31
Slovakia	1,435	54.60	26.28
Slovenia	1,496	20.79	71.96
South Africa	4,373	593.09	7.37
South Korea	8,427	512.69	16.44
South Sudan	21	111.94	0.19
Spain	23,217	467.55	49.66
Sri Lanka	697	214.13	3.25
Sweden	1,378	100.99	13.64
Switzerland	3,771	86.55	43.57
Syria	15	175.01	0.09
Taiwan	1,103	238.17	4.63
Thailand	1,084	698.00	1.55
Tunisia	45	118.19	0.38
Turkey	18,885	843.39	22.39
Turkmenistan	10	60.31	0.17

Country	Articles	Pop	Art/100K
Ukraine	14,533	437.34	33.23
United Arab Emirates	294	98.90	2.97
United Kingdom	37,686	678.86	55.51
United States	49,289	3,310.03	14.89
Uruguay	780	34.74	22.45
Uzbekistan	1,101	334.69	3.29
Venezuela	927	284.36	3.26
Viet Nam	264	973.39	0.27
Yemen	80	298.26	0.27
Zimbabwe	51	148.63	0.34