

# Cites & Insights

Crawford at Large

Libraries • Policy • Technology • Media

Volume 18, Number 4: July 2018

ISSN 1534-0937

## Intersections

# Subject Supplement to *GOAJ3*: Gold Open Access Journals 2012-2017

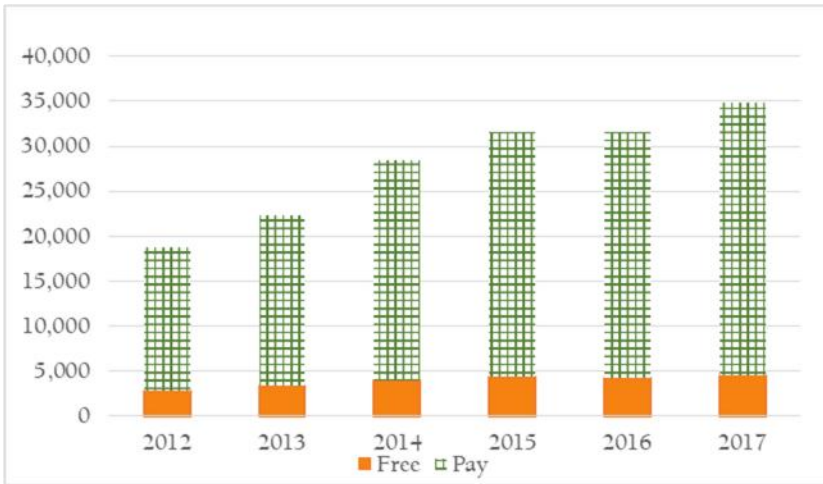
This special issue is the third in a series of subject supplements to *Gold Open Access Journals*. The first was a paperback and free PDF ebook, *Gold Open Access Journals 2011-2015: A Subject Approach*. Because that book showed relatively few downloads (and no purchased paperback copies), I added a page of three selected tables for each subject to subject-segment chapters to *GOAJ2: Gold Open Access Journals 2011-2016*, then provided graphs and additional tables in the June 2017 *Cites & Insights*. Oddly enough, the issue (which consisted mostly of the subject supplement) was downloaded four times as often as the earlier subject book and more than twice as often as *The Countries of OAWorld 2011-2016*. For this year, I'm doing the same thing as last year—except that this subject supplement is a full-issue essay, not just the longest piece of the issue.

*GOAJ3: Gold Open Access Journals 2012-2017* includes a page for each subject with three key tables. This article expands on those pages, providing additional tables and figures. Subjects appear in the same order as in *GOAJ3*: alphabetically within each segment. To make it easier to look at *all* of a subject, subject subheads in this article have page references to the relevant page in *GOAJ2*.

Tables and graphs normally appear in this order: Articles-by-year graph; starting year graph; article volume; publisher category (sorted by 2017 article count); growth/shrinkage table; countries with the most 2017 articles (typically either 20+ articles or what will fit on two pages). Some country tables will be split over two pages. I'm eschewing commentary this time around: this is strictly facts and figures.

Note that “countries” are OAWorld countries—APCLand is treated as a separate country. That's the same practice as in *GOAJ3* but *not* as in *Gold Open Access Journals by Country: 2012-2017*. Figures are the same size as in the two books, slightly narrower than the *C&I* page width.

## Biology [p. 83]



	Journals	%Free	Articles	%Free
Largest: 600+	13	0%	14,345	0%
Large: 150-599	58	16%	11,685	13%
Med.: 60-149	72	26%	4,960	25%
Small: 20-59	154	42%	3,424	46%
Smallest: 1-19	66	42%	468	52%

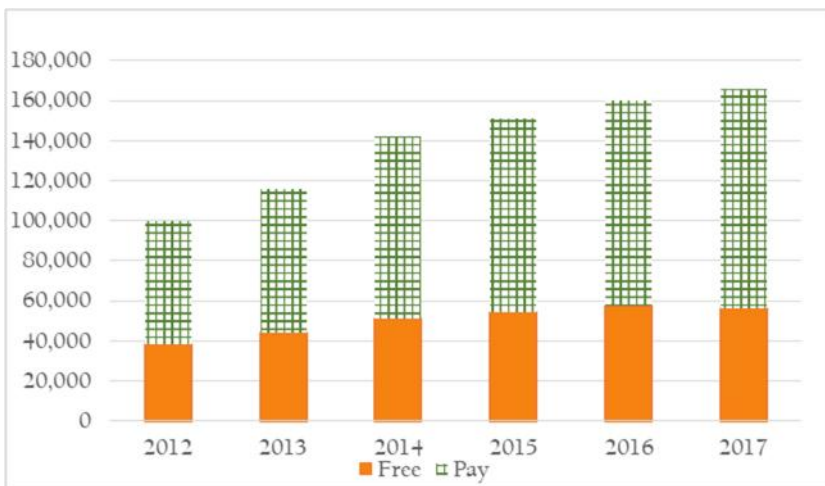
Category	Journals	%Free	Articles	%Free
Open Access	167	16%	19,034	3%
Traditional	63	19%	6,006	15%
Univ/college	81	68%	4,790	47%
Miscellaneous	24	50%	2,706	12%
Society/govt	28	50%	2,346	21%

Change 2016-17	Count	Percent	Cum%
Grew 50%+	60	16.5%	
Grew 25-49.9%	36	9.9%	26.4%
Grew 10-24.99%	35	9.6%	36.1%
Even, $\pm$ 9.99%	86	23.7%	59.8%
Shrank 10-24.99%	43	11.8%	71.6%
Shrank 25-49.99%	49	13.5%	85.1%
Shrank 50%+	54	14.9%	

Biology	Journals	%Free	Articles	%Free
APCLand	191	9%	22,203	4%
United Kingdom	14	7%	2,668	2%
United States	18	28%	2,637	5%
Brazil	16	44%	1,603	35%
Ukraine	5	80%	904	26%
Switzerland	1	0%	809	0%
Indonesia	22	73%	566	61%
Poland	18	83%	313	66%
Iran, Islamic Republic of	13	62%	281	68%
Colombia	2	100%	252	100%
France	3	100%	223	100%
Russian Federation	3	67%	214	77%
Bulgaria	5	60%	199	35%
Pakistan	2	50%	197	11%
Serbia	2	100%	175	100%
Germany	2	50%	148	82%
Slovakia	2	100%	144	100%
Kenya	1	0%	142	0%

Biology	Journals	%Free	Articles	%Free
Chile	2	50%	120	7%
Romania	4	100%	116	100%
Finland	2	0%	101	0%
Korea, Republic of	1	0%	99	0%
Turkey	3	100%	77	100%
Italy	4	75%	72	67%
Austria	1	0%	63	0%
Croatia	1	100%	60	100%
Peru	1	100%	53	100%
Taiwan, Province of China	1	100%	53	100%
Canada	2	100%	38	100%
South Africa	1	100%	38	100%
Spain	3	100%	33	100%
Ecuador	1	100%	30	100%
Japan	1	0%	30	0%
Latvia	1	100%	30	100%
Czech Republic	1	100%	23	100%
New Zealand	1	100%	22	100%
Bangladesh	1	0%	20	0%

## Medicine [p. 84]





	Journals	%Free	Articles	%Free
Largest: 600+	39	13%	33,884	6%
Large: 150-599	295	30%	56,623	24%
Med.: 60-149	648	49%	45,019	49%
Small: 20-59	1,024	58%	27,984	63%
Smallest: 1-19	325	42%	2,443	55%

Category	Journals	%Free	Articles	%Free
Open Access	912	26%	74,569	17%
Traditional	451	34%	35,116	27%
Univ/college	554	81%	28,135	63%
Society/govt	197	79%	14,496	63%
Miscellaneous	217	67%	13,637	53%

Change 2016-17	Count	Percent	Cum%
Grew 50%+	347	14.9%	
Grew 25-49.9%	243	10.4%	25.3%
Grew 10-24.99%	248	10.6%	36.0%
Even, ±9.99%	638	27.4%	63.3%
Shrank 10-24.99%	292	12.5%	75.8%
Shrank 25-49.99%	270	11.6%	87.4%
Shrank 50%+	293	12.6%	

Medicine	Jrnls	%Free	Artic.	%Free
APCLand	1,069	22%	93,696	16%
Brazil	148	80%	11,209	74%
Iran, Islamic Republic of	165	90%	7,788	74%
United Kingdom	81	25%	6,616	8%
United States	78	49%	4,533	61%
India	31	52%	4,428	17%
Poland	74	73%	3,447	61%
Russian Federation	50	100%	3,023	100%
Turkey	58	100%	2,354	100%
Indonesia	84	63%	2,311	59%
China	14	43%	2,153	9%
Switzerland	28	43%	2,060	59%
Italy	50	38%	1,737	35%
Ukraine	21	71%	1,495	61%
Canada	20	70%	1,384	27%
Korea, Republic of	20	75%	1,226	68%
Spain	28	93%	1,206	98%
Sweden	11	27%	1,154	22%
Colombia	27	100%	997	100%
Uganda	1	0%	850	0%
Germany	17	65%	834	65%
Pakistan	10	40%	784	12%
Australia	7	43%	746	14%
South Africa	16	63%	675	49%
Cuba	16	100%	646	100%
Romania	18	83%	526	68%
Portugal	11	91%	467	87%
Argentina	10	90%	448	74%
Serbia	13	69%	442	29%
Peru	6	100%	403	100%
Nigeria	1	0%	378	0%
Chile	7	71%	359	58%
Nepal	9	100%	354	100%
Bangladesh	6	100%	321	100%
Greece	6	83%	291	95%
Malaysia	6	67%	290	53%

Medicine	Jrnls	%Free	Artic.	%Free
Croatia	9	100%	282	100%
Macedonia, the Former Yugoslav Republic of	3	67%	264	18%
Saudi Arabia	1	0%	237	0%
Mexico	4	100%	206	100%
Iceland	1	100%	200	100%
Singapore	3	0%	187	0%
France	4	25%	178	27%
Bosnia and Herzegovina	6	50%	160	51%
Hong Kong	3	67%	153	95%
Bulgaria	3	0%	150	0%
Oman	2	100%	145	100%
Congo, the Democratic Republic of the	1	100%	138	100%
Sri Lanka	3	100%	128	100%
Cameroon	1	0%	124	0%
Japan	4	25%	121	7%
Slovenia	2	100%	120	100%
Costa Rica	6	100%	115	100%
Ethiopia	1	100%	96	100%
Austria	5	80%	94	62%
Iraq	2	0%	88	0%
Paraguay	4	100%	84	100%
Ireland	3	100%	81	100%
Slovakia	4	100%	80	100%
Thailand	1	100%	78	100%
Czech Republic	4	100%	76	100%
Norway	4	100%	75	100%
Uruguay	2	100%	70	100%
Ecuador	3	100%	66	100%
Belgium	2	100%	56	100%
Hungary	2	50%	52	27%
Morocco	2	100%	50	100%
Philippines	2	100%	49	100%
Israel	1	100%	44	100%
Mongolia	1	0%	43	0%
United Arab Emirates	1	0%	42	0%

## Agriculture [p. 91]



	Journals	%Free	Articles	%Free
Largest: 600+	2	0%	3,657	0%
Large: 150-599	21	24%	4,130	19%
Med.: 60-149	125	46%	8,430	46%
Small: 20-59	170	66%	4,694	68%
Smallest: 1-19	75	71%	751	75%



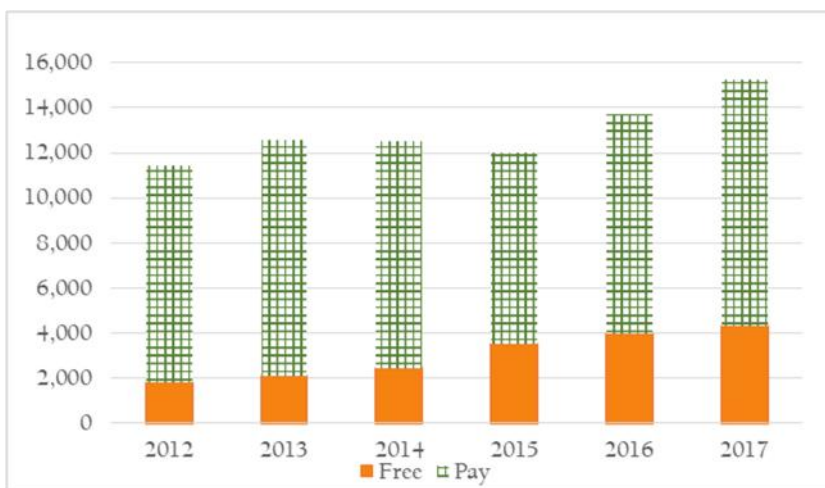
Category	Journals	%Free	Articles	%Free
Univ/college	203	66%	8,622	60%
Open Access	71	51%	6,699	14%
Miscellaneous	43	65%	2,463	42%
Society/govt	45	42%	2,382	28%
Traditional	31	39%	1,496	37%

Change 2016-17	Count	Percent	Cum%
Grew 50%+	57	14.5%	
Grew 25-49.9%	38	9.7%	24.2%
Grew 10-24.99%	38	9.7%	33.8%
Even, $\pm$ 9.99%	131	33.3%	67.2%
Shrank 10-24.99%	49	12.5%	79.6%
Shrank 25-49.99%	43	10.9%	90.6%
Shrank 50%+	37	9.4%	

Agriculture	Journals	%Free	Articles	%Free
APCLand	57	23%	6,726	9%
Brazil	55	65%	4,145	49%
Indonesia	52	50%	913	41%
Poland	29	86%	877	74%
Turkey	12	83%	831	59%
Romania	15	67%	825	74%
Russian Federation	4	75%	699	29%
Czech Republic	10	40%	668	55%
Iran, Islamic Republic of	14	29%	593	28%
China	5	40%	464	26%
United Kingdom	7	14%	386	9%
Colombia	10	90%	303	85%
Spain	7	100%	298	100%
United States	6	50%	272	34%
Italy	10	60%	259	31%
Argentina	10	50%	213	35%
Ukraine	5	80%	206	93%
Bulgaria	3	33%	196	34%

<b>Agriculture</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Germany	6	83%	190	76%
Cuba	6	100%	173	100%
France	4	75%	171	77%
Slovakia	4	75%	160	29%
Thailand	2	100%	150	100%
Croatia	4	100%	138	100%
Mexico	3	0%	131	0%
Kenya	2	0%	126	0%
Iraq	1	0%	116	0%
Serbia	6	100%	114	100%
Korea, Republic of	2	0%	113	0%
Montenegro	1	100%	109	100%
Sweden	2	50%	103	3%
Chile	2	50%	91	42%
Costa Rica	3	100%	91	100%
Peru	2	50%	79	46%
Slovenia	3	100%	78	100%
Portugal	1	0%	71	0%
Morocco	2	100%	70	100%
Bangladesh	3	33%	68	22%
Algeria	2	100%	66	100%
Belgium	2	50%	64	39%
Pakistan	2	50%	50	10%
Ecuador	2	100%	35	100%
Tunisia	1	100%	28	100%
Hungary	1	100%	26	100%
Finland	1	100%	23	100%
Sri Lanka	1	100%	23	100%
India	1	100%	22	100%
Austria	1	100%	20	100%
Bolivia, Plurinational State of	1	100%	20	100%

## Chemistry [p. 92]



	Journals	%Free	Articles	%Free
Largest: 600+	8	25%	8,255	19%
Large: 150-599	15	20%	3,066	22%
Med.: 60-149	30	47%	1,912	42%
Small: 20-59	82	48%	1,807	59%
Smallest: 1-19	26	58%	195	80%

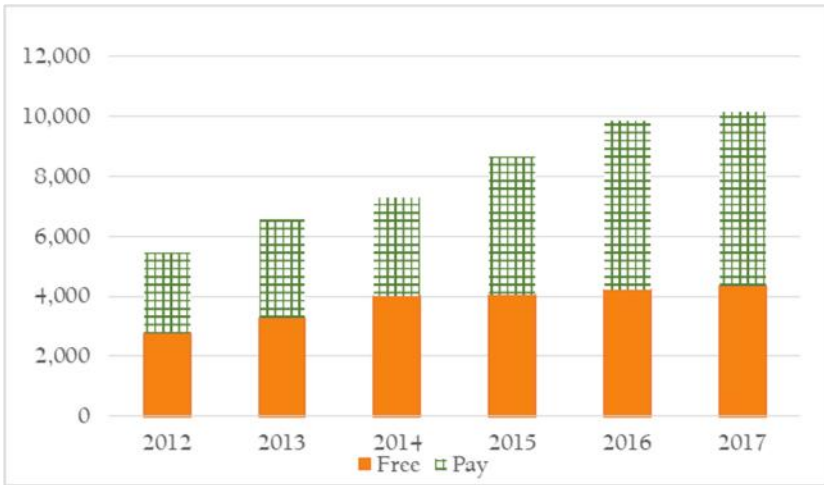
Category	Journals	%Free	Articles	%Free
Open Access	63	22%	7,560	5%
Society/govt	23	61%	4,323	39%
Traditional	24	42%	1,661	63%
Univ/college	42	71%	1,307	73%
Miscellaneous	9	56%	384	51%

Change 2016-17	Count	Percent	Cum%
Grew 50%+	26	16.1%	
Grew 25-49.9%	18	11.2%	27.3%
Grew 10-24.99%	19	11.8%	39.1%
Even, ±9.99%	30	18.6%	57.8%
Shrank 10-24.99%	16	9.9%	67.7%
Shrank 25-49.99%	21	13.0%	80.7%
Shrank 50%+	31	19.3%	

Chemistry	Journals	%Free	Articles	%Free
APCLand	68	16%	8,685	13%
United Kingdom	8	25%	1,927	50%
United States	3	33%	1,372	17%
Brazil	4	25%	597	9%
Indonesia	17	65%	401	52%
Iran, Islamic Republic of	10	100%	314	100%
Germany	1	100%	277	100%
Serbia	5	60%	259	57%
Poland	10	90%	241	80%
Croatia	4	100%	159	100%
Turkey	3	67%	133	75%
Slovenia	1	100%	126	100%
France	2	100%	95	100%
Hungary	2	50%	87	0%
India	2	50%	65	31%
Moldova, Republic of	2	50%	62	35%
Czech Republic	1	0%	50	0%
Ethiopia	1	100%	50	100%
Italy	1	0%	44	0%
Ukraine	2	50%	41	51%

Chemistry	Journals	%Free	Articles	%Free
Romania	1	100%	40	100%
Colombia	2	50%	30	40%
South Africa	1	100%	27	100%
Morocco	1	0%	24	0%
Russian Federation	1	100%	23	100%
Canada	1	100%	20	100%

## Computer Science [p. 93]



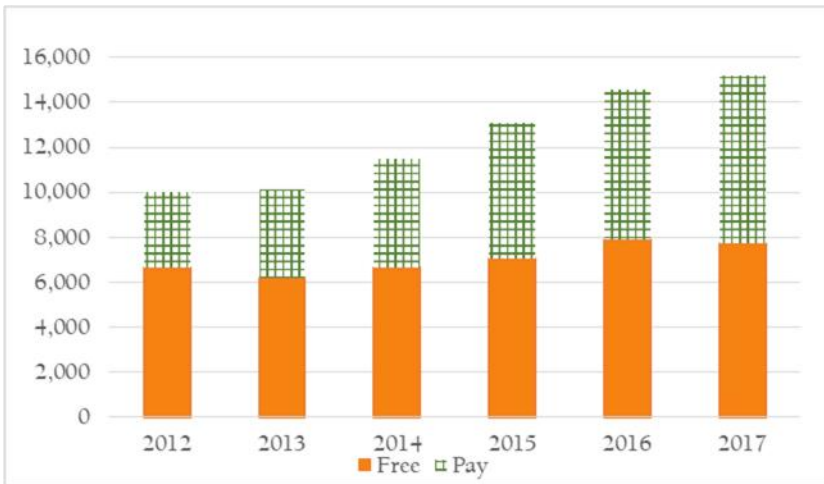
	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Largest: 600+	3	0%	2,050	0%
Large: 150-599	10	40%	1,996	41%
Med.: 60-149	37	51%	2,081	55%
Small: 20-59	141	60%	3,341	58%
Smallest: 1-19	71	69%	675	69%

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Univ/college	120	75%	3,934	56%
Traditional	33	24%	2,326	9%
Open Access	55	25%	2,060	14%
Miscellaneous	31	74%	1,096	87%
Society/govt	23	91%	727	97%

<b>Computer Science</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
APCLand	61	13%	3,625	5%
Germany	7	57%	1,264	8%
Indonesia	54	65%	964	67%
Poland	12	92%	640	90%
United States	10	80%	439	88%
Ukraine	8	75%	372	91%
Russian Federation	7	100%	340	100%
Romania	12	75%	282	53%
Australia	3	100%	273	100%
France	6	50%	261	33%
Brazil	5	100%	193	100%
Spain	6	100%	136	100%
United Kingdom	8	38%	131	14%
Canada	4	50%	110	33%
Iran, Islamic Republic of	4	100%	84	100%
Netherlands	3	100%	84	100%
Belarus	2	100%	81	100%
South Africa	3	33%	72	8%
India	3	67%	70	100%
Serbia	2	100%	67	100%

Computer Science	Journals	%Free	Articles	%Free
Portugal	3	100%	59	100%
Czech Republic	3	100%	58	100%
Latvia	2	50%	51	47%
China	2	100%	50	100%
United Arab Emirates	1	0%	46	0%
Croatia	2	50%	42	55%
Korea, Republic of	2	0%	38	0%
Slovakia	2	50%	38	74%
Italy	2	100%	32	100%
Belgium	3	100%	30	100%
Bulgaria	1	100%	22	100%
Argentina	2	100%	21	100%
Ecuador	1	100%	20	100%
Slovenia	1	100%	20	100%

## Earth Sciences [p. 94]





	Journals	%Free	Articles	%Free
Largest: 600+	3	67%	2,402	44%
Large: 150-599	17	12%	3,093	3%
Med.: 60-149	67	58%	4,222	56%
Small: 20-59	188	77%	4,844	77%
Smallest: 1-19	76	62%	645	74%

Category	Journals	%Free	Articles	%Free
Open Access	74	39%	6,045	28%
Univ/college	155	83%	4,593	77%
Traditional	52	48%	2,252	49%
Miscellaneous	35	80%	1,242	68%
Society/govt	35	69%	1,074	53%

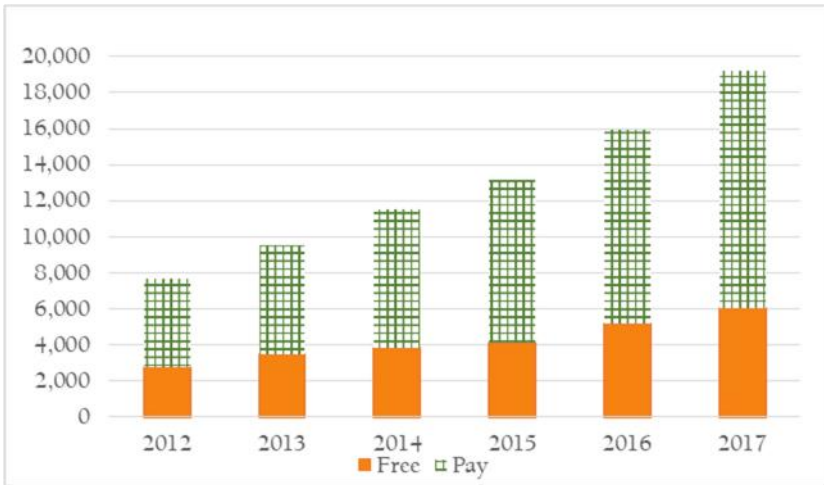
Change 2016-17	Count	Percent	Cum%
Grew 50%+	49	14.0%	
Grew 25-49.9%	30	8.5%	22.5%
Grew 10-24.99%	42	12.0%	34.5%
Even, ±9.99%	94	26.8%	61.3%
Shrank 10-24.99%	48	13.7%	74.9%
Shrank 25-49.99%	44	12.5%	87.5%
Shrank 50%+	44	12.5%	



<b>Earth Sciences</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
APCLand	73	34%	5,258	20%
Germany	23	30%	2,141	54%
Brazil	42	93%	1,630	83%
Poland	24	88%	608	81%
Russian Federation	9	100%	542	100%
United Kingdom	12	8%	523	7%
Spain	22	100%	507	100%
Iran, Islamic Republic of	8	50%	428	34%
Indonesia	17	53%	336	51%
France	8	88%	329	89%
Italy	7	71%	262	82%
China	1	0%	227	0%
Mexico	5	40%	177	60%
Ukraine	4	50%	160	45%
Austria	4	25%	143	17%
Colombia	7	100%	140	100%
Croatia	5	80%	123	87%
Serbia	6	100%	117	100%
United States	5	40%	112	31%
Romania	11	100%	107	100%
Argentina	7	100%	100	100%
India	1	100%	86	100%
Taiwan, Province of China	1	0%	82	0%
Finland	3	67%	78	37%
Czech Republic	4	75%	76	61%
Portugal	4	100%	72	100%
Switzerland	1	0%	71	0%
Greece	2	100%	66	100%
Slovakia	3	100%	64	100%
Slovenia	3	100%	60	100%
Chile	3	100%	58	100%
Turkey	2	100%	58	100%
Canada	1	100%	55	100%
Cuba	2	100%	51	100%

Iceland	1	100%	45	100%
Hungary	1	100%	41	100%
Belgium	2	100%	39	100%
Pakistan	2	100%	37	100%
Australia	2	100%	36	100%
Korea, Republic of	1	0%	35	0%
Estonia	2	100%	21	100%

## Ecology [p. 95]



	Journals	%Free	Articles	%Free
Largest: 600+	6	17%	7,803	13%
Large: 150-599	18	17%	3,705	16%
Med.: 60-149	49	43%	3,138	38%
Small: 20-59	146	73%	3,980	71%
Smallest: 1-19	62	68%	552	73%

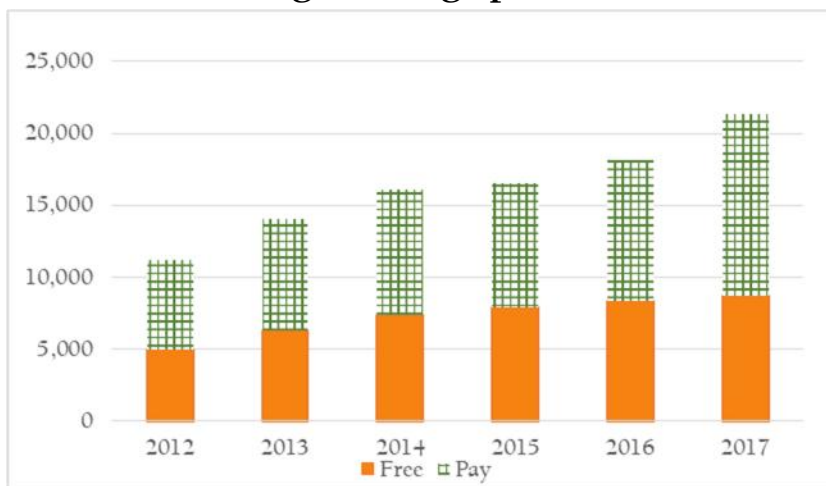
Category	Journals	%Free	Articles	%Free
Open Access	64	41%	8,506	8%
Traditional	46	37%	4,719	40%
Univ/college	111	84%	3,306	72%
Society/govt	27	63%	1,386	37%
Miscellaneous	33	64%	1,261	46%

Change 2016-17	Count	Percent	Cum%
Grew 50%+	65	23.1%	
Grew 25-49.9%	20	7.1%	30.2%
Grew 10-24.99%	37	13.2%	43.4%
Even, $\pm$ 9.99%	65	23.1%	66.5%
Shrank 10-24.99%	30	10.7%	77.2%
Shrank 25-49.99%	31	11.0%	88.3%
Shrank 50%+	33	11.7%	

Ecology	Journals	%Free	Articles	%Free
APCLand	63	29%	8,579	11%
Germany	10	20%	2,046	2%
France	7	71%	1,237	96%
Brazil	30	87%	1,212	75%
Poland	22	86%	909	58%
United Kingdom	10	20%	817	4%
United States	18	61%	710	52%
Indonesia	16	63%	628	35%
Iran, Islamic Republic of	11	82%	359	77%
Canada	6	33%	320	15%
Russian Federation	6	67%	238	55%

Ecology	Journals	%Free	Articles	%Free
Spain	7	100%	196	100%
Costa Rica	3	100%	187	100%
Mexico	3	33%	178	7%
Japan	1	0%	160	0%
Italy	4	50%	139	29%
Ukraine	2	50%	131	60%
South Africa	3	67%	115	77%
Bulgaria	3	67%	92	46%
Croatia	2	50%	68	38%
Colombia	4	100%	59	100%
Chile	3	100%	56	100%
Montenegro	1	0%	55	0%
Morocco	2	100%	51	100%
Thailand	2	50%	47	30%
Hungary	4	100%	45	100%
Malaysia	2	100%	45	100%
Egypt	1	100%	43	100%
Serbia	2	100%	40	100%
Tunisia	1	0%	38	0%
Czech Republic	2	100%	30	100%
Uruguay	1	100%	30	100%
Pakistan	2	100%	27	100%
Nigeria	1	100%	26	100%
Romania	3	100%	26	100%
Netherlands	2	100%	25	100%
Ecuador	1	100%	24	100%
Nepal	1	100%	22	100%
Argentina	3	100%	21	100%

## Engineering [p. 96]



	Journals	%Free	Articles	%Free
Largest: 600+	5	0%	4,937	0%
Large: 150-599	31	42%	5,888	31%
Med.: 60-149	78	54%	5,240	57%
Small: 20-59	187	66%	4,668	73%
Smallest: 1-19	71	77%	597	83%

Category	Journals	%Free	Articles	%Free
Univ/college	193	79%	9,206	59%
Open Access	85	35%	4,515	22%
Traditional	48	46%	3,149	41%
Society/govt	20	80%	3,062	17%
Miscellaneous	26	46%	1,398	31%

Change 2016-17	Count	Percent	Cum%
Grew 50%+	70	18.8%	
Grew 25-49.9%	39	10.5%	29.3%
Grew 10-24.99%	41	11.0%	40.3%
Even, $\pm$ 9.99%	87	23.4%	63.7%
Shrank 10-24.99%	47	12.6%	76.3%
Shrank 25-49.99%	33	8.9%	85.2%
Shrank 50%+	55	14.8%	

Ecology	Journals	%Free	Articles	%Free
APCLand	90	26%	5,973	21%
United States	7	43%	2,530	2%
Poland	33	88%	1,317	87%
Indonesia	41	63%	1,128	41%
Brazil	17	94%	1,050	94%
China	5	20%	895	6%
United Kingdom	6	33%	765	12%
Colombia	23	100%	662	100%
Serbia	10	90%	629	41%
Croatia	6	33%	607	9%
Ukraine	10	50%	523	41%
Romania	12	83%	475	81%
Malaysia	7	57%	472	38%
Czech Republic	7	86%	456	68%
Turkey	7	100%	405	100%
Russian Federation	5	80%	355	96%
Greece	2	0%	300	0%
Iran, Islamic Republic of	11	100%	294	100%

Ecology	Journals	%Free	Articles	%Free
Belarus	3	100%	183	100%
Thailand	3	100%	182	100%
Germany	6	67%	173	60%
Slovenia	1	0%	152	0%
Italy	1	100%	151	100%
France	4	0%	140	0%
Chile	4	75%	119	80%
Algeria	3	100%	108	100%
Cuba	4	100%	107	100%
Spain	4	75%	104	58%
Japan	1	0%	103	0%
Pakistan	1	0%	102	0%
Korea, Republic of	2	100%	94	100%
Iraq	3	0%	92	0%
Lithuania	1	0%	70	0%
Nigeria	1	0%	70	0%
South Africa	1	0%	64	0%
Bosnia and Herzegovina	2	100%	61	100%
Costa Rica	2	100%	61	100%
Ecuador	4	100%	60	100%
Slovakia	4	50%	51	59%
Mexico	2	100%	45	100%
Australia	2	100%	32	100%
Canada	1	100%	28	100%
Hungary	1	100%	24	100%
Kyrgyzstan	1	100%	24	100%

## Mathematics [p. 97]



	Journals	%Free	Articles	%Free
Largest: 600+	3	0%	1,121	0%
Large: 150-599	11	27%	2,091	29%
Med.: 60-149	28	64%	1,733	65%
Small: 20-59	118	64%	2,664	77%
Smallest: 1-19	80	66%	767	77%



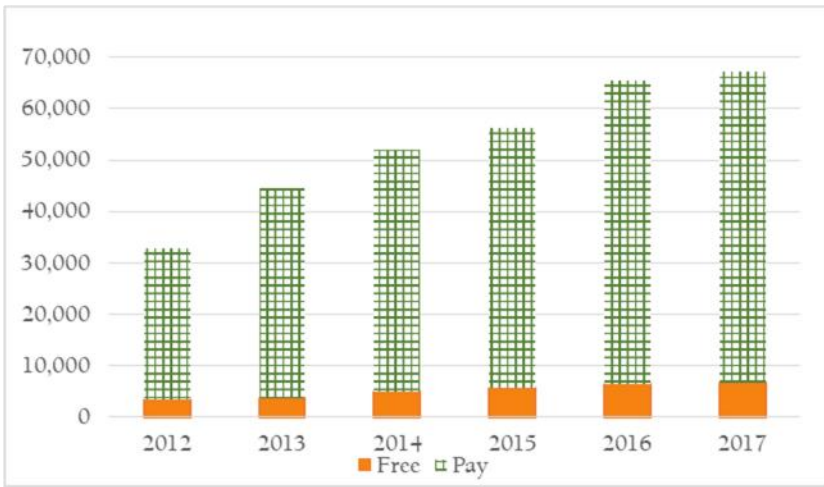
Category	Journals	%Free	Articles	%Free
Open Access	80	31%	2,970	21%
Univ/college	101	86%	2,878	91%
Traditional	27	41%	1,480	18%
Miscellaneous	18	83%	734	81%
Society/govt	14	86%	314	94%

Change 2016-17	Count	Percent	Cum%
Grew 50%+	43	17.9%	
Grew 25-49.9%	21	8.8%	26.7%
Grew 10-24.99%	22	9.2%	35.8%
Even, $\pm$ 9.99%	65	27.1%	62.9%
Shrank 10-24.99%	19	7.9%	70.8%
Shrank 25-49.99%	23	9.6%	80.4%
Shrank 50%+	47	19.6%	

Mathematics	Journals	%Free	Articles	%Free
APCLand	74	16%	3,525	9%
Poland	25	84%	747	75%
United States	10	80%	626	96%
Indonesia	32	69%	592	69%
Brazil	8	100%	319	100%
Turkey	7	100%	269	100%
Iran, Islamic Republic of	11	100%	229	100%
Ukraine	7	71%	227	80%
Australia	1	100%	224	100%
United Kingdom	6	33%	174	18%
Canada	4	75%	163	56%
Romania	9	100%	144	100%
Italy	6	83%	109	83%
Russian Federation	3	100%	108	100%
Spain	5	100%	106	100%
Hungary	1	100%	100	100%
Serbia	4	100%	99	100%
Germany	5	100%	91	100%
Czech Republic	3	100%	74	100%
Colombia	4	100%	65	100%

Mathematics	Journals	%Free	Articles	%Free
Finland	1	100%	64	100%
Pakistan	1	100%	58	100%
France	1	0%	44	0%
Bulgaria	1	0%	36	0%
India	1	0%	34	0%
Hong Kong	1	100%	28	100%
Austria	1	100%	23	100%

### Other Sciences [p.98]



	Journals	%Free	Articles	%Free
Largest: 600+	14	21%	59,412	2%
Large: 150-599	11	36%	1,686	32%
Med.: 60-149	48	79%	3,604	77%
Small: 20-59	95	77%	2,164	77%
Smallest: 1-19	28	93%	256	96%

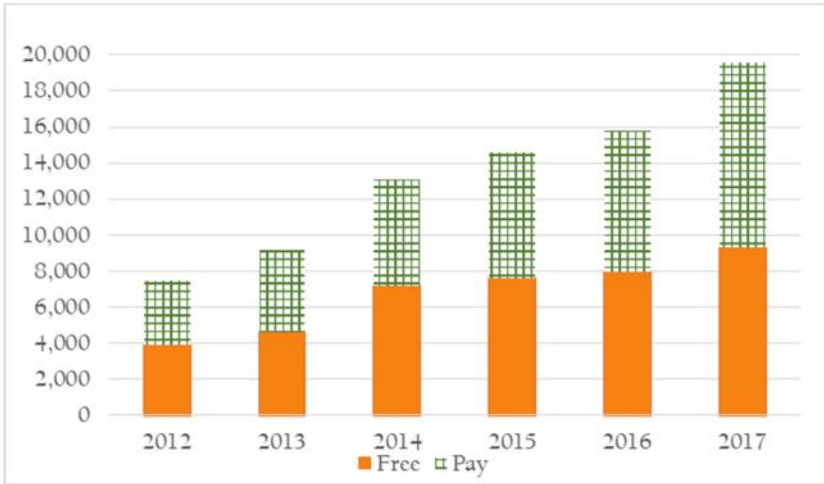
Category	Journals	%Free	Articles	%Free
Traditional	24	50%	31,689	3%
Open Access	20	35%	23,889	1%
Univ/college	121	88%	7,090	66%
Society/govt	13	62%	3,331	8%
Miscellaneous	18	61%	1,123	33%

Change 2016-17	Count	Percent	Cum%
Grew 50%+	41	20.9%	
Grew 25-49.9%	23	11.7%	32.7%
Grew 10-24.99%	24	12.2%	44.9%
Even, $\pm$ 9.99%	42	21.4%	66.3%
Shrank 10-24.99%	20	10.2%	76.5%
Shrank 25-49.99%	21	10.7%	87.2%
Shrank 50%+	25	12.8%	

Other Sciences	Journals	%Free	Articles	%Free
APCLand	35	34%	55,554	1%
United States	7	43%	2,328	2%
United Kingdom	4	25%	1,507	5%
Brazil	20	95%	1,152	89%
Algeria	2	100%	813	100%
Turkey	9	100%	708	100%
India	3	0%	659	0%
France	2	100%	531	100%
Indonesia	18	78%	341	74%
Taiwan, Province of China	2	50%	332	4%
Russian Federation	7	100%	273	100%

Other Sciences	Journals	%Free	Articles	%Free
China	2	50%	258	49%
Mexico	7	100%	227	100%
Bulgaria	2	50%	224	67%
Colombia	8	100%	216	100%
Serbia	4	75%	195	42%
Thailand	7	86%	176	84%
South Africa	2	100%	161	100%
Ukraine	2	100%	155	100%
Spain	4	100%	137	100%
Iraq	2	50%	114	12%
Romania	4	100%	111	100%
Slovakia	1	0%	88	0%
Latvia	1	100%	87	100%
Bangladesh	2	50%	84	52%
Germany	5	80%	79	65%
Lithuania	1	100%	74	100%
Belarus	1	100%	64	100%
Argentina	3	100%	57	100%
Costa Rica	2	100%	49	100%
Peru	2	100%	47	100%
Canada	2	100%	40	100%
Italy	2	50%	38	42%
Pakistan	1	100%	36	100%
Ecuador	1	100%	25	100%
Lebanon	1	100%	23	100%
Macedonia, the Former Yugoslav Republic of	1	100%	20	100%
Philippines	1	100%	20	100%

# Physics [p. 99]



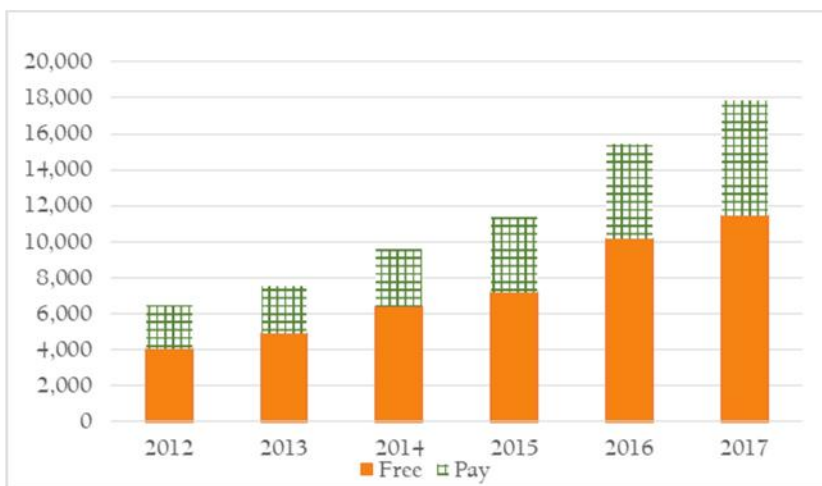
	Journals	%Free	Articles	%Free
Largest: 600+	9	44%	11,498	59%
Large: 150-599	14	21%	4,092	17%
Med.: 60-149	36	44%	2,410	41%
Small: 20-59	56	45%	1,288	51%
Smallest: 1-19	38	47%	265	64%

Category	Journals	%Free	Articles	%Free
Traditional	41	34%	10,302	72%
Open Access	58	33%	6,463	11%
Society/govt	14	50%	1,763	34%
Univ/college	27	67%	699	53%
Miscellaneous	13	62%	326	49%

Change 2016-17	Count	Percent	Cum%
Grew 50%+	33	21.6%	
Grew 25-49.9%	13	8.5%	30.1%
Grew 10-24.99%	12	7.8%	37.9%
Even, $\pm$ 9.99%	31	20.3%	58.2%
Shrank 10-24.99%	16	10.5%	68.6%
Shrank 25-49.99%	16	10.5%	79.1%
Shrank 50%+	32	20.9%	

Physics	Journals	%Free	Articles	%Free
APCLand	75	28%	12,449	39%
France	4	50%	3,017	99%
United States	8	25%	1,537	18%
United Kingdom	11	9%	885	1%
Poland	10	90%	309	64%
Indonesia	16	63%	270	62%
Brazil	4	100%	266	100%
China	3	0%	241	0%
Iran, Islamic Republic of	2	100%	109	100%
Germany	2	100%	96	100%
Romania	4	100%	75	100%
Netherlands	1	100%	65	100%
Russian Federation	2	100%	47	100%
Latvia	1	100%	42	100%
Korea, Republic of	1	0%	35	0%
Argentina	2	0%	30	0%
Ukraine	2	100%	29	100%
Slovenia	1	0%	22	0%

## Technology [p. 100]



	Journals	%Free	Articles	%Free
Largest: 600+	2	50%	7,654	60%
Large: 150-599	22	64%	4,835	66%
Med.: 60-149	41	63%	2,899	67%
Small: 20-59	87	70%	2,150	72%
Smallest: 1-19	38	61%	294	68%

Category	Journals	%Free	Articles	%Free
Traditional	36	44%	6,944	83%
Open Access	43	42%	5,398	21%
Univ/college	68	88%	3,374	93%
Society/govt	18	89%	1,336	76%
Miscellaneous	25	60%	780	55%

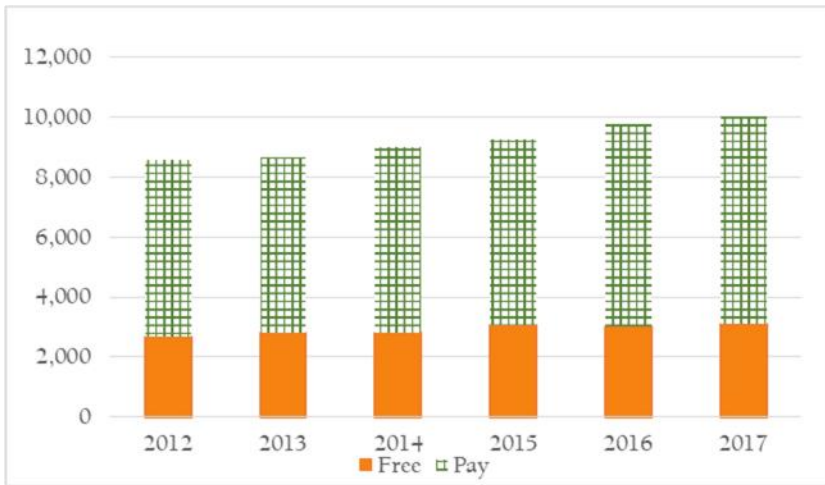
Change 2016-17	Count	Percent	Cum%
Grew 50%+	28	14.7%	
Grew 25-49.9%	22	11.6%	26.3%
Grew 10-24.99%	22	11.6%	37.9%
Even, $\pm$ 9.99%	48	25.3%	63.2%
Shrank 10-24.99%	20	10.5%	73.7%
Shrank 25-49.99%	23	12.1%	85.8%
Shrank 50%+	27	14.2%	

Technology	Journals	%Free	Articles	%Free
APCLand	51	31%	6,072	14%
France	3	67%	4,996	100%
Indonesia	20	80%	1,085	90%
Poland	16	94%	1,030	86%
Brazil	13	92%	992	96%
Germany	4	75%	648	94%
China	5	40%	365	29%
Russian Federation	7	86%	338	91%
United States	7	57%	317	21%
Canada	3	67%	304	97%
Serbia	5	100%	253	100%
Romania	4	100%	192	100%
United Kingdom	7	29%	142	61%
Ukraine	4	75%	111	89%
Spain	3	0%	100	0%
Hungary	1	100%	96	100%
Belgium	6	100%	93	100%
India	5	60%	86	100%



Technology	Journals	%Free	Articles	%Free
Ecuador	2	100%	78	100%
Finland	1	100%	73	100%
Turkey	2	100%	53	100%
Moldova, Republic of	1	100%	47	100%
Bulgaria	1	100%	44	100%
Czech Republic	3	100%	42	100%
Croatia	1	100%	40	100%
Slovenia	2	100%	40	100%
Iran, Islamic Republic of	2	50%	37	49%
Algeria	2	100%	27	100%
South Africa	1	0%	23	0%
Colombia	2	100%	22	100%
Uruguay	1	100%	21	100%
Argentina	1	100%	20	100%
Cuba	1	100%	20	100%

## Zoology [p. 101]





	Journals	%Free	Articles	%Free
Large: 150-599	16	13%	3,466	8%
Med.: 60-149	55	36%	3,471	33%
Small: 20-59	109	58%	2,794	54%
Smallest: 1-19	35	54%	298	52%

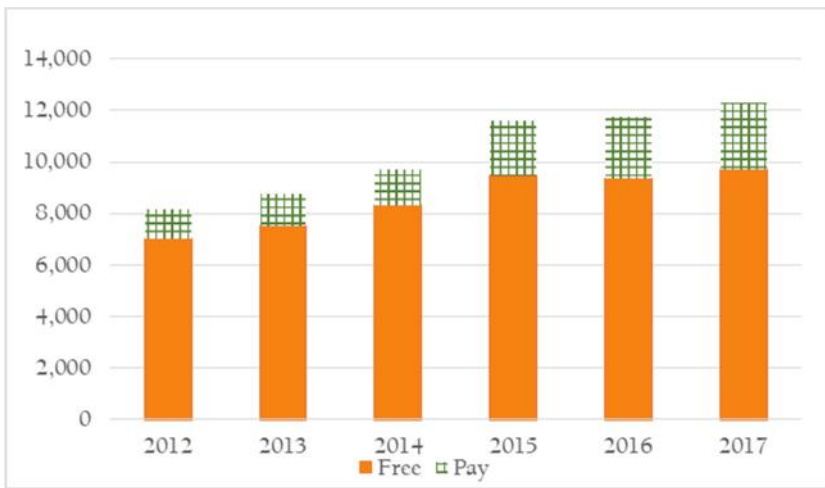
Category	Journals	%Free	Articles	%Free
Univ/college	89	55%	3,981	37%
Open Access	58	38%	2,759	21%
Miscellaneous	22	68%	1,247	55%
Society/govt	28	57%	1,113	25%
Traditional	18	11%	929	7%

Change 2016-17	Count	Percent	Cum%
Grew 50%+	38	17.7%	
Grew 25-49.9%	19	8.8%	26.5%
Grew 10-24.99%	20	9.3%	35.8%
Even, ±9.99%	51	23.7%	59.5%
Shrank 10-24.99%	36	16.7%	76.3%
Shrank 25-49.99%	31	14.4%	90.7%
Shrank 50%+	20	9.3%	

Zoology	Journals	%Free	Articles	%Free
APCLand	42	17%	2,304	8%
Brazil	22	45%	1,774	26%
Bulgaria	8	25%	672	9%
India	4	50%	567	40%
Indonesia	23	26%	513	25%
Poland	14	86%	373	78%
Iran, Islamic Republic of	7	57%	357	46%
Turkey	6	83%	285	45%
Korea, Republic of	2	0%	261	0%
Germany	6	33%	254	16%
Spain	7	86%	249	74%
United States	3	33%	229	20%
Italy	9	78%	220	85%
Czech Republic	3	0%	208	0%
Colombia	4	100%	190	100%
United Kingdom	5	40%	188	9%
Romania	4	50%	180	61%
France	2	100%	137	100%
Pakistan	1	0%	104	0%
China	1	0%	95	0%
Mexico	3	67%	79	35%
South Africa	3	33%	74	42%
Bangladesh	2	50%	73	23%
Serbia	2	100%	63	100%
Libya	1	100%	60	100%
Argentina	3	100%	59	100%
Russian Federation	2	100%	57	100%
Egypt	2	0%	41	0%
Ukraine	1	0%	39	0%
Iraq	2	0%	38	0%
Croatia	2	100%	32	100%
Sweden	1	0%	30	0%

Zoology	Journals	%Free	Articles	%Free
Macedonia, the Former Yugoslav Republic of	1	100%	24	100%
Norway	4	100%	24	100%
Peru	2	100%	24	100%
Hungary	1	100%	23	100%
Venezuela, Bolivarian Republic of	2	100%	21	100%
Thailand	1	100%	20	100%

## Anthropology [p. 108]



	Journals	%Free	Articles	%Free
Largest: 600+	1	0%	826	0%
Large: 150-599	7	86%	767	66%
Med.: 60-149	55	78%	3,391	77%
Small: 20-59	249	90%	6,113	90%
Smallest: 1-19	114	91%	1,179	92%

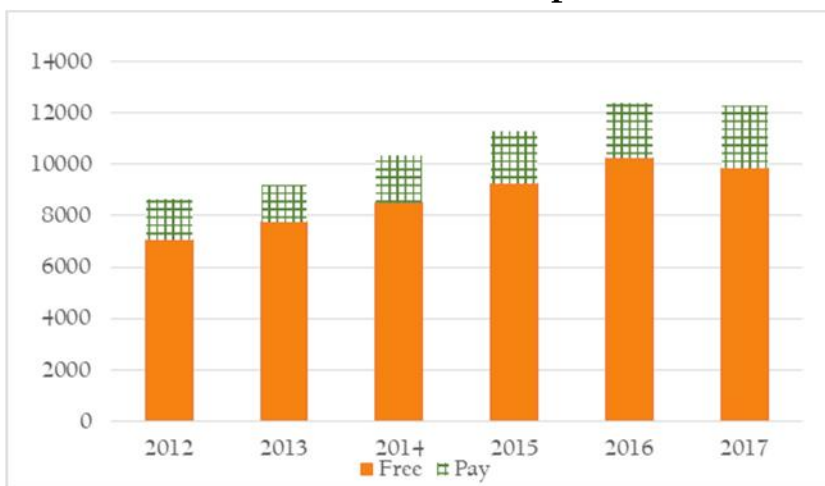
Category	Journals	%Free	Articles	%Free
Univ/college	282	93%	8,574	80%
Miscellaneous	71	90%	1,642	81%
Open Access	34	56%	972	57%
Society/govt	30	87%	857	81%
Traditional	9	78%	231	89%

Change 2016-17	Count	Percent	Cum%
Grew 50%+	72	16.9%	
Grew 25-49.9%	46	10.8%	27.7%
Grew 10-24.99%	59	13.8%	41.5%
Even, $\pm$ 9.99%	94	22.1%	63.6%
Shrank 10-24.99%	54	12.7%	76.3%
Shrank 25-49.99%	47	11.0%	87.3%
Shrank 50%+	54	12.7%	

Anthropology	Journals	%Free	Articles	%Free
Brazil	43	95%	1,708	96%
Spain	56	96%	1,402	90%
Poland	20	80%	1,385	32%
United States	21	86%	674	81%
France	25	100%	673	100%
Romania	17	76%	667	42%
Italy	25	100%	588	100%
APCLand	17	47%	513	46%
Argentina	21	95%	406	96%
Indonesia	21	71%	380	70%
United Kingdom	14	36%	366	31%

<b>Anthropology</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Turkey	11	91%	365	78%
Ukraine	7	86%	326	93%
Russian Federation	5	100%	289	100%
Colombia	14	100%	280	100%
Germany	7	100%	236	100%
Serbia	9	89%	210	93%
Mexico	9	100%	200	100%
Portugal	5	80%	163	75%
Australia	6	83%	93	73%
Canada	4	100%	90	100%
Croatia	6	100%	87	100%
Moldova, Republic of	3	100%	86	100%
Czech Republic	7	100%	84	100%
Peru	3	100%	82	100%
Iran, Islamic Republic of	2	50%	80	50%
Finland	4	100%	78	100%
Greece	2	100%	77	100%
Norway	4	100%	77	100%
Cuba	3	100%	67	100%
Slovenia	4	100%	59	100%
Sweden	2	100%	53	100%
Chile	3	100%	52	100%
Japan	1	100%	50	100%
Montenegro	2	50%	50	40%
Costa Rica	3	100%	46	100%
Slovakia	2	100%	39	100%
Austria	1	100%	22	100%
Malaysia	1	100%	22	100%
Bangladesh	1	0%	20	0%
Bulgaria	1	100%	20	100%

## Arts & Architecture [p. 109]



	Journals	%Free	Articles	%Free
Large: 150-599	4	100%	560	100%
Med.: 60-149	24	71%	1,687	61%
Small: 20-59	144	92%	3,235	92%
Smallest: 1-19	76	97%	688	97%

Category	Journals	%Free	Articles	%Free
Univ/college	172	94%	3,757	88%
Miscellaneous	46	87%	1,262	85%
Society/govt	14	100%	628	100%
Traditional	6	67%	286	46%
Open Access	10	80%	237	38%

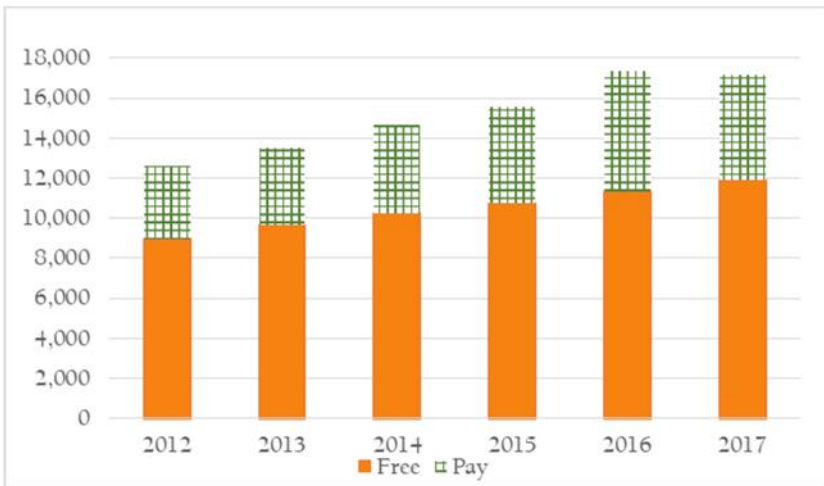
Change 2016-17	Count	Percent	Cum%
Grew 50%+	50	20.2%	
Grew 25-49.9%	22	8.9%	29.0%
Grew 10-24.99%	27	10.9%	39.9%
Even, ±9.99%	50	20.2%	60.1%
Shrank 10-24.99%	32	12.9%	73.0%
Shrank 25-49.99%	24	9.7%	82.7%
Shrank 50%+	43	17.3%	

Arts & Architecture	Journals	%Free	Articles	%Free
Spain	41	98%	849	95%
Brazil	26	96%	816	100%
Italy	27	93%	787	86%
Russian Federation	5	60%	446	75%
United States	17	94%	384	75%
APCLand	7	71%	339	45%
United Kingdom	13	85%	304	63%
Indonesia	18	89%	267	86%
Colombia	6	100%	199	100%
Moldova, Republic of	2	100%	165	100%
Serbia	9	100%	155	100%
Turkey	3	67%	153	25%
Argentina	7	100%	138	100%
France	6	100%	131	100%
Portugal	6	83%	120	75%
Romania	4	100%	119	100%
Chile	6	100%	107	100%
Norway	5	60%	86	64%



Arts & Architecture	Journals	%Free	Articles	%Free
Croatia	5	100%	77	100%
Mexico	3	100%	73	100%
Netherlands	4	50%	67	42%
Ukraine	1	100%	66	100%
Canada	2	100%	37	100%
Greece	1	100%	37	100%
Ireland	1	100%	29	100%
Slovenia	2	100%	29	100%
Belgium	2	100%	25	100%
Australia	3	100%	24	100%
Ecuador	2	100%	24	100%
Costa Rica	1	100%	20	100%
Iran, Islamic Republic of	1	100%	20	100%
Sweden	1	100%	20	100%

## Economics [p. 110]





	Journals	%Free	Articles	%Free
Largest: 600+	1	0%	239	0%
Large: 150-599	12	33%	1,840	26%
Med.: 60-149	81	59%	4,310	57%
Small: 20-59	340	82%	8,550	82%
Smallest: 1-19	200	88%	2,236	88%

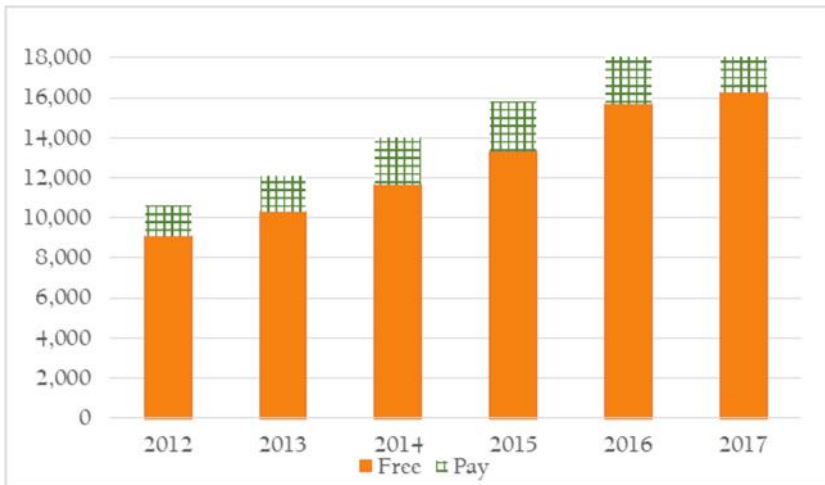
Category	Journals	%Free	Articles	%Free
Univ/college	429	84%	10,930	78%
Open Access	63	59%	2,373	38%
Miscellaneous	73	70%	2,095	58%
Society/govt	35	89%	986	79%
Traditional	34	74%	791	62%

Change 2016-17	Count	Percent	Cum%
Grew 50%+	91	14.4%	
Grew 25-49.9%	65	10.3%	24.6%
Grew 10-24.99%	77	12.1%	36.8%
Even, ±9.99%	176	27.8%	64.5%
Shrank 10-24.99%	77	12.1%	76.7%
Shrank 25-49.99%	81	12.8%	89.4%
Shrank 50%+	67	10.6%	

Economics	Journals	%Free	Articles	%Free
Brazil	87	100%	2,525	100%
Indonesia	125	78%	2,244	74%
Romania	59	63%	2,105	55%
Turkey	27	59%	1,497	23%
Poland	39	90%	1,111	82%
Ukraine	18	39%	1,030	40%
APCLand	39	69%	822	81%
Serbia	19	84%	515	70%
Colombia	22	100%	484	100%
Russian Federation	9	67%	475	65%
Iran, Islamic Republic of	13	92%	344	90%
United Kingdom	10	50%	330	17%
Spain	18	94%	284	87%
Mexico	9	100%	282	100%
United States	13	62%	254	53%
Croatia	10	100%	245	100%
Canada	7	100%	235	100%
Korea, Republic of	5	80%	162	68%
United Arab Emirates	2	0%	154	0%
Italy	10	100%	148	100%
Czech Republic	7	100%	147	100%
Argentina	9	100%	140	100%
Moldova, Republic of	4	25%	126	22%
Latvia	2	50%	116	19%
Slovenia	5	100%	107	100%
Pakistan	4	100%	101	100%
Lithuania	3	0%	93	0%
South Africa	3	0%	87	0%
Austria	1	0%	74	0%
Sweden	4	75%	68	49%
Greece	6	33%	66	14%
Montenegro	1	100%	60	100%
China	1	100%	56	100%

Economics	Journals	%Free	Articles	%Free
Ecuador	2	100%	55	100%
Algeria	1	100%	53	100%
France	3	100%	53	100%
Australia	4	100%	49	100%
Peru	3	100%	46	100%
Slovakia	2	50%	46	24%
Germany	1	100%	35	100%
Macedonia, the Former Yugoslav Republic of	1	100%	30	100%
Belgium	2	100%	29	100%
Bulgaria	1	100%	29	100%
Costa Rica	3	100%	28	100%
Portugal	2	100%	27	100%
Venezuela, Bolivarian Republic of	2	50%	27	22%
Cuba	1	100%	26	100%
Bosnia and Herzegovina	1	100%	22	100%

## Education [p. 111]





	Journals	%Free	Articles	%Free
Large: 150-599	10	50%	1,317	42%
Med.: 60-149	88	76%	5,623	81%
Small: 20-59	390	87%	10,668	87%
Smallest: 1-19	186	85%	2,225	84%

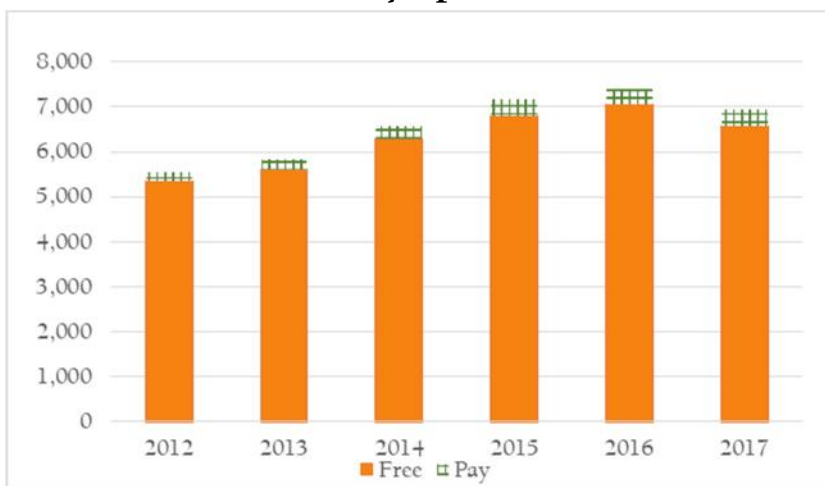
Category	Journals	%Free	Articles	%Free
Univ/college	483	87%	14,793	85%
Miscellaneous	86	87%	2,276	84%
Society/govt	45	80%	1,261	81%
Open Access	42	64%	968	46%
Traditional	18	56%	535	42%

Change 2016-17	Count	Percent	Cum%
Grew 50%+	131	19.4%	
Grew 25-49.9%	63	9.3%	28.8%
Grew 10-24.99%	84	12.5%	41.2%
Even, ±9.99%	191	28.3%	69.6%
Shrank 10-24.99%	70	10.4%	80.0%
Shrank 25-49.99%	77	11.4%	91.4%
Shrank 50%+	58	8.6%	

Education	Journals	%Free	Articles	%Free
Brazil	98	97%	4,418	95%
Indonesia	158	71%	3,604	65%
Spain	60	98%	1,716	99%
Turkey	28	86%	916	88%
United States	44	93%	915	90%
Cuba	10	100%	807	100%
APCLand	19	53%	546	41%
Germany	12	67%	522	35%
United Kingdom	14	64%	392	43%
Russian Federation	6	83%	383	75%
Mexico	10	100%	365	100%
Italy	10	100%	332	100%
Colombia	16	100%	317	100%
Iran, Islamic Republic of	11	82%	308	72%
Canada	16	100%	302	100%
Norway	12	83%	253	90%
Ukraine	4	25%	221	37%
South Africa	8	38%	214	23%
Czech Republic	7	86%	209	84%
Costa Rica	4	100%	178	100%
Sweden	9	78%	175	59%
France	6	100%	170	100%
Australia	8	88%	160	69%
Poland	5	100%	160	100%
Portugal	6	100%	142	100%
Slovenia	5	100%	140	100%
Korea, Republic of	3	67%	124	77%
Argentina	7	100%	116	100%
Hong Kong	2	100%	111	100%
Romania	5	80%	96	86%
Austria	2	100%	84	100%
Serbia	4	100%	83	100%
Thailand	2	50%	78	17%
Cyprus	3	67%	74	66%

Education	Journals	%Free	Articles	%Free
New Zealand	3	100%	74	100%
Peru	3	100%	74	100%
Malaysia	4	100%	71	100%
Japan	2	100%	69	100%
Ecuador	2	100%	67	100%
Chile	3	100%	66	100%
Lithuania	3	67%	64	25%
Bulgaria	2	100%	63	100%
Taiwan, Province of China	5	40%	60	17%
Croatia	2	50%	49	57%
Switzerland	1	100%	48	100%
Uruguay	2	100%	48	100%
Denmark	3	100%	44	100%
Belgium	2	100%	40	100%
Pakistan	2	100%	39	100%
India	2	50%	37	76%
Estonia	2	100%	35	100%
Moldova, Republic of	1	0%	33	0%
Barbados	1	100%	32	100%
Slovakia	1	100%	29	100%
Iraq	1	0%	25	0%
Venezuela, Bolivarian Republic of	2	100%	25	100%
Greece	2	50%	22	45%
Albania	1	100%	21	100%
Latvia	1	100%	20	100%

## History [p. 112]



	Journals	%Free	Articles	%Free
Largest: 600+	1	100%	666	100%
Large: 150-599	6	83%	498	68%
Med.: 60-149	19	89%	908	92%
Small: 20-59	172	98%	4,343	98%
Smallest: 1-19	60	93%	518	90%



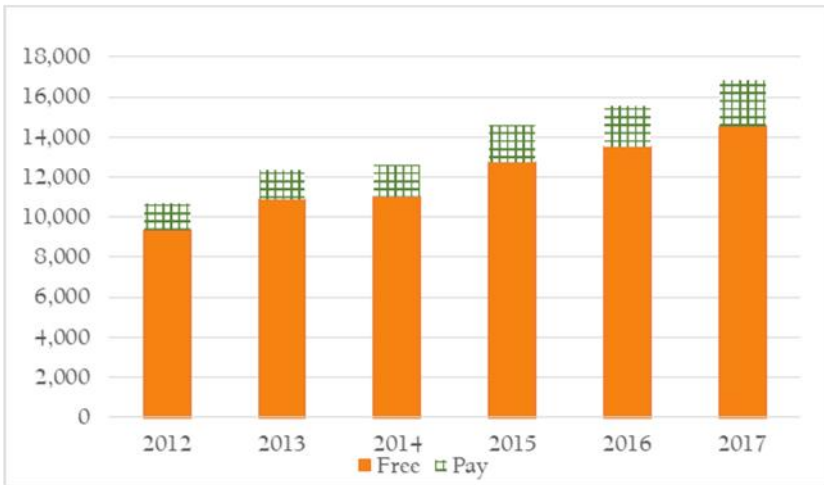
Category	Journals	%Free	Articles	%Free
Univ/college	200	96%	4,885	93%
Miscellaneous	28	96%	1,249	98%
Society/govt	23	100%	667	100%
Open Access	7	86%	132	95%

Change 2016-17	Count	Percent	Cum%
Grew 50%+	24	9.3%	
Grew 25-49.9%	21	8.1%	17.4%
Grew 10-24.99%	30	11.6%	29.1%
Even, ±9.99%	62	24.0%	53.1%
Shrank 10-24.99%	40	15.5%	68.6%
Shrank 25-49.99%	43	16.7%	85.3%
Shrank 50%+	38	14.7%	

History	Journals	%Free	Articles	%Free
Brazil	38	100%	1,272	100%
Spain	43	100%	1,032	100%
United States	10	100%	813	100%
Argentina	20	100%	498	100%
Russian Federation	7	86%	469	67%
France	16	100%	350	100%
Italy	16	100%	283	100%
Netherlands	6	100%	264	100%
Colombia	11	100%	262	100%
Turkey	7	86%	136	92%
Moldova, Republic of	3	67%	116	83%
Poland	5	100%	112	100%
Romania	9	100%	106	100%
United Kingdom	5	80%	105	93%
Portugal	6	100%	104	100%
Hungary	2	100%	88	100%
Chile	6	100%	84	100%
Germany	4	100%	79	100%
Indonesia	6	50%	78	32%

History	Journals	%Free	Articles	%Free
Mexico	3	100%	75	100%
Croatia	3	100%	67	100%
Canada	4	100%	58	100%
Austria	2	100%	51	100%
Iraq	1	0%	50	0%
Norway	2	100%	50	100%
Czech Republic	1	100%	41	100%
Australia	5	100%	37	100%
Ukraine	1	0%	34	0%
Denmark	1	100%	30	100%
Greece	3	100%	27	100%
Finland	1	100%	24	100%
South Africa	1	0%	24	0%
Estonia	2	100%	23	100%

## Language & Literature [p. 113]





	Journals	%Free	Articles	%Free
Largest: 600+	1	100%	710	100%
Large: 150-599	8	50%	1,371	33%
Med.: 60-149	66	89%	4,147	87%
Small: 20-59	328	93%	8,711	92%
Smallest: 1-19	206	91%	1,921	88%

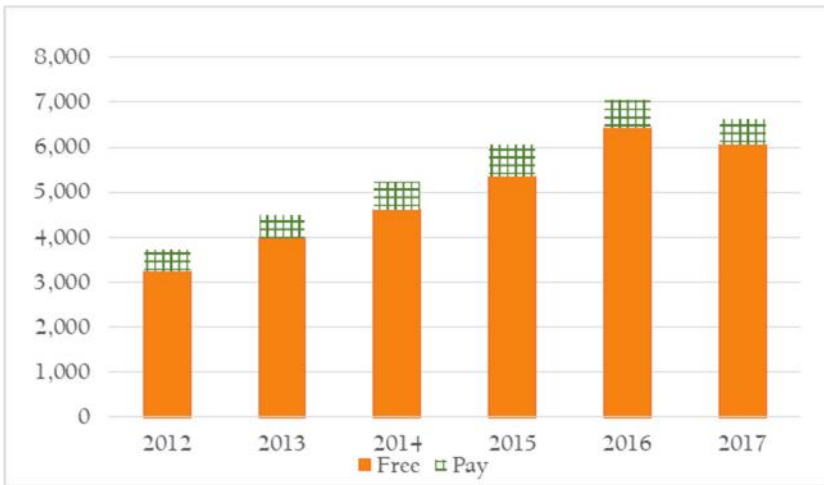
Category	Journals	%Free	Articles	%Free
Univ/college	453	92%	12,175	87%
Miscellaneous	60	93%	2,247	93%
Open Access	52	85%	1,274	58%
Society/govt	34	97%	1,022	98%
Traditional	10	50%	142	57%

Change 2016-17	Count	Percent	Cum%
Grew 50%+	128	21.0%	
Grew 25-49.9%	74	12.2%	33.2%
Grew 10-24.99%	62	10.2%	43.3%
Even, ±9.99%	160	26.3%	69.6%
Shrank 10-24.99%	67	11.0%	80.6%
Shrank 25-49.99%	46	7.6%	88.2%
Shrank 50%+	72	11.8%	

Language & Literature	Journals	%Free	Articles	%Free
Brazil	92	100%	3,348	100%
Spain	75	99%	1,777	98%
Indonesia	64	75%	1,138	75%
Turkey	6	100%	1,023	100%
Italy	30	97%	916	98%
Russian Federation	12	75%	914	44%
France	49	100%	845	100%
United States	39	97%	769	98%
Romania	21	90%	614	67%
Poland	23	96%	526	93%
Australia	7	71%	525	50%
United Kingdom	16	81%	333	60%
Colombia	9	89%	247	81%
Germany	9	89%	246	95%
Ukraine	3	0%	233	0%
Slovenia	10	100%	222	100%
South Africa	5	0%	210	0%
Argentina	6	100%	192	100%
Czech Republic	6	100%	192	100%
Canada	11	100%	170	100%
Iran, Islamic Republic of	7	71%	158	66%
Mexico	6	100%	155	100%
Portugal	9	100%	155	100%
APCLand	6	50%	149	42%
Serbia	4	100%	148	100%
Belgium	6	100%	142	100%
Croatia	5	100%	135	100%
Norway	10	100%	135	100%
Malaysia	3	33%	128	8%
Lithuania	5	100%	97	100%
Ecuador	1	100%	93	100%
Chile	4	100%	84	100%
Netherlands	8	63%	82	65%

Language & Literature	Journals	%Free	Articles	%Free
Switzerland	3	100%	74	100%
Sweden	3	100%	65	100%
Korea, Republic of	2	100%	61	100%
Libya	1	0%	56	0%
Bosnia and Herzegovina	1	100%	52	100%
Peru	2	100%	49	100%
Estonia	2	100%	48	100%
Slovakia	2	50%	48	79%
Finland	2	100%	40	100%
Greece	2	100%	39	100%
Israel	2	100%	38	100%
Tunisia	1	100%	20	100%

### Law [p. 114]





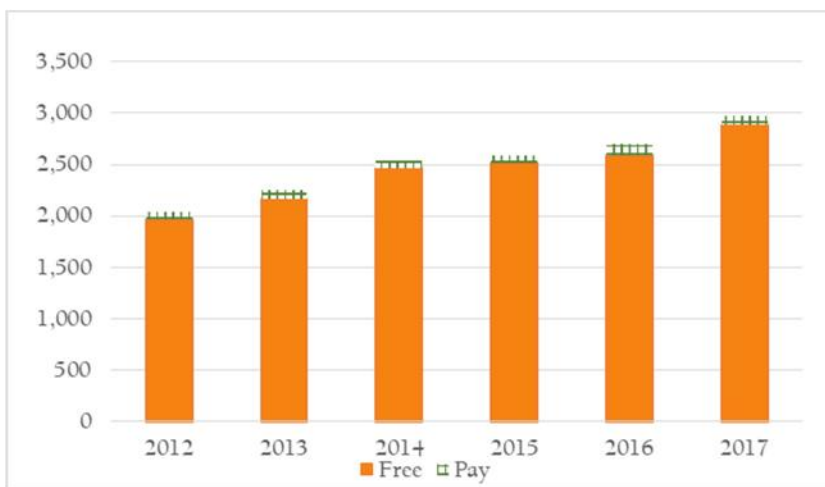
	Journals	%Free	Articles	%Free
Large: 150-599	2	50%	267	79%
Med.: 60-149	31	90%	1,732	92%
Small: 20-59	160	93%	3,806	91%
Smallest: 1-19	86	93%	836	93%

Category	Journals	%Free	Articles	%Free
Univ/college	217	93%	5,124	91%
Miscellaneous	27	100%	658	100%
Society/govt	13	92%	490	91%
Open Access	17	82%	291	89%
Traditional	5	60%	78	68%

Change 2016-17	Count	Percent	Cum%
Grew 50%+	41	14.7%	
Grew 25-49.9%	25	9.0%	23.7%
Grew 10-24.99%	27	9.7%	33.3%
Even, ±9.99%	68	24.4%	57.7%
Shrank 10-24.99%	36	12.9%	70.6%
Shrank 25-49.99%	33	11.8%	82.4%
Shrank 50%+	49	17.6%	

Law	Journals	%Free	Articles	%Free
Brazil	71	99%	2,031	98%
Indonesia	44	80%	734	69%
Russian Federation	11	91%	587	90%
Spain	19	100%	523	100%
Italy	12	100%	468	100%
Colombia	22	100%	371	100%
APCLand	9	56%	192	63%
Poland	8	88%	131	76%
Iran, Islamic Republic of	4	75%	126	71%
South Africa	3	67%	101	59%
Serbia	4	100%	99	100%
United Kingdom	7	86%	93	84%
Norway	6	83%	84	80%
United States	6	100%	82	100%
Romania	4	100%	81	100%
Chile	4	100%	78	100%
Turkey	2	100%	68	100%
Croatia	3	100%	67	100%
Australia	4	100%	65	100%
France	3	100%	63	100%
Peru	2	100%	63	100%
Costa Rica	2	100%	55	100%
Argentina	3	100%	47	100%
Portugal	1	0%	45	0%
Lithuania	2	100%	43	100%
Canada	3	100%	36	100%
Switzerland	3	100%	36	100%
Qatar	1	100%	35	100%
Estonia	1	100%	28	100%
Saudi Arabia	1	100%	27	100%
Uruguay	1	100%	24	100%
Mexico	1	100%	22	100%
Netherlands	2	100%	21	100%

## Library Science [p. 115]



	Journals	%Free	Articles	%Free
Med.: 60-149	14	100%	912	100%
Small: 20-59	72	94%	1,748	96%
Smallest: 1-19	38	95%	309	95%



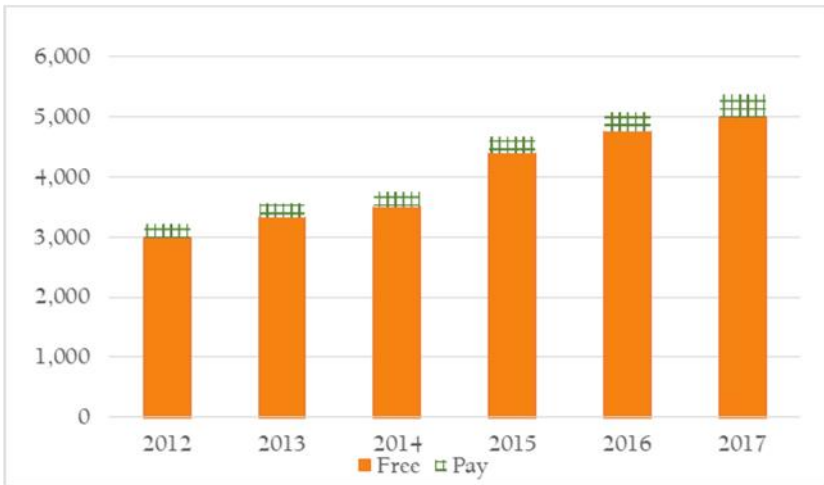
Category	Journals	%Free	Articles	%Free
Univ/college	82	96%	1,885	98%
Society/govt	19	100%	526	100%
Miscellaneous	17	94%	398	93%
Open Access	6	67%	160	87%

Change 2016-17	Count	Percent	Cum%
Grew 50%+	33	26.6%	
Grew 25-49.9%	14	11.3%	37.9%
Grew 10-24.99%	12	9.7%	47.6%
Even, $\pm$ 9.99%	19	15.3%	62.9%
Shrank 10-24.99%	13	10.5%	73.4%
Shrank 25-49.99%	18	14.5%	87.9%
Shrank 50%+	15	12.1%	

Library Science	Journals	%Free	Articles	%Free
Brazil	17	100%	582	100%
United States	26	96%	529	95%
United Kingdom	10	80%	268	92%
Poland	7	100%	197	100%
Spain	9	100%	166	100%
Canada	3	100%	157	100%
Italy	3	100%	106	100%
Germany	4	100%	104	100%
Indonesia	6	83%	94	79%
Portugal	3	100%	75	100%
Turkey	3	100%	60	100%
Iran, Islamic Republic of	1	100%	54	100%
Argentina	2	100%	49	100%
Ukraine	1	100%	46	100%
Netherlands	2	100%	41	100%
Korea, Republic of	2	100%	40	100%
Slovakia	1	100%	40	100%
India	1	100%	39	100%
Cuba	2	100%	36	100%
Taiwan, Province of China	3	100%	35	100%
Slovenia	1	100%	30	100%

Library Science	Journals	%Free	Articles	%Free
Costa Rica	2	100%	29	100%
Lithuania	1	100%	29	100%
Colombia	1	100%	27	100%
APCLand	1	100%	27	100%
Croatia	2	100%	22	100%
Egypt	1	100%	21	100%

## Media & Communications [p. 116]



	Journals	%Free	Articles	%Free
Large: 150-599	3	100%	424	100%
Med.: 60-149	18	89%	1,186	91%
Small: 20-59	124	94%	3,223	93%
Smallest: 1-19	43	91%	546	91%

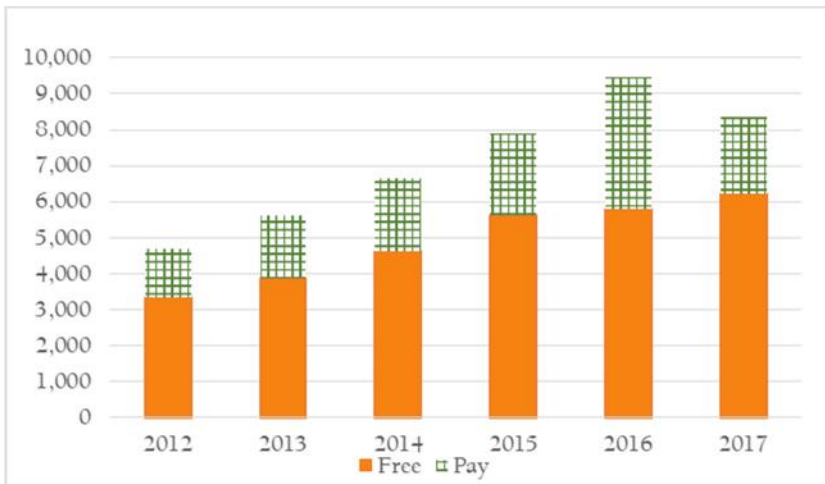
Category	Journals	%Free	Articles	%Free
Univ/college	140	97%	3,951	98%
Miscellaneous	23	87%	641	87%
Society/govt	15	80%	504	81%
Open Access	8	63%	173	39%
Traditional	2	50%	110	68%

Change 2016-17	Count	Percent	Cum%
Grew 50%+	35	18.6%	
Grew 25-49.9%	15	8.0%	26.6%
Grew 10-24.99%	27	14.4%	41.0%
Even, $\pm$ 9.99%	59	31.4%	72.3%
Shrank 10-24.99%	19	10.1%	82.4%
Shrank 25-49.99%	17	9.0%	91.5%
Shrank 50%+	16	8.5%	

Media & Communications	Journals	%Free	Articles	%Free
Brazil	35	100%	1,242	100%
Spain	29	93%	898	91%
Portugal	9	89%	385	83%
Indonesia	21	81%	339	79%
France	7	86%	220	92%
Argentina	7	100%	182	100%
United States	7	100%	178	100%
Canada	5	100%	174	100%
Ecuador	2	100%	160	100%
APCLand	4	50%	145	59%
Italy	5	100%	144	100%
Colombia	5	100%	130	100%

Media & Communications	Journals	%Free	Articles	%Free
Poland	7	100%	127	100%
Australia	5	100%	124	100%
Chile	3	100%	106	100%
Turkey	3	100%	89	100%
United Kingdom	3	100%	89	100%
Austria	2	100%	71	100%
Netherlands	3	100%	71	100%
Romania	4	100%	63	100%
Germany	3	100%	55	100%
Croatia	2	100%	49	100%
Norway	2	100%	45	100%
Ireland	2	100%	44	100%
Korea, Republic of	1	0%	40	0%
Denmark	2	100%	32	100%
Belgium	1	100%	30	100%
Czech Republic	1	100%	27	100%

### Miscellany [p. 117]





	Journals	%Free	Articles	%Free
Largest: 600+	3	33%	1,000	16%
Large: 150-599	11	45%	1,554	50%
Med.: 60-149	38	89%	2,369	91%
Small: 20-59	114	90%	3,028	91%
Smallest: 1-19	36	89%	408	92%

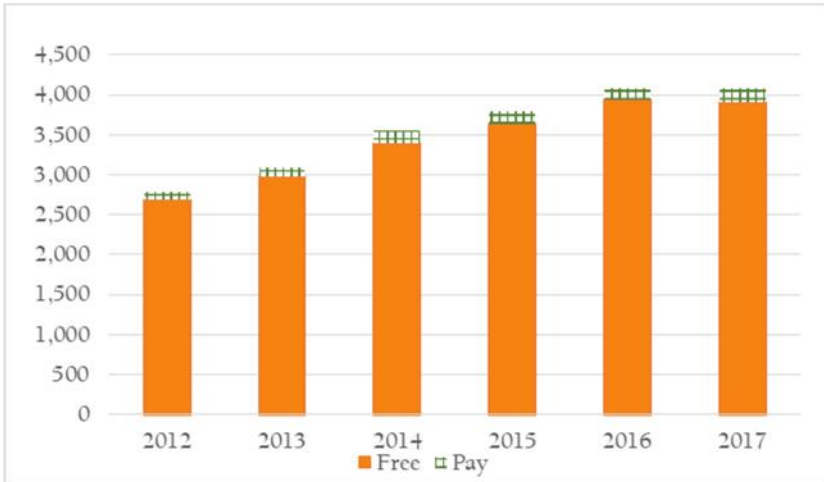
Category	Journals	%Free	Articles	%Free
Univ/college	157	94%	6,074	81%
Miscellaneous	23	65%	993	70%
Traditional	5	20%	616	8%
Open Access	14	64%	613	74%
Society/govt	3	100%	63	100%

Change 2016-17	Count	Percent	Cum%
Grew 50%+	39	19.3%	
Grew 25-49.9%	26	12.9%	32.2%
Grew 10-24.99%	27	13.4%	45.5%
Even, ±9.99%	36	17.8%	63.4%
Shrank 10-24.99%	21	10.4%	73.8%
Shrank 25-49.99%	30	14.9%	88.6%
Shrank 50%+	23	11.4%	

Miscellany	Journals	%Free	Articles	%Free
Brazil	44	100%	1,986	100%
Iraq	1	0%	751	0%
APCLand	6	50%	706	46%
Russian Federation	7	71%	416	75%
Ecuador	5	100%	352	100%
Romania	9	67%	346	67%
Colombia	14	100%	343	100%
Indonesia	15	73%	278	76%
United Kingdom	5	60%	272	24%
Ukraine	3	100%	232	100%
Turkey	4	100%	214	100%
Poland	5	80%	188	77%
Spain	6	100%	169	100%
Chile	5	100%	168	100%
United States	8	100%	158	100%
Costa Rica	3	100%	150	100%
Philippines	1	0%	147	0%
Bulgaria	3	67%	126	92%
Venezuela, Bolivarian Republic of	2	50%	116	5%
Mexico	4	100%	100	100%
Tunisia	1	0%	88	0%
Serbia	2	100%	86	100%
Slovakia	2	50%	79	70%
Argentina	2	100%	74	100%
Italy	4	100%	69	100%
Algeria	1	100%	67	100%
Germany	3	100%	58	100%
Slovenia	2	100%	57	100%
Netherlands	2	100%	55	100%
Malaysia	1	100%	53	100%
South Africa	2	0%	47	0%
France	4	100%	46	100%
Portugal	2	100%	45	100%
Sweden	2	50%	44	64%
Peru	2	100%	43	100%

Miscellany	Journals	%Free	Articles	%Free
India	2	0%	39	0%
Iran, Islamic Republic of	1	100%	30	100%
Australia	2	100%	23	100%
Uruguay	1	100%	20	100%

## Philosophy [p. 118]



	Journals	%Free	Articles	%Free
Large: 150-599	1	100%	122	100%
Med.: 60-149	17	94%	1,016	94%
Small: 20-59	100	97%	2,601	97%
Smallest: 1-19	42	93%	343	88%

Category	Journals	%Free	Articles	%Free
Univ/college	116	98%	3,114	99%
Miscellaneous	22	95%	460	97%
Society/govt	12	100%	262	100%
Open Access	9	67%	228	52%
Traditional	1	0%	18	0%

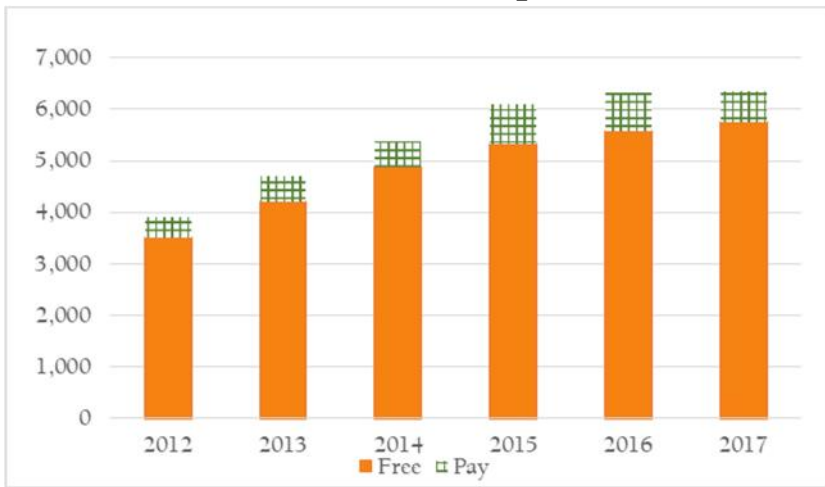
Change 2016-17	Count	Percent	Cum%
Grew 50%+	27	16.9%	
Grew 25-49.9%	14	8.8%	25.6%
Grew 10-24.99%	22	13.8%	39.4%
Even, $\pm$ 9.99%	42	26.3%	65.6%
Shrank 10-24.99%	15	9.4%	75.0%
Shrank 25-49.99%	21	13.1%	88.1%
Shrank 50%+	19	11.9%	

Philosophy	Journals	%Free	Articles	%Free
Brazil	24	100%	798	100%
Spain	20	100%	633	100%
Italy	19	100%	468	100%
Poland	10	100%	288	100%
Colombia	7	100%	201	100%
United States	10	100%	192	100%
Romania	8	88%	184	85%
APCLand	5	20%	154	17%
Ukraine	3	100%	150	100%
Canada	7	100%	116	100%
Serbia	2	100%	96	100%
Argentina	8	100%	92	100%



Philosophy	Journals	%Free	Articles	%Free
Russian Federation	2	100%	85	100%
Iran, Islamic Republic of	3	100%	77	100%
Chile	4	100%	75	100%
Australia	1	100%	67	100%
Mexico	3	67%	55	84%
France	3	100%	53	100%
Norway	2	50%	39	62%
Austria	3	100%	37	100%
Croatia	1	100%	37	100%
Philippines	1	100%	30	100%
Germany	2	100%	24	100%
Ecuador	1	100%	21	100%

### Political Science [p. 119]





	Journals	%Free	Articles	%Free
Largest: 600+	1	100%	705	100%
Large: 150-599	1	0%	113	0%
Med.: 60-149	26	81%	1,420	83%
Small: 20-59	138	94%	3,459	95%
Smallest: 1-19	66	91%	645	92%

Category	Journals	%Free	Articles	%Free
Univ/college	160	93%	3,840	90%
Miscellaneous	35	94%	1,618	96%
Open Access	22	77%	414	72%
Society/govt	9	100%	282	100%
Traditional	6	67%	188	90%

Change 2016-17	Count	Percent	Cum%
Grew 50%+	29	12.5%	
Grew 25-49.9%	20	8.6%	21.1%
Grew 10-24.99%	30	12.9%	34.1%
Even, ±9.99%	51	22.0%	56.0%
Shrank 10-24.99%	33	14.2%	70.3%
Shrank 25-49.99%	38	16.4%	86.6%
Shrank 50%+	31	13.4%	

Political Science	Journals	%Free	Articles	%Free
Russian Federation	6	100%	969	100%
Brazil	31	100%	858	100%
Romania	26	96%	707	84%
Spain	21	100%	576	100%
Poland	14	100%	396	100%
United States	10	90%	258	97%
Colombia	9	100%	252	100%
Indonesia	15	60%	249	47%
Germany	10	100%	202	100%
APCLand	4	100%	170	100%
Chile	6	100%	152	100%
Italy	5	100%	134	100%
Portugal	3	67%	112	28%
Austria	7	100%	109	100%
France	5	100%	93	100%
Moldova, Republic of	1	0%	88	0%
Mexico	4	75%	84	80%
Ukraine	3	33%	75	20%
United Kingdom	5	40%	68	60%
Czech Republic	5	100%	66	100%
South Africa	3	100%	65	100%
Netherlands	3	33%	61	25%
Iran, Islamic Republic of	2	100%	56	100%
Norway	2	100%	51	100%
Switzerland	1	100%	51	100%
Turkey	3	100%	51	100%
Iceland	2	100%	48	100%
Argentina	3	100%	45	100%
Taiwan, Province of China	1	100%	39	100%
Ecuador	1	100%	31	100%
Croatia	2	100%	26	100%
El Salvador	1	100%	26	100%
Sweden	3	67%	25	72%
Lithuania	1	100%	22	100%

# Psychology [p. 120]



	Journals	%Free	Articles	%Free
Largest: 600+	1	0%	2,319	0%
Large: 150-599	1	100%	31	100%
Med.: 60-149	25	76%	1,532	68%
Small: 20-59	100	86%	2,603	87%
Smallest: 1-19	46	83%	409	89%

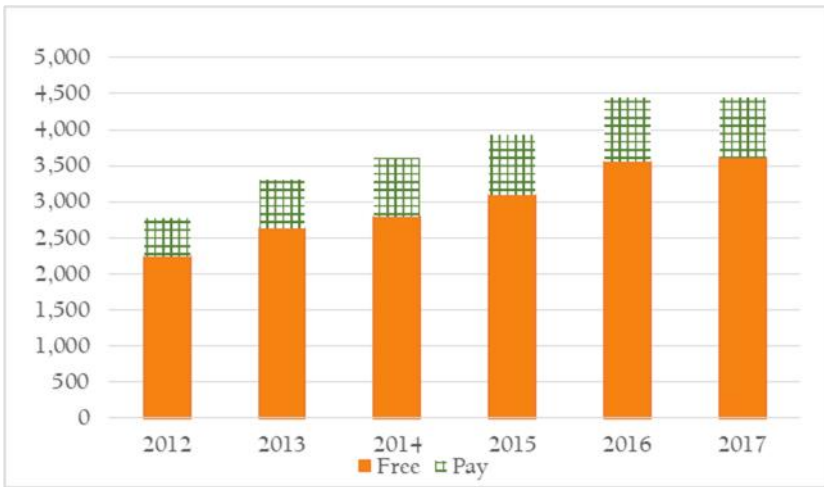
Category	Journals	%Free	Articles	%Free
Univ/college	112	93%	3,087	90%
Open Access	16	38%	2,656	7%
Traditional	17	59%	479	44%
Society/govt	13	92%	391	83%
Miscellaneous	15	80%	281	79%

Change 2016-17	Count	Percent	Cum%
Grew 50%+	18	10.4%	
Grew 25-49.9%	19	11.0%	21.4%
Grew 10-24.99%	18	10.4%	31.8%
Even, $\pm$ 9.99%	58	33.5%	65.3%
Shrank 10-24.99%	23	13.3%	78.6%
Shrank 25-49.99%	20	11.6%	90.2%
Shrank 50%+	17	9.8%	

Psychology	Journals	%Free	Articles	%Free
APCLand	18	50%	2,808	6%
Brazil	25	100%	931	100%
Spain	14	79%	565	56%
Colombia	12	100%	355	100%
Russian Federation	7	100%	343	100%
Indonesia	13	85%	202	87%
Poland	5	80%	174	82%
Germany	6	83%	163	87%
United States	9	67%	160	78%
Italy	8	88%	120	98%
Peru	4	100%	114	100%
Argentina	5	100%	96	100%
Canada	3	33%	81	17%
Turkey	3	100%	74	100%
Chile	3	100%	72	100%
Portugal	2	50%	71	7%
Moldova, Republic of	2	100%	63	100%
United Kingdom	6	50%	61	54%
Czech Republic	3	100%	56	100%
Iran, Islamic Republic of	2	100%	50	100%

Psychology	Journals	%Free	Articles	%Free
Uruguay	2	100%	48	100%
Georgia	1	100%	46	100%
Costa Rica	3	100%	44	100%
Croatia	1	100%	30	100%
South Africa	1	0%	25	0%
Mexico	2	100%	23	100%
Malta	1	100%	20	100%

## Religion [p. 121]



	Journals	%Free	Articles	%Free
Large: 150-599	3	67%	571	53%
Med.: 60-149	15	80%	970	80%
Small: 20-59	105	85%	2,447	85%
Smallest: 1-19	46	96%	461	94%

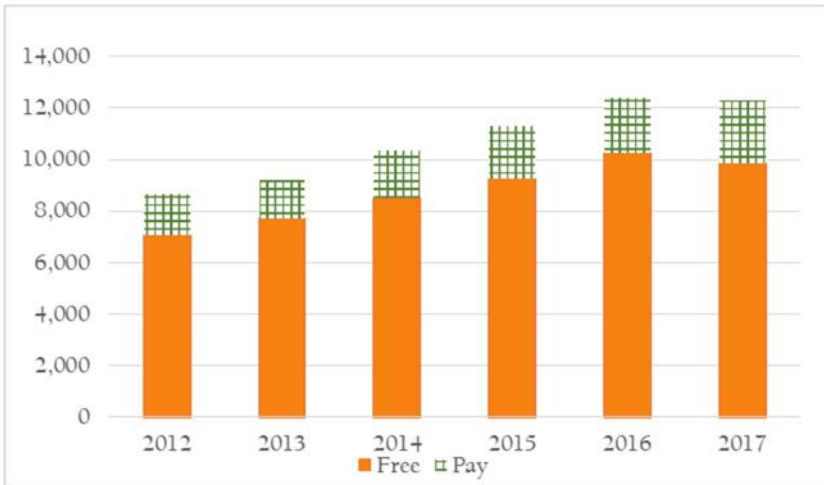
Category	Journals	%Free	Articles	%Free
Univ/college	133	91%	3,023	92%
Open Access	11	55%	830	43%
Miscellaneous	17	88%	331	84%
Traditional	2	50%	155	81%
Society/govt	6	67%	110	65%

Change 2016-17	Count	Percent	Cum%
Grew 50%+	19	11.2%	
Grew 25-49.9%	16	9.5%	20.7%
Grew 10-24.99%	20	11.8%	32.5%
Even, $\pm$ 9.99%	44	26.0%	58.6%
Shrank 10-24.99%	23	13.6%	72.2%
Shrank 25-49.99%	21	12.4%	84.6%
Shrank 50%+	26	15.4%	

Religion	Journals	%Free	Articles	%Free
Indonesia	66	91%	931	87%
Brazil	18	94%	588	93%
South Africa	8	13%	521	0%
Poland	12	100%	337	100%
APCLand	1	100%	268	100%
Netherlands	2	100%	181	100%
Turkey	6	100%	164	100%
United States	7	100%	148	100%
Italy	2	100%	139	100%
Russian Federation	2	100%	122	100%
Germany	5	60%	93	43%
Sweden	2	100%	91	100%

Religion	Journals	%Free	Articles	%Free
Malaysia	3	33%	84	57%
Spain	2	100%	83	100%
Iran, Islamic Republic of	4	75%	77	81%
Norway	3	100%	66	100%
Croatia	1	100%	55	100%
Chile	2	100%	49	100%
United Kingdom	3	33%	48	19%
Austria	1	100%	45	100%
Costa Rica	1	100%	44	100%
Pakistan	1	100%	41	100%
Colombia	1	100%	31	100%
Switzerland	2	100%	31	100%
Australia	1	100%	29	100%
Czech Republic	1	100%	27	100%
Japan	1	100%	22	100%
Romania	1	0%	22	0%
Lithuania	1	100%	21	100%

### Sociology [p. 122]







	Journals	%Free	Articles	%Free
Large: 150-599	10	40%	1,559	39%
Med.: 60-149	56	86%	3,257	80%
Small: 20-59	247	90%	6,500	89%
Smallest: 1-19	96	90%	967	92%

Category	Journals	%Free	Articles	%Free
Univ/college	272	94%	7,953	91%
Miscellaneous	63	89%	1,902	71%
Society/govt	28	96%	841	97%
Open Access	28	54%	811	30%
Traditional	18	39%	776	26%

Change 2016-17	Count	Percent	Cum%
Grew 50%+	53	13.0%	
Grew 25-49.9%	37	9.0%	22.0%
Grew 10-24.99%	51	12.5%	34.5%
Even, ±9.99%	112	27.4%	61.9%
Shrank 10-24.99%	49	12.0%	73.8%
Shrank 25-49.99%	55	13.4%	87.3%
Shrank 50%+	52	12.7%	

Sociology	Journals	%Free	Articles	%Free
Brazil	62	100%	1,982	100%
Spain	37	92%	969	90%
United States	30	97%	896	97%
APCLand	20	45%	825	23%
Colombia	21	100%	551	100%
Poland	10	90%	529	83%
United Kingdom	11	55%	508	59%
Russian Federation	7	86%	458	76%
France	15	93%	420	95%
Indonesia	26	65%	420	51%
Turkey	11	91%	389	69%
Portugal	10	80%	348	49%
Mexico	12	100%	335	100%
Argentina	17	100%	301	100%
South Africa	3	0%	276	0%
Romania	10	80%	270	45%
Canada	7	100%	232	100%
Netherlands	4	100%	195	100%
Italy	7	100%	175	100%
Ecuador	4	100%	172	100%
Norway	8	100%	168	100%
Germany	5	100%	164	100%
Greece	2	100%	147	100%
Ukraine	1	0%	127	0%
Iran, Islamic Republic of	3	100%	111	100%
Australia	5	100%	95	100%
Chile	5	100%	93	100%
Venezuela, Bolivarian Republic of	4	100%	87	100%
Serbia	3	100%	82	100%
Croatia	3	100%	81	100%
Lithuania	7	86%	78	91%
Moldova, Republic of	2	50%	70	19%
Pakistan	2	100%	64	100%

Sociology	Journals	%Free	Articles	%Free
Iraq	1	100%	63	100%
Slovenia	3	100%	62	100%
Switzerland	2	50%	58	93%
Slovakia	3	100%	55	100%
Costa Rica	3	100%	48	100%
Ghana	2	50%	46	52%
Sweden	4	50%	41	27%
Hungary	1	100%	40	100%
Denmark	2	50%	37	0%
India	2	100%	37	100%
Latvia	1	100%	32	100%
Austria	2	100%	30	100%
Albania	1	100%	21	100%
United Arab Emirates	1	0%	21	0%

## Closing Notes and Questions

First, for those looking at all the “mistakes” in the article volume tables: Journals were assigned to volume categories (e.g., Largest) based on *peak* volume in any year 2012 through 2017. Thus, it’s entirely possible to have three Largest journals with total article count well below 1,800, or even below 600. That methodology is consistent throughout the GOAJ project.

Would it make more sense to categorize journals based on the latest year’s volume? That’s one of several questions I’m seeking feedback on (if there are future GOAJ editions). Others include:

- Does the split between APCLand and OAWorld (used this year in *GOAJ3* and this subject supplement, but *not* in *Gold Open Access Journals by Country 2012-2017*) make sense, or is it a distraction?
- For *GOAJ3* itself, is the Visibility measure useless, or should I either retain it or even expand it to a more granular measure?
- For subject segments, should Psychology be lumped into Medicine, and should Anthropology be treated as part of STEM?
- Do the publisher categories provide useful information?
- For country listings, should I continue to use names as provided in *DOAJ* or normalize to shorter forms used in *Wikipedia* and elsewhere—that is, Iran, Taiwan, Russia, Macedonia, Moldova,

Bolivia and Venezuela? If so, what forms should I use for the Republic of Korea (South Korea?) and the Democratic Republic of the Congo?

- Should the graph of free and pay articles by year be replaced by or supplemented with a table with the same data as numbers?
- How about commentary? Last year's subject supplement included my brief comments about what seemed most interesting in each subject's tables—but the room left by removing commentary means that this subject supplement offers more complete country lists, going down to 20 articles for all subjects except Medicine.
- Similarly, the last two country-oriented publications have eschewed commentary in order to avoid even longer/larger publications. Would you like to see commentary restored?

And, of course, I'm open to other ideas and suggestions. Send your responses to [waltcrawford@gmail.com](mailto:waltcrawford@gmail.com). There may be an online survey later this year, but that's not certain—and I *do* read comments.

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However, the GOAJ project is funded by SPARC, and *C&I* also received a generous donation from the people behind *DOAJ*. I am, therefore, not soliciting donations for this or the immediately previous issue.

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## Masthead

*Cites & Insights: Crawford at Large*, Volume 18, Number 4, Whole # 213, ISSN 1534-0937, a periodical of libraries, policy, technology and media, is written and produced by Walt Crawford.

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