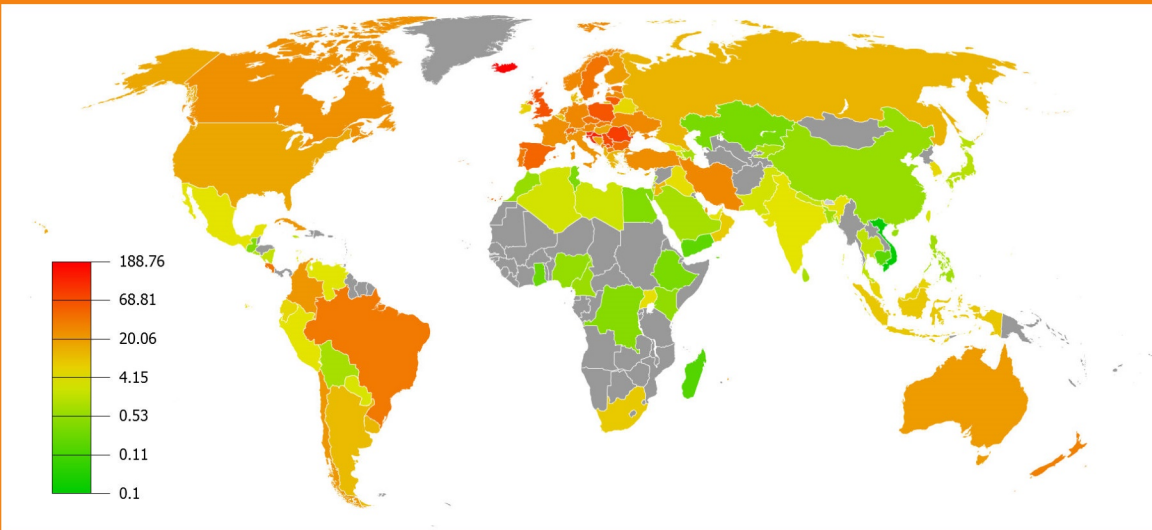


# The Countries of OAWorld 2: 2011-2016



A Supplement to  
GOAJ2: Gold Open Access Journals 2011-2016

Walt Crawford



# THE COUNTRIES OF OAWORLD 2: 2011-2016

Supplement to *GOAJ2: Gold  
Open Access Journals 2011-  
2016*

Walt Crawford

Cites & Insights Books  
Livermore, California, 2017

# The Countries of OAWorld 2: 2011-2016

## Supplement to GOAJ2: *Gold Open Access Journals* 2011-2016

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# Contents

Preface .....	vii
OAWorld .....	1
Africa .....	4
South Africa .....	7
Other African Countries .....	11
Asia .....	16
Bangladesh .....	19
China .....	22
Hong Kong.....	26
India .....	30
Indonesia .....	34
Japan.....	38
Korea, Republic of .....	41
Malaysia .....	45
Nepal .....	48
Pakistan.....	50
Philippines .....	53
Taiwan, Province of China .....	55
Thailand.....	58
Other Asian Countries .....	61
Eastern Europe .....	64
Bosnia and Herzegovina.....	67

Bulgaria .....	70
Croatia.....	73
Czech Republic.....	77
Estonia .....	81
Hungary .....	83
Lithuania .....	86
Macedonia, the Former Yugoslav Republic of .....	89
Moldova, Republic of.....	92
Poland .....	95
Romania .....	99
Russian Federation.....	103
Serbia .....	107
Slovakia.....	111
Slovenia.....	115
Ukraine .....	119
Other Eastern European Countries.....	123
Latin America .....	128
Argentina.....	131
Brazil .....	135
Chile.....	139
Colombia.....	143
Costa Rica.....	147
Cuba.....	150
Ecuador .....	153
Mexico.....	155
Peru.....	159
Uruguay .....	162
Venezuela, Bolivarian Republic of.....	164
Other Latin American Countries .....	167

Middle East .....	171
Iran, Islamic Republic of.....	174
Iraq .....	178
Turkey.....	181
Other Middle East Countries .....	185
Pacific/English .....	190
Australia.....	193
Canada.....	196
New Zealand .....	200
United States .....	203
Western Europe.....	207
Austria .....	210
Belgium.....	213
Denmark.....	216
Finland.....	219
France .....	222
Germany .....	226
Greece .....	230
Ireland .....	233
Italy.....	235
Netherlands.....	239
Norway .....	243
Portugal.....	246
Spain.....	250
Sweden .....	254
Switzerland .....	258
United Kingdom.....	261
Other Western European Countries .....	265
Country and Region Index.....	268





# Preface

This book is a supplement to *GOAJ2: Gold Open Access Journals 2011-2016*, providing details on OA publishing by country, with the large APC-oriented publishers in APCLand removed. (See Chapters 2 and 12 of *GOAJ2* for more information on APCLand and OAWorld.)

Countries with at least 10 OA journals eligible for analysis in the overall project have full details, with some formatting changes to provide a more compact presentation.

Publisher category and subject tables appear sorted by article count. Table rows with no content are deleted.

After careful consideration and review of last year's edition, I've chosen *not* to provide occasional commentary, both to save space and because I don't believe the comments were useful.

After the OAWorld discussion, each region is followed by chapters for countries within that region, then a chapter offering brief notes on countries with fewer than 10 OA journals (except for Pacific/English, which has no such countries).

For compactness in PDF size and page count, redundant graphs in region and OAWorld chapters are deleted, as are starting-date graphs for countries with fewer than 25 journals.

Thanks again to SPARC for sponsoring this project.

The heatmap on the cover is based on combined 2015-2016 OA-World articles per 100,000 people and was generated at [GunnMap 2](#). The underlying data table (and notes) will appear in the June 2017 *Cites & Insights*, volume 17 issue 5.



# OAWorld

OAWorld's 7,276 journals published 318,887 articles in 2016. Average cost per article in APC-based journals: \$635. Overall average: \$222.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	6,860	7,074	6,861	6,366	5,748	5,048
%Free	80%	81%	81%	81%	81%	82%
Articles	318,887	297,506	286,134	260,437	234,412	197,694
%Free	65%	67%	66%	66%	67%	68%

## Article Volume

	Journals	%Free	Articles	%Free
Largest: 600+	50	36%	54,753	47%
Large: 150-599	371	50%	70,433	44%
Med.: 60-149	1,250	66%	81,761	66%
Small: 20-59	3,600	86%	95,330	86%
Smallest: 0-19	1,589	86%	16,610	87%

## 2 The Countries of OAWorld 2: 2011-2016

### APC Levels and Revenue

	Journals	Articles	Revenue	\$/article
\$1,400+	162	18,993	\$37,947,098	\$1,998
\$600-\$1.399	259	18,567	\$18,227,747	\$982
\$200-\$599	388	31,646	\$10,467,973	\$331
\$2-\$199	598	42,199	\$4,071,980	\$96
Free	5,869	207,482		
Total	7,276	318,887	\$70,714,798	\$222

### Publisher Category

Category	Journals	%Free	Articles	%Free
Univ/college	3,933	90%	126,740	80%
Miscellaneous	1,441	79%	82,722	62%
Open Access	952	57%	51,152	44%
Society/govt	730	82%	39,703	57%
Traditional	220	29%	18,570	50%

### Growth and Shrinkage

Change 2015-16	Count	Percent	Cum%
Grew 50%+	1,194	16.4%	
Grew 25-49.9%	721	9.9%	26.3%
Grew 10-24.99%	847	11.6%	38.0%
Even, $\pm$ 9.99%	1,850	25.4%	63.4%
Shrank 10-24.99%	830	11.4%	74.8%
Shrank 25-49.99%	884	12.1%	86.9%
Shrank 50%+	950	13.1%	

**Subjects**

<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>
Medicine	1,347	70%	83,450
Engineering	241	71%	18,891
Education	540	89%	15,009
Agriculture	306	61%	14,800
Economics	479	83%	14,526
Physics	67	66%	12,665
Technology	162	84%	12,436
Language & Literature	471	95%	11,940
Computer Science	219	68%	11,828
Biology	201	57%	11,225
Other Sciences	138	70%	11,104
Ecology	186	71%	10,439
Sociology	358	90%	10,125
Zoology	180	59%	8,360
History	277	96%	8,289
Earth Sciences	245	82%	8,265
Anthropology	251	90%	6,249
Chemistry	84	70%	6,216
Miscellany	109	84%	6,092
Political Science	212	92%	5,626
Mathematics	149	85%	5,172
Law	196	94%	5,072
Arts & Architecture	208	94%	4,827
Psychology	140	88%	3,796
Media & Communications	134	95%	3,767
Religion	133	87%	3,473
Philosophy	133	97%	3,002
Library Science	110	96%	2,243

# Africa

Africa's 102 OAWorld journals published 5,338 articles in 2016. Average cost per article in APC-based journals: \$350. Overall average: \$200.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	98	99	98	90	85	76
%Free	54%	56%	56%	52%	53%	53%
Articles	5,338	5,226	5,288	3,792	4,214	3,330
%Free	43%	36%	33%	36%	31%	30%

## Article Volume

	Journals	%Free	Articles	%Free
Largest: 600+	3	33%	1,566	39%
Large: 150-599	4	50%	946	33%
Med.: 60-149	25	36%	1,478	37%
Small: 20-59	46	59%	1,121	58%
Smallest: 0-19	20	70%	227	70%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$600-\$1,399	11	590	\$472,751	\$801
\$200-\$599	17	955	\$351,464	\$368
\$2-\$199	17	1,510	\$244,924	\$162
Free	57	2,283	\$0	\$0
Total	102	5,338	\$1,069,139	\$200

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Univ/college	35	57%	1,910	57%
Open Access	38	53%	1,639	46%
Miscellaneous	24	58%	1,571	18%
Society/govt	4	75%	208	77%
Traditional	1	0%	10	0%

**Growth and Shrinkage**

<b>Change 2015-16</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	15	14.7%	
Grew 25-49.9%	11	10.8%	25.5%
Grew 10-24.99%	15	14.7%	40.2%
Even, $\pm$ 9.99%	24	23.5%	63.7%
Shrank 10-24.99%	10	9.8%	73.5%
Shrank 25-49.99%	15	14.7%	88.2%
Shrank 50%+	12	11.8%	

**Subjects**

<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Medicine	26	69%	2,297	33%
Other Sciences	3	100%	786	100%
Religion	7	14%	535	0%
Language & Literature	7	43%	189	34%
Economics	6	50%	167	32%
Engineering	3	67%	159	52%
Education	6	50%	153	41%
Agriculture	4	50%	149	30%
Computer Science	6	50%	139	11%
Zoology	5	40%	122	52%
Sociology	5	40%	108	41%
Ecology	4	75%	104	96%
Law	3	67%	93	41%
Chemistry	2	50%	73	42%
Media & Communications	2	50%	64	30%
Political Science	2	100%	52	100%
Biology	2	50%	43	58%
Technology	2	100%	42	100%
Psychology	1	0%	33	0%
Library Science	1	0%	11	0%
Mathematics	1	0%	7	0%
Anthropology	1	100%	6	100%
Physics	1	0%	6	0%
History	1	100%	0	
Miscellany	1	100%	0	

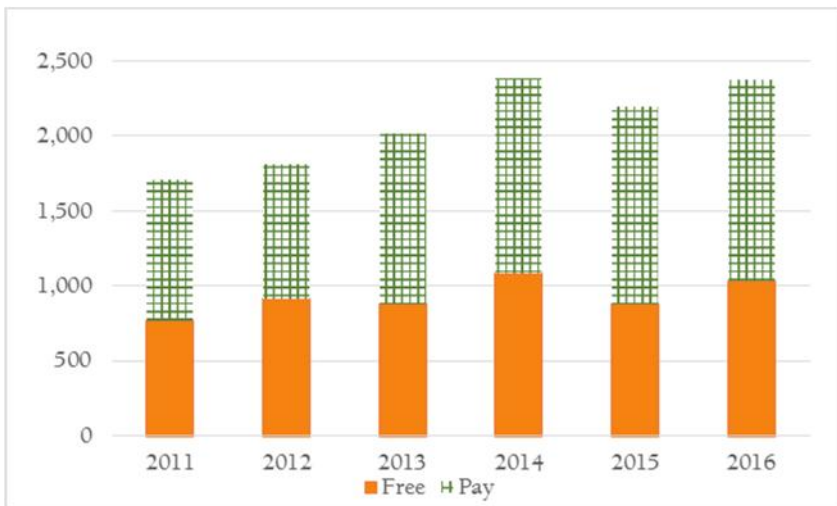


# South Africa

South Africa's 63 OAWorld journals published 2,376 articles in 2016. Average cost per article in APC-based journals: \$541. Overall average: \$306.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	61	60	60	59	55	52
%Free	46%	47%	48%	47%	47%	48%
Articles	2,376	2,193	2,381	2,015	1,809	1,705
%Free	43%	40%	45%	44%	50%	45%



### Article Volume

	Journals	%Free	Articles	%Free
Large: 150-599	2	50%	474	43%
Med.: 60-149	18	33%	1,067	37%
Small: 20-59	30	50%	702	51%
Smallest: 0-19	11	55%	133	54%

### APC Levels and Revenue

	Journals	Articles	Revenue	\$/article
\$600-\$1.399	11	590	\$472,751	\$801
\$200-\$599	13	503	\$220,094	\$438
\$2-\$199	9	250	\$33,380	\$134
Free	30	1,033		
Total	63	2,376	\$726,225	\$306

### Publisher Category

Category	Journals	%Free	Articles	%Free
Open Access	35	51%	1,504	46%
Univ/college	16	31%	401	16%
Miscellaneous	8	63%	259	50%
Society/govt	3	67%	202	77%
Traditional	1	0%	10	0%

Starting Date



Growth and Shrinkage

Change 2015-16	Count	Percent	Cum%
Grew 50%+	8	12.7%	
Grew 25-49.9%	8	12.7%	25.4%
Grew 10-24.99%	9	14.3%	39.7%
Even, ±9.99%	16	25.4%	65.1%
Shrank 10-24.99%	8	12.7%	77.8%
Shrank 25-49.99%	8	12.7%	90.5%
Shrank 50%+	6	9.5%	

**Subjects**

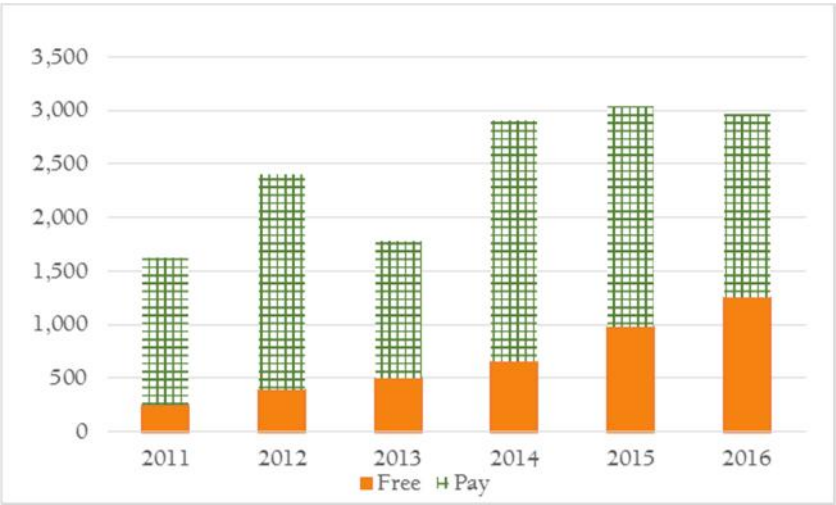
<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Medicine	14	71%	602	73%
Religion	7	14%	535	0%
Other Sciences	2	100%	179	100%
Language & Literature	5	20%	171	27%
Education	6	50%	153	41%
Economics	4	25%	119	5%
Ecology	2	100%	89	100%
Law	2	50%	80	31%
Engineering	1	0%	77	0%
Sociology	3	0%	64	0%
Zoology	3	33%	57	54%
Political Science	2	100%	52	100%
Biology	2	50%	43	58%
Computer Science	3	33%	35	17%
Psychology	1	0%	33	0%
Chemistry	1	100%	31	100%
Media & Communications	1	100%	19	100%
Technology	1	100%	19	100%
Library Science	1	0%	11	0%
Mathematics	1	0%	7	0%
History	1	100%	0	

# Other African Countries

These countries have a total of 39 OAWorld journals publishing 2,962 articles in 2016. Average cost per article in APC-based journals: \$200. Overall average: \$116.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	37	39	38	31	30	24
%Free	68%	69%	68%	61%	63%	63%
Articles	2,962	3,033	2,907	1,777	2,405	1,625
%Free	42%	32%	22%	28%	16%	15%



**Article Volume**

	Journals	%Free	Articles	%Free
Largest: 600+	3	33%	1,566	39%
Large: 150-599	2	50%	472	23%
Med.: 60-149	7	43%	411	36%
Small: 20-59	16	75%	419	71%
Smallest: 0-19	9	89%	94	94%

**APC Levels and Revenue**

	Journals	Articles	Revenue	\$/article
\$200-\$599	4	452	\$131,370	\$291
\$2-\$199	8	1,260	\$211,544	\$168
Free	27	1,250		
Total	39	2,962	\$342,914	\$116

**Publisher Category**

Category	Journals	%Free	Articles	%Free
Univ/college	19	79%	1,509	68%
Miscellaneous	16	56%	1,312	12%
Open Access	3	67%	135	49%
Society/govt	1	100%	6	100%

Starting Date



Growth and Shrinkage

Change 2015-16	Count	Percent	Cum%
Grew 50%+	7	17.9%	
Grew 25-49.9%	3	7.7%	25.6%
Grew 10-24.99%	6	15.4%	41.0%
Even, ±9.99%	8	20.5%	61.5%
Shrank 10-24.99%	2	5.1%	66.7%
Shrank 25-49.99%	7	17.9%	84.6%
Shrank 50%+	6	15.4%	

**Subjects**

<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Medicine	12	67%	1,695	18%
Other Sciences	1	100%	607	100%
Agriculture	4	50%	149	30%
Computer Science	3	67%	104	9%
Engineering	2	100%	82	100%
Zoology	2	50%	65	51%
Economics	2	100%	48	100%
Media & Communications	1	0%	45	0%
Sociology	2	100%	44	100%
Chemistry	1	0%	42	0%
Technology	1	100%	23	100%
Language & Literature	2	100%	18	100%
Ecology	2	50%	15	73%
Law	1	100%	13	100%
Anthropology	1	100%	6	100%
Physics	1	0%	6	0%
Miscellany	1	100%	0	

**Country Summaries****Algeria**

Eight journals publishing 793 articles in 2016. All free, mostly university-based, mostly growing.

**Cameroon**

One APC-charging university-based journal published 88 articles in 2016.

**Congo, the Democratic Republic of the**

One free university-based journal published 109 articles in 2016.



## **Ethiopia**

Three free university-based journals published 91 articles in 2016.

## **Ghana**

One free university-based journal published 24 articles in 2016.

## **Kenya**

Five journals published 128 articles in 2016. Two charge APCs; the other three are university-based. Most are growing.

## **Libya**

Two journals (one with APCs) published 78 articles in 2016.

## **Madagascar**

One free journal published 11 articles in 2016.

## **Mauritius**

Two journals, one with APCs, published 107 articles in 2016.

## **Morocco**

Five journals, one with APCs, published 114 articles in 2016.

## **Nigeria**

Seven journals, five with APCs, published 540 articles in 2016.

## **Tunisia**

Two free journals published 15 articles in 2016.

## **Uganda**

One APC-charging journal published 864 articles in 2016.

# Asia

Asia's 1,049 OAWorld journals published 57,141 articles in 2016. Average cost per article in APC-based journals: \$248. Overall average: \$136.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	987	1,013	977	896	802	626
%Free	66%	66%	66%	66%	66%	66%
Articles	57,141	55,037	54,893	49,506	42,074	31,569
%Free	45%	45%	45%	46%	46%	48%

## Article Volume

	Journals	%Free	Articles	%Free
Largest: 600+	14	0%	10,615	0%
Large: 150-599	94	46%	18,995	45%
Med.: 60-149	205	52%	13,521	54%
Small: 20-59	439	70%	11,216	70%
Smallest: 0-19	235	81%	2,794	81%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$1,400+	4	1,250	\$2,204,963	\$1,764
\$600-\$1.399	11	737	\$645,931	\$876
\$200-\$599	85	9,934	\$3,179,913	\$320
\$2-\$199	251	19,340	\$1,730,215	\$89
Free	698	25,880		
Total	1,049	57,141	\$7,761,022	\$136

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Miscellaneous	247	58%	19,154	31%
Open Access	145	54%	14,677	49%
Univ/college	541	75%	14,547	70%
Society/govt	108	63%	7,191	34%
Traditional	8	25%	1,572	14%

**Growth and Shrinkage**

<b>Change 2015-16</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	159	15.2%	
Grew 25-49.9%	81	7.7%	22.9%
Grew 10-24.99%	104	9.9%	32.8%
Even, $\pm$ 9.99%	316	30.1%	62.9%
Shrank 10-24.99%	122	11.6%	74.5%
Shrank 25-49.99%	120	11.4%	86.0%
Shrank 50%+	147	14.0%	

**Subjects**

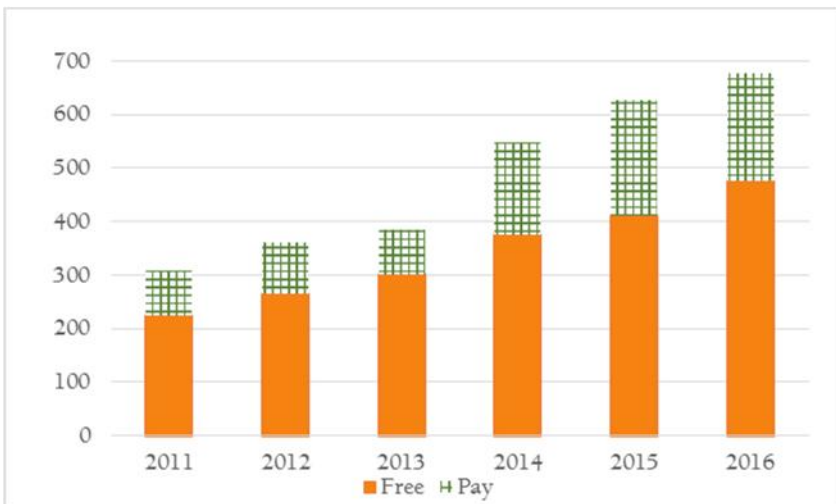
<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Medicine	276	68%	23,803	48%
Engineering	62	53%	6,727	20%
Computer Science	77	49%	4,471	33%
Other Sciences	40	53%	3,262	25%
Zoology	39	49%	2,536	27%
Economics	65	85%	2,061	89%
Agriculture	48	50%	1,922	39%
Biology	36	53%	1,736	40%
Education	85	72%	1,711	61%
Technology	36	83%	1,493	84%
Religion	48	85%	752	80%
Chemistry	19	63%	708	53%
Mathematics	24	75%	682	76%
Law	20	75%	609	38%
Physics	13	54%	602	50%
Ecology	17	53%	580	32%
Political Science	12	75%	552	54%
Earth Sciences	16	69%	547	76%
Language & Literature	31	81%	519	68%
Anthropology	17	76%	330	78%
Sociology	18	83%	324	81%
Miscellany	8	38%	318	24%
Arts & Architecture	13	69%	229	66%
Psychology	7	100%	203	100%
Library Science	7	86%	167	74%
History	7	57%	149	54%
Media & Communications	4	50%	76	54%
Philosophy	4	100%	72	100%

# Bangladesh

Bangladesh's 17 OAWorld journals published 677 articles in 2016. Average cost per article in APC-based journals: \$89. Overall average: \$27.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	16	17	16	13	11	11
%Free	69%	71%	69%	85%	82%	82%
Articles	677	626	547	384	361	307
%Free	70%	65%	69%	79%	73%	73%



**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Large: 150-599	1	100%	160	100%
Med.: 60-149	4	25%	279	45%
Small: 20-59	8	75%	191	74%
Smallest: 0-19	3	100%	47	100%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$2-\$199	5	202	\$17,960	\$89
Free	12	475		
Total	17	677	\$17,960	\$27

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Society/govt	9	89%	316	91%
Miscellaneous	6	50%	302	56%
Univ/college	2	50%	59	29%

**Growth and Shrinkage**

<b>Change 2015-16</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	3	17.6%	
Grew 25-49.9%	3	17.6%	35.3%
Grew 10-24.99%	2	11.8%	47.1%
Even, $\pm$ 9.99%	6	35.3%	82.4%
Shrank 25-49.99%	2	11.8%	94.1%
Shrank 50%+	1	5.9%	

As elsewhere, 0-count lines omitted: no journals shrank 10%-24.9%.

**Subjects**

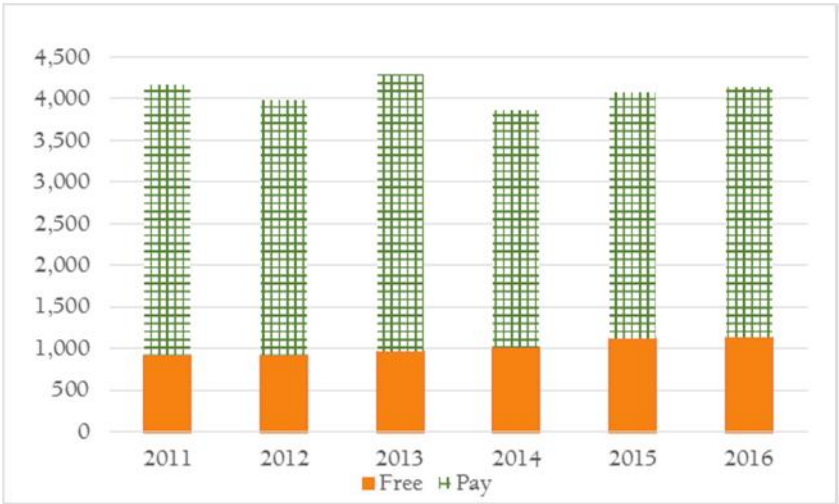
<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Medicine	7	100%	374	100%
Agriculture	4	25%	124	20%
Zoology	2	50%	80	24%
Other Sciences	1	0%	42	0%
Biology	1	100%	27	100%
Engineering	1	100%	15	100%
Philosophy	1	100%	15	100%

# China

China's 35 OAWorld journals published 4,130 articles in 2016. Average 2016 cost per article in APC-based journals: \$695. Overall average: \$505.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	34	35	32	29	27	26
%Free	50%	51%	47%	45%	44%	42%
Articles	4,130	4,075	3,861	4,297	3,989	4,164
%Free	27%	28%	26%	22%	23%	22%





**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Largest: 600+	1	0%	583	0%
Large: 150-599	7	14%	1,691	10%
Med.: 60-149	19	53%	1,610	47%
Small: 20-59	6	83%	227	81%
Smallest: 0-19	1	100%	19	100%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$1,400+	1	583	\$1,166,000	\$2,000
\$600-\$1,399	1	146	\$146,000	\$1,000
\$200-\$599	12	1,983	\$733,298	\$370
\$2-\$199	3	290	\$39,712	\$137
Free	18	1,128		
Total	35	4,130	\$2,085,010	\$505

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Miscellaneous	17	65%	1,512	34%
Univ/college	10	60%	1,135	39%
Open Access	1	0%	583	0%
Traditional	4	25%	495	34%
Society/govt	3	0%	405	0%

Starting Date



Growth and Shrinkage

Change 2015-16	Count	Percent	Cum%
Grew 50%+	4	11.4%	
Grew 25-49.9%	4	11.4%	22.9%
Grew 10-24.99%	5	14.3%	37.1%
Even, ±9.99%	6	17.1%	54.3%
Shrank 10-24.99%	11	31.4%	85.7%
Shrank 25-49.99%	4	11.4%	97.1%
Shrank 50%+	1	2.9%	

**Subjects**

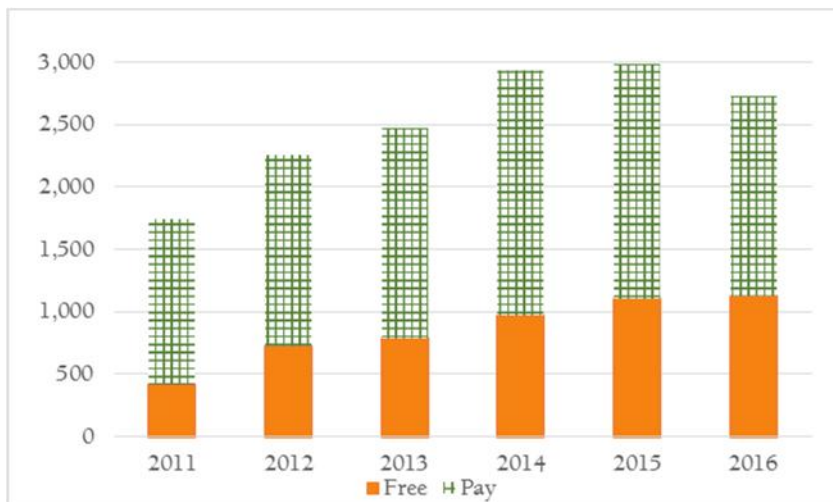
<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Medicine	10	50%	1,636	12%
Engineering	5	20%	891	8%
Agriculture	6	50%	589	46%
Technology	4	75%	309	82%
Physics	3	0%	232	0%
Zoology	2	50%	210	35%
Other Sciences	2	100%	161	100%
Earth Sciences	2	100%	81	100%
Computer Science	1	100%	21	100%

# Hong Kong

Hong Kong's 31 OAWorld journals published 2,725 articles in 2016. Average article cost in APC-based journals: \$323. Overall average: \$190.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	31	30	28	27	24	22
%Free	45%	47%	46%	48%	42%	45%
Articles	2,725	2,987	2,935	2,468	2,250	1,738
%Free	41%	37%	33%	32%	32%	24%



Article Volume

	Journals	%Free	Articles	%Free
Largest: 600+	1	0%	619	0%
Large: 150-599	5	40%	950	42%
Med.: 60-149	10	60%	825	66%
Small: 20-59	9	56%	267	64%
Smallest: 0-19	6	17%	64	9%

APC Levels and Revenue

	Journals	Articles	Revenue	\$/article
\$200-\$599	12	915	\$407,011	\$445
\$2-\$199	5	688	\$110,080	\$160
Free	14	1,122		
Total	31	2,725	\$517,091	\$190

Publisher Category

Category	Journals	%Free	Articles	%Free
Open Access	19	47%	1,162	55%
Society/govt	5	20%	832	2%
Miscellaneous	5	60%	519	52%
Univ/college	2	50%	212	92%

Starting Date



Growth and Shrinkage

Change 2015-16	Count	Percent	Cum%
Grew 50%+	4	12.9%	
Grew 25-49.9%	2	6.5%	19.4%
Grew 10-24.99%	1	3.2%	22.6%
Even, ±9.99%	15	48.4%	71.0%
Shrank 10-24.99%	4	12.9%	83.9%
Shrank 25-49.99%	4	12.9%	96.8%
Shrank 50%+	1	3.2%	

**Subjects**

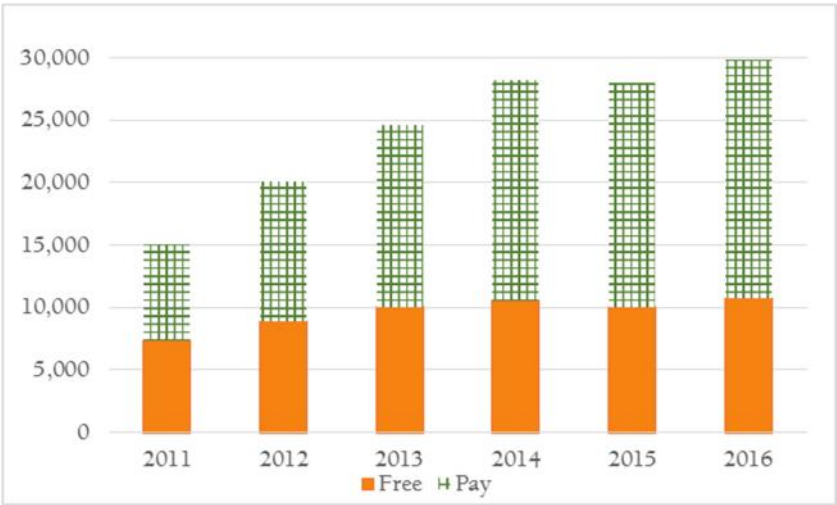
<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Computer Science	14	57%	933	66%
Engineering	2	0%	691	0%
Medicine	3	100%	436	100%
Law	1	0%	239	0%
Political Science	1	0%	202	0%
Mathematics	2	50%	107	25%
Education	1	100%	39	100%
Biology	2	0%	24	0%
Zoology	1	0%	17	0%
Other Sciences	1	0%	14	0%
Economics	1	0%	9	0%
Ecology	1	0%	8	0%
Language & Literature	1	100%	6	100%

# India

India's 282 OAWorld journals published 29,886 articles in 2016. Average cost per article in APC-based journals: \$186. Overall average: \$120.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	268	275	275	264	237	190
%Free	53%	53%	53%	52%	52%	56%
Articles	29,886	27,940	28,180	24,609	20,108	15,051
%Free	36%	36%	37%	41%	44%	49%





**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Largest: 600+	10	0%	8,499	0%
Large: 150-599	64	47%	13,078	44%
Med.: 60-149	94	49%	5,951	52%
Small: 20-59	77	70%	2,163	78%
Smallest: 0-19	23	52%	195	59%

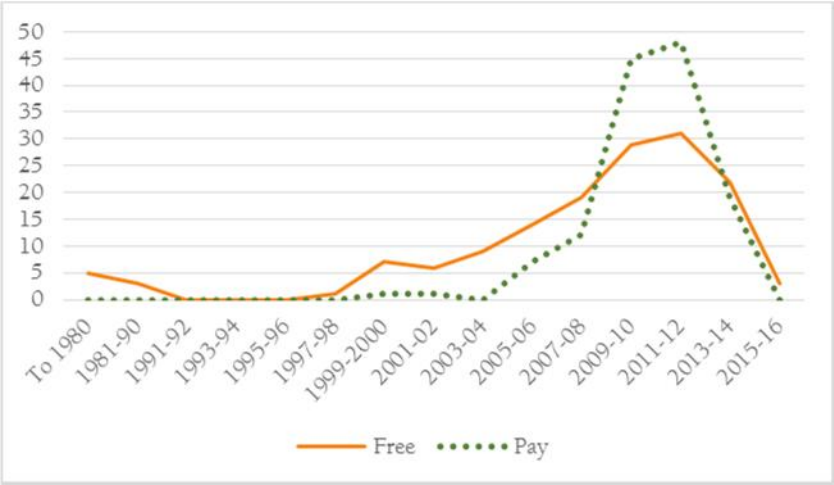
**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$1,400+	2	601	\$931,515	\$1,550
\$600-\$1,399	1	44	\$26,400	\$600
\$200-\$599	35	4,865	\$1,384,950	\$285
\$2-\$199	95	13,662	\$1,232,316	\$90
Free	149	10,714		
Total	282	29,886	\$3,575,181	\$120

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Miscellaneous	114	43%	12,866	21%
Open Access	116	56%	12,299	52%
Society/govt	25	56%	2,826	27%
Traditional	4	25%	1,077	5%
Univ/college	23	87%	818	94%

Starting Date



Growth and Shrinkage

Change 2015-16	Count	Percent	Cum%
Grew 50%+	49	17.4%	
Grew 25-49.9%	25	8.9%	26.2%
Grew 10-24.99%	23	8.2%	34.4%
Even, ±9.99%	58	20.6%	55.0%
Shrank 10-24.99%	42	14.9%	69.9%
Shrank 25-49.99%	48	17.0%	86.9%
Shrank 50%+	37	13.1%	

## Subjects

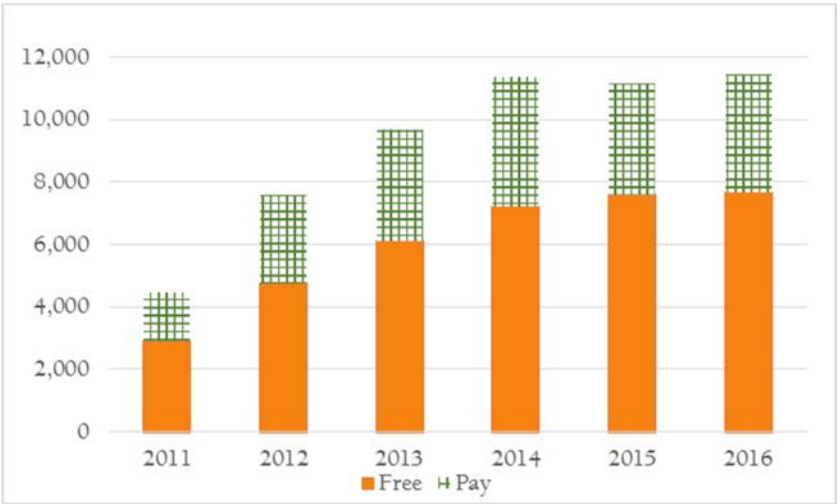
Subject	Journals	%Free	Articles	%Free
Medicine	160	61%	17,416	44%
Engineering	13	31%	3,482	14%
Other Sciences	11	18%	2,217	11%
Computer Science	30	17%	2,174	12%
Zoology	4	50%	1,120	20%
Biology	11	45%	865	33%
Chemistry	5	60%	392	56%
Physics	2	100%	290	100%
Ecology	3	33%	253	14%
Earth Sciences	3	100%	217	100%
Education	2	0%	200	0%
Agriculture	2	0%	190	0%
Technology	8	63%	157	38%
Psychology	1	100%	127	100%
Miscellany	3	0%	125	0%
Mathematics	4	50%	109	65%
Economics	4	75%	107	100%
Political Science	1	100%	88	100%
Library Science	2	50%	85	48%
Arts & Architecture	2	100%	80	100%
Sociology	3	67%	53	28%
Anthropology	1	100%	36	100%
Language & Literature	2	100%	36	100%
Law	3	100%	35	100%
Philosophy	1	100%	21	100%
Media & Communications	1	0%	11	0%

# Indonesia

Indonesia’s 473 OAWorld journals published 11,435 articles in 2016. Average cost per article in APC-based journals: \$100. Overall average: \$33.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	440	452	426	370	326	219
%Free	72%	72%	72%	73%	73%	68%
Articles	11,435	11,143	11,339	9,687	7,562	4,475
%Free	67%	68%	63%	63%	63%	64%



**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Largest: 600+	1	0%	297	0%
Large: 150-599	7	86%	1,687	89%
Med.: 60-149	36	56%	1,829	58%
Small: 20-59	239	66%	5,628	61%
Smallest: 0-19	157	83%	1,994	82%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$200-\$599	8	626	\$172,775	\$276
\$2-\$199	122	3,143	\$202,404	\$64
Free	343	7,666		
Total	473	11,435	\$375,179	\$33

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Univ/college	404	73%	9,402	70%
Miscellaneous	55	71%	1,340	63%
Open Access	3	0%	469	0%
Society/govt	11	82%	224	90%

**Starting Date**



**Growth and Shrinkage**

Change 2015-16	Count	Percent	Cum%
Grew 50%+	64	13.5%	
Grew 25-49.9%	26	5.5%	19.0%
Grew 10-24.99%	46	9.7%	28.8%
Even, ±9.99%	174	36.8%	65.5%
Shrank 10-24.99%	40	8.5%	74.0%
Shrank 25-49.99%	50	10.6%	84.6%
Shrank 50%+	73	15.4%	

## Subjects

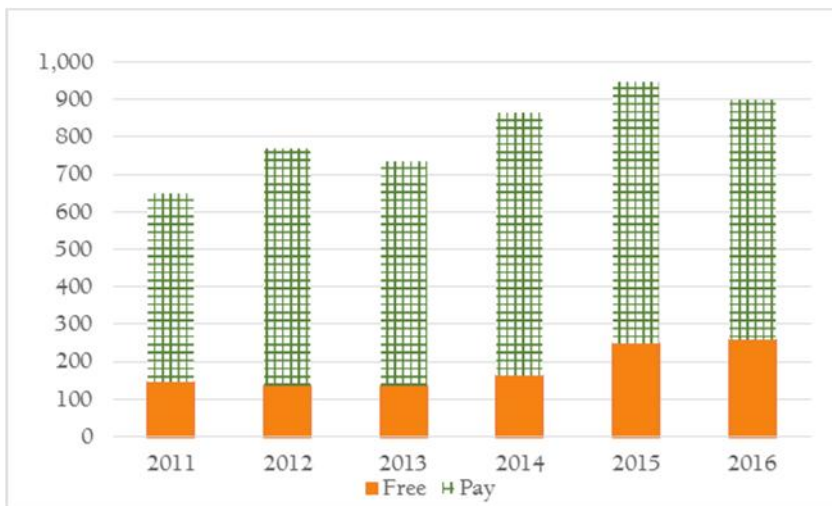
Subject	Journals	%Free	Articles	%Free
Economics	48	83%	1,552	86%
Medicine	45	80%	1,520	77%
Education	65	72%	1,150	66%
Engineering	26	58%	931	29%
Technology	15	93%	856	98%
Zoology	23	52%	706	42%
Religion	44	89%	648	84%
Agriculture	24	58%	530	60%
Computer Science	23	74%	439	90%
Other Sciences	11	64%	411	29%
Law	15	73%	331	58%
Biology	14	64%	309	63%
Chemistry	12	58%	277	42%
Anthropology	15	73%	239	69%
Mathematics	13	77%	236	80%
Language & Literature	19	79%	224	63%
Earth Sciences	8	50%	164	43%
Sociology	7	71%	155	85%
Political Science	6	67%	141	65%
Arts & Architecture	10	60%	137	43%
Ecology	7	71%	121	70%
Miscellany	4	75%	96	79%
Physics	7	57%	80	18%
Psychology	6	100%	76	100%
History	4	25%	68	0%
Media & Communications	2	50%	38	37%

# Japan

Japan's 21 OAWorld journals published 899 articles in 2016. Average cost per article in APC-based journals: \$679. Overall average: \$485.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	20	21	21	21	19	17
%Free	55%	52%	52%	52%	53%	53%
Articles	899	945	864	736	767	649
%Free	29%	26%	19%	19%	18%	22%





**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Large: 150-599	2	0%	216	0%
Med.: 60-149	6	0%	423	0%
Small: 20-59	9	89%	239	99%
Smallest: 0-19	3	100%	21	100%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$1,400+	1	66	\$107,448	\$1,628
\$600-\$1,399	5	245	\$246,531	\$1,006
\$200-\$599	3	262	\$75,952	\$290
\$2-\$199	1	69	\$5,934	\$86
Free	11	257		
Total	21	899	\$435,865	\$485

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Society/govt	9	22%	501	2%
Univ/college	7	71%	318	53%
Miscellaneous	5	80%	80	96%

**Growth and Shrinkage**

<b>Change 2015-16</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	5	23.8%	
Grew 25-49.9%	2	9.5%	33.3%
Grew 10-24.99%	2	9.5%	42.9%
Even, $\pm 9.99\%$	5	23.8%	66.7%
Shrank 25-49.99%	2	9.5%	76.2%
Shrank 50%+	5	23.8%	

**Subjects**

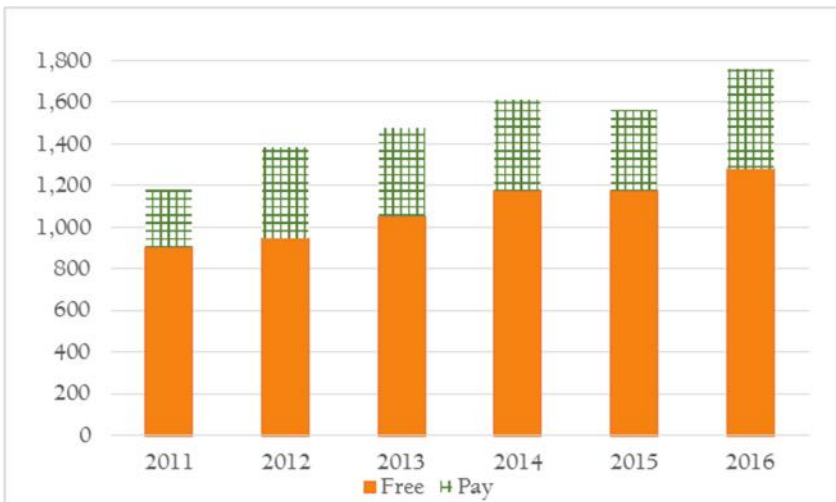
<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Medicine	6	33%	396	11%
Ecology	3	0%	132	0%
Engineering	1	0%	84	0%
Technology	1	0%	69	0%
Education	3	100%	61	100%
Anthropology	1	100%	55	100%
History	1	100%	49	100%
Religion	1	100%	22	100%
Sociology	1	100%	20	100%
Agriculture	1	100%	4	100%
Philosophy	1	100%	4	100%
Other Sciences	1	0%	3	0%

# Korea, Republic of

Korea's 33 OAWorld OA journals published 1,757 articles in 2016. Average cost per article in APC-based journals: \$639. Overall average: \$174.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	33	33	33	29	28	26
%Free	79%	79%	79%	76%	75%	81%
Articles	1,757	1,565	1,609	1,479	1,386	1,182
%Free	73%	75%	73%	71%	68%	76%



**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Large: 150-599	1	100%	193	100%
Med.: 60-149	11	73%	959	67%
Small: 20-59	18	78%	575	71%
Smallest: 0-19	3	100%	30	100%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$600-\$1.399	4	302	\$227,000	\$752
\$200-\$599	3	177	\$78,900	\$446
Free	26	1,278		
Total	33	1,757	\$305,900	\$174

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Society/govt	19	74%	1,077	63%
Miscellaneous	8	88%	394	88%
Univ/college	5	80%	209	85%
Open Access	1	100%	77	100%

Starting Date



Growth and Shrinkage

Change 2015-16	Count	Percent	Cum%
Grew 50%+	3	9.1%	
Grew 25-49.9%	6	18.2%	27.3%
Grew 10-24.99%	5	15.2%	42.4%
Even, ±9.99%	10	30.3%	72.7%
Shrank 10-24.99%	5	15.2%	87.9%
Shrank 25-49.99%	2	6.1%	93.9%
Shrank 50%+	2	6.1%	

**Subjects**

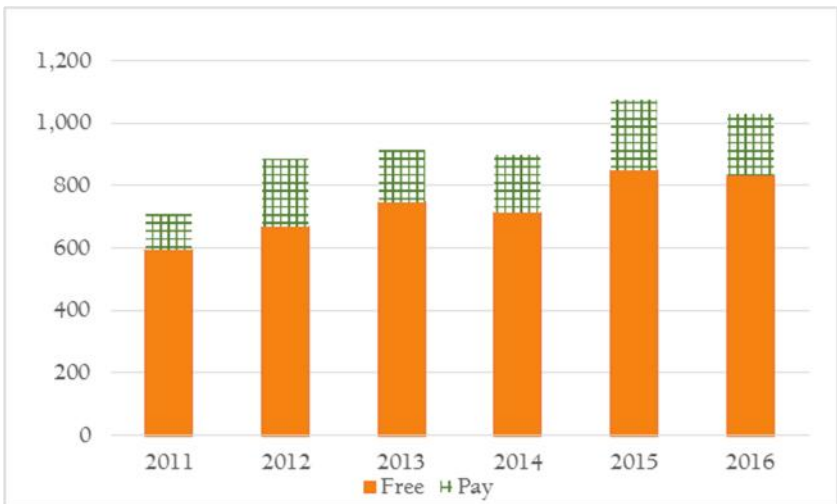
<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Medicine	10	80%	571	70%
Economics	4	100%	253	100%
Mathematics	2	100%	145	100%
Engineering	1	100%	129	100%
Zoology	2	0%	122	0%
Agriculture	2	50%	117	60%
Biology	1	0%	100	0%
Computer Science	2	100%	96	100%
Earth Sciences	2	50%	62	34%
Education	1	100%	57	100%
Library Science	2	100%	32	100%
Language & Literature	1	100%	31	100%
Other Sciences	1	100%	26	100%
Chemistry	1	100%	14	100%
Technology	1	100%	2	100%

# Malaysia

Malaysia's 44 OAWorld OA journals published 1,028 articles in 2016. Average cost per article in APC-based journals: \$253. Overall average: \$49.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	40	43	42	41	39	35
%Free	85%	86%	86%	85%	85%	86%
Articles	1,028	1,076	898	916	886	709
%Free	81%	79%	79%	81%	75%	84%



**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Med.: 60-149	5	60%	281	74%
Small: 20-59	22	82%	589	79%
Smallest: 0-19	13	100%	158	100%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$200-\$599	5	163	\$46,302	\$284
\$2-\$199	1	35	\$3,850	\$110
Free	38	830		
Total	44	1,028	\$50,152	\$49

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Univ/college	35	89%	837	85%
Society/govt	4	50%	127	44%
Miscellaneous	5	100%	64	100%

**Growth and Shrinkage**

<b>Change 2015-16</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	8	18.2%	
Grew 25-49.9%	3	6.8%	25.0%
Grew 10-24.99%	6	13.6%	38.6%
Even, $\pm$ 9.99%	11	25.0%	63.6%
Shrank 10-24.99%	6	13.6%	77.3%
Shrank 25-49.99%	3	6.8%	84.1%
Shrank 50%+	7	15.9%	



## Starting Date



## Subjects

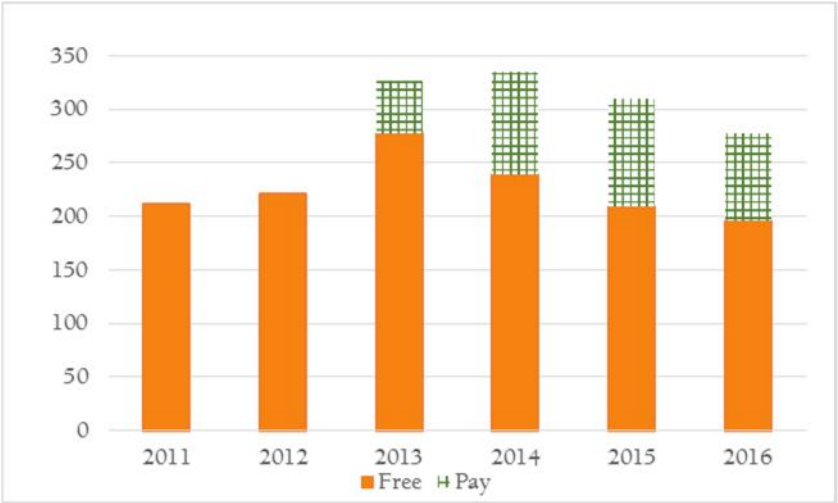
Subject	Journals	%Free	Articles	%Free
Engineering	8	100%	283	100%
Medicine	6	100%	167	100%
Biology	3	33%	113	37%
Language & Literature	4	50%	113	26%
Religion	3	33%	82	48%
Education	4	100%	68	100%
Technology	4	100%	47	100%
Economics	3	100%	39	100%
Computer Science	2	100%	36	100%
History	2	100%	32	100%
Sociology	2	100%	31	100%
Other Sciences	2	100%	16	100%
Mathematics	1	100%	1	100%

# Nepal

Nepal's 10 OAWorld journals published 277 articles in 2016. The single APC-based journal charges \$100; overall average cost is \$29. Since there's only one APC-charging journal (81 articles), one table is omitted.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	9	10	9	9	7	7
%Free	89%	90%	89%	89%	100%	100%
Articles	277	310	335	327	221	212
%Free	71%	67%	71%	85%	100%	100%



**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Med.: 60-149	2	50%	154	47%
Small: 20-59	5	100%	99	100%
Smallest: 0-19	2	100%	24	100%

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Society/govt	5	100%	133	100%
Miscellaneous	3	67%	97	16%
Univ/college	2	100%	47	100%

**Growth and Shrinkage**

Two grew 10-24.9%, three shrank 50% or more, one in each other bracket.

**Subjects**

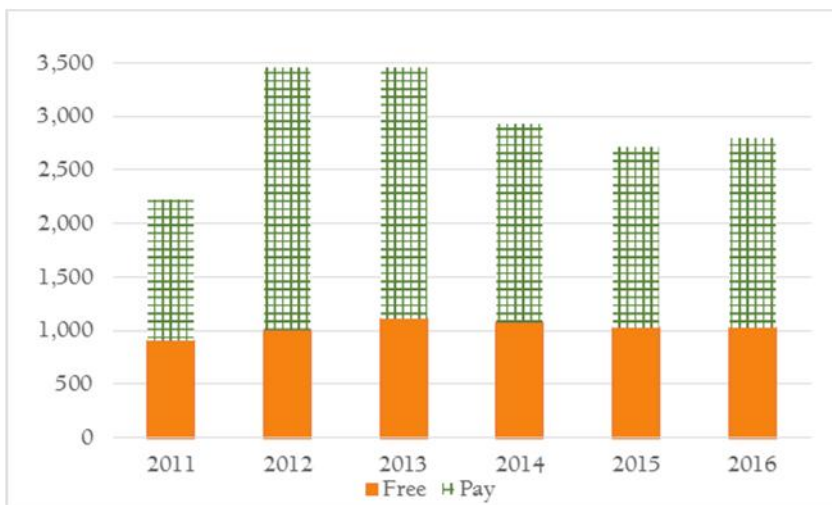
<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Medicine	6	100%	156	100%
Other Sciences	1	0%	81	0%
Agriculture	1	100%	16	100%
Technology	1	100%	16	100%
Sociology	1	100%	8	100%

# Pakistan

Pakistan's 45 OAWorld journals published 2,798 articles in 2016. Average cost per article in APC-based journals: \$203. Overall average: \$128.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	40	42	42	41	35	30
%Free	58%	60%	60%	59%	63%	63%
Articles	2,798	2,719	2,924	3,452	3,457	2,223
%Free	37%	38%	37%	32%	29%	41%



**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Largest: 600+	1	0%	617	0%
Large: 150-599	6	33%	923	29%
Med.: 60-149	9	56%	622	47%
Small: 20-59	20	65%	581	73%
Smallest: 0-19	4	75%	55	73%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$200-\$599	6	911	\$274,325	\$301
\$2-\$199	11	863	\$85,055	\$99
Free	28	1,024		
Total	45	2,798	\$359,380	\$128

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Miscellaneous	17	71%	1,570	35%
Society/govt	10	50%	629	29%
Univ/college	16	69%	590	49%
Open Access	2	0%	9	0%

**Growth and Shrinkage**

<b>Change 2015-16</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	10	22.2%	
Grew 25-49.9%	3	6.7%	28.9%
Grew 10-24.99%	4	8.9%	37.8%
Even, $\pm$ 9.99%	11	24.4%	62.2%
Shrank 10-24.99%	6	13.3%	75.6%
Shrank 25-49.99%	4	8.9%	84.4%
Shrank 50%+	7	15.6%	

Starting Date



Subjects

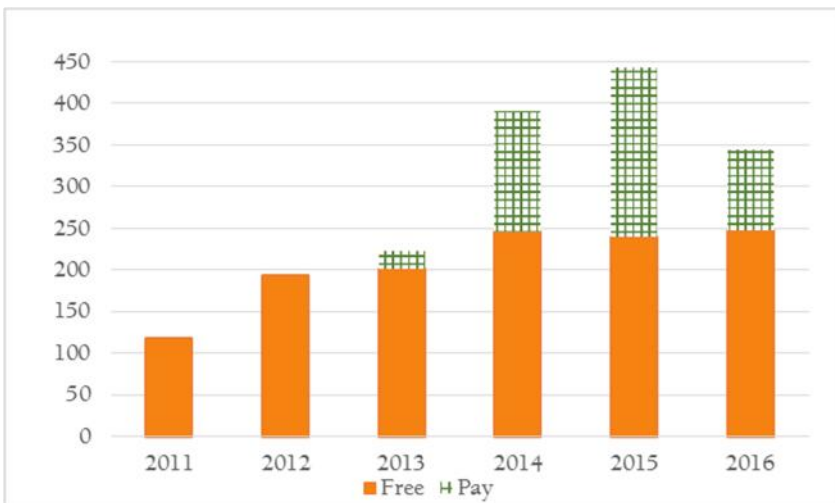
Subject	Journals	%Free	Articles	%Free
Medicine	16	69%	957	62%
Computer Science	2	50%	663	7%
Agriculture	6	17%	308	3%
Zoology	4	50%	271	25%
Biology	2	50%	159	0%
Engineering	2	0%	115	0%
Political Science	2	100%	87	100%
Economics	3	100%	70	100%
Mathematics	1	100%	52	100%
Chemistry	1	100%	25	100%
Earth Sciences	1	100%	23	100%
Ecology	1	100%	21	100%
Sociology	2	100%	21	100%
Other Sciences	1	0%	15	0%
Education	1	100%	11	100%

# Philippines

Philippines' 11 OAWorld journals published 345 articles in 2016. One journal charged \$70 (97 2016 articles); overall average cost \$20. One table omitted as superfluous.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	11	11	11	11	10	7
%Free	91%	91%	91%	91%	100%	100%
Articles	345	443	390	222	194	118
%Free	72%	54%	63%	91%	100%	100%



**Article Volume**

	Journals	%Free	Articles	%Free
Large: 150-599	1	0%	97	0%
Med.: 60-149	1	100%	28	100%
Small: 20-59	6	100%	187	100%
Smallest: 0-19	3	100%	33	100%

**Publisher Category**

Category	Journals	%Free	Articles	%Free
Univ/college	6	83%	213	54%
Open Access	3	100%	78	100%
Society/govt	2	100%	54	100%

**Growth and Shrinkage**

Change 2015-16	Count	Percent	Cum%
Grew 50%+	3	27.3%	
Grew 25-49.9%	1	9.1%	36.4%
Grew 10-24.99%	1	9.1%	45.5%
Even, $\pm 9.99\%$	4	36.4%	81.8%
Shrank 50%+	2	18.2%	

**Subjects**

Subject	Journals	%Free	Articles	%Free
Miscellany	1	0%	97	0%
Language & Literature	2	100%	83	100%
Medicine	2	100%	54	100%
Education	1	100%	32	100%
Philosophy	1	100%	32	100%
Economics	1	100%	14	100%
Arts & Architecture	1	100%	12	100%
Sociology	1	100%	11	100%
Other Sciences	1	100%	10	100%

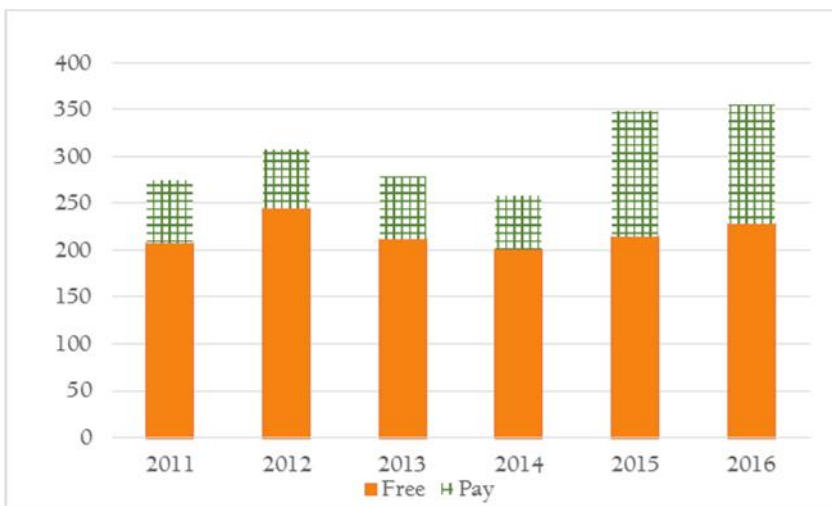


# Taiwan, Province of China

Taiwan's 18 OAWorld journals published 356 articles in 2016. Average cost per article in APC-based journals: \$51. Overall average: \$18.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	18	17	16	16	16	16
%Free	78%	76%	75%	75%	75%	75%
Articles	356	349	258	279	308	274
%Free	64%	62%	78%	76%	80%	76%



**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Med.: 60-149	2	50%	113	28%
Small: 20-59	7	86%	159	86%
Smallest: 0-19	9	78%	84	71%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$2-\$199	4	128	\$6,578	\$51
Free	14	228		
Total	18	356	\$6,578	\$18

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Univ/college	9	78%	171	79%
Miscellaneous	6	67%	153	40%
Society/govt	3	100%	32	100%

**Growth and Shrinkage**

<b>Change 2015-16</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	2	11.1%	
Grew 10-24.99%	3	16.7%	27.8%
Even, $\pm$ 9.99%	7	38.9%	66.7%
Shrank 10-24.99%	4	22.2%	88.9%
Shrank 50%+	2	11.1%	

**Subjects**

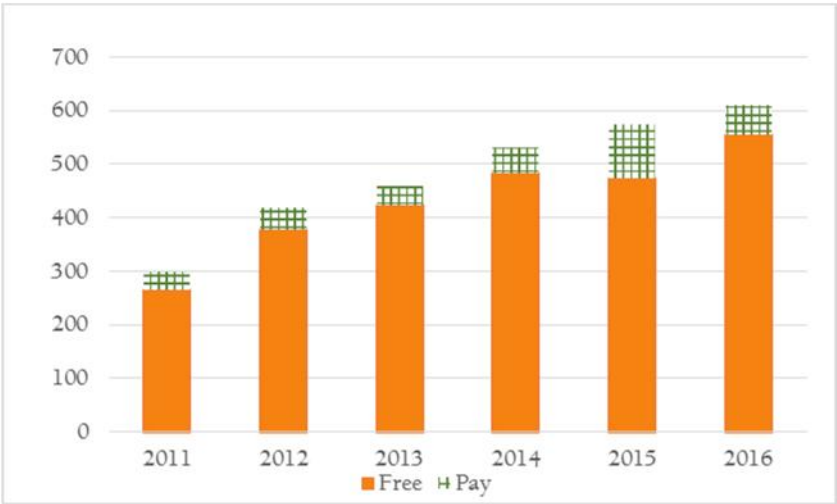
<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Computer Science	2	50%	106	24%
Education	5	40%	60	22%
Library Science	3	100%	50	100%
Technology	2	100%	37	100%
Mathematics	1	100%	32	100%
Media & Communications	1	100%	27	100%
Political Science	1	100%	22	100%
Engineering	1	100%	10	100%
Language & Literature	1	100%	8	100%
Law	1	100%	4	100%

# Thailand

Thailand's 16 OAWorld journals published 610 articles in 2016. Average cost per article in APC-based journals: \$163. Overall average: \$15.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	14	15	14	14	13	10
%Free	86%	87%	86%	86%	85%	90%
Articles	610	573	531	460	419	299
%Free	91%	83%	91%	92%	90%	88%



**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Med.: 60-149	5	80%	425	94%
Small: 20-59	6	83%	157	80%
Smallest: 0-19	3	100%	28	100%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$200-\$599	1	32	\$6,400	\$200
\$2-\$199	1	24	\$2,736	\$114
Free	14	554		
Total	16	610	\$9,136	\$15

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Univ/college	10	80%	404	86%
Miscellaneous	5	100%	199	100%
Society/govt	1	100%	7	100%

**Growth and Shrinkage**

<b>Change 2015-16</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	1	6.3%	
Grew 25-49.9%	3	18.8%	25.0%
Grew 10-24.99%	1	6.3%	31.3%
Even, $\pm$ 9.99%	6	37.5%	68.8%
Shrank 25-49.99%	2	12.5%	81.3%
Shrank 50%+	3	18.8%	

**Subjects**

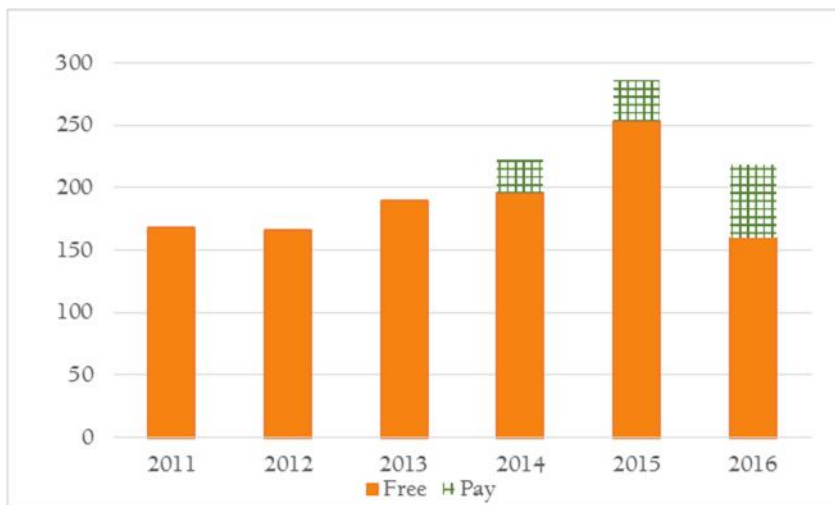
<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Other Sciences	6	83%	259	88%
Biology	1	100%	128	100%
Engineering	1	100%	84	100%
Ecology	1	100%	37	100%
Education	2	50%	33	27%
Sociology	1	100%	25	100%
Agriculture	1	100%	22	100%
Political Science	1	100%	12	100%
Zoology	1	100%	10	100%
Physics	1	100%	0	

## Other Asian Countries

These six countries' 13 OAWorld journals published 218 articles in 2016. One \$150-APC journal (58 articles), overall average cost per article \$40. APCs and Revenue table omitted.

### Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	13	12	12	11	10	10
%Free	92%	92%	92%	100%	100%	100%
Articles	218	286	222	190	166	168
%Free	73%	88%	88%	100%	100%	100%



**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Med.: 60-149	1	100%	22	100%
Small: 20-59	7	86%	154	62%
Smallest: 0-19	5	100%	42	100%

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Univ/college	10	100%	132	100%
Miscellaneous	1	0%	58	0%
Society/govt	2	100%	28	100%

**Subjects**

<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Medicine	5	80%	120	52%
Agriculture	1	100%	22	100%
Language & Literature	1	100%	18	100%
Economics	1	100%	17	100%
Engineering	1	100%	12	100%
Biology	1	100%	11	100%
Ecology	1	100%	8	100%
Other Sciences	1	100%	7	100%
Computer Science	1	100%	3	100%



**Growth and Shrinkage**

<b>Change 2015-16</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	2	15.4%	
Grew 25-49.9%	2	15.4%	30.8%
Grew 10-24.99%	3	23.1%	53.8%
Even, $\pm 9.99\%$	2	15.4%	69.2%
Shrank 10-24.99%	1	7.7%	76.9%
Shrank 50%+	3	23.1%	

**Country Summaries****Brunei Darussalam**

One free society-published journal with 22 articles in 2016.

**Cambodia**

One free university-published journal with 11 articles in 2016.

**Kyrgyzstan**

Two free university-published journals with 29 articles in 2016.

**Singapore**

One free university-published journal with 18 articles in 2016.

**Sri Lanka**

Seven free journals (one society, six university) with a total of 80 articles in 2016.

**Viet Nam**

One \$150-APC journal with 58 articles in 2016.

# Eastern Europe

Eastern Europe's 1,386 OAWorld journals published 52,116 articles in 2016. Average cost per article in APC-based journals: \$235. Overall average: \$71.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	1,299	1,350	1,304	1,198	1,031	903
%Free	83%	84%	84%	84%	84%	84%
Articles	52,116	53,490	53,636	51,553	45,017	38,427
%Free	70%	72%	70%	70%	71%	72%

## Article Volume

	Journals	%Free	Articles	%Free
Largest: 600+	4	50%	3,626	26%
Large: 150-599	66	52%	9,286	50%
Med.: 60-149	293	69%	18,811	67%
Small: 20-59	694	89%	17,826	89%
Smallest: 0-19	242	92%	2,567	91%

### APC Levels and Revenue

	Journals	Articles	Revenue	\$/article
\$1,400+	3	178	\$283,781	\$1,594
\$600-\$1.399	12	699	\$601,304	\$860
\$200-\$599	63	6,542	\$2,065,801	\$316
\$2-\$199	144	8,298	\$743,962	\$90
Free	1,164	36,399		
Total	1,386	52,116	\$3,694,848	\$71

### Publisher Category

Category	Journals	%Free	Articles	%Free
Univ/college	643	86%	24,250	76%
Miscellaneous	263	83%	12,664	58%
Open Access	344	83%	9,244	75%
Society/govt	108	86%	4,184	78%
Traditional	28	50%	1,774	30%

### Growth and Shrinkage

Change 2015-16	Count	Percent	Cum%
Grew 50%+	186	13.4%	
Grew 25-49.9%	128	9.2%	22.7%
Grew 10-24.99%	169	12.2%	34.8%
Even, $\pm$ 9.99%	346	25.0%	59.8%
Shrank 10-24.99%	180	13.0%	72.8%
Shrank 25-49.99%	190	13.7%	86.5%
Shrank 50%+	187	13.5%	

**Subjects**

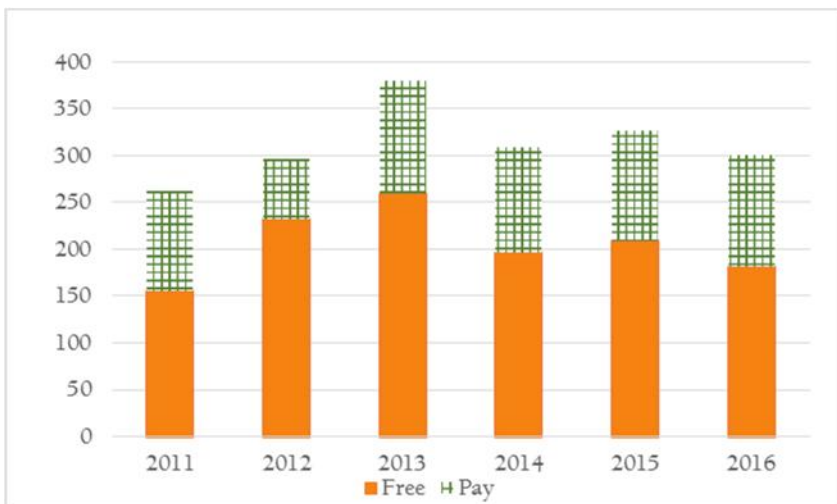
<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Medicine	157	75%	7,281	67%
Economics	158	75%	5,692	58%
Agriculture	82	70%	3,465	55%
Engineering	75	83%	3,264	73%
Miscellany	22	68%	3,177	25%
Technology	48	90%	2,741	83%
Political Science	56	95%	1,982	88%
Language & Literature	86	93%	1,965	86%
Anthropology	63	92%	1,926	77%
Zoology	42	64%	1,755	34%
Biology	45	78%	1,676	75%
Mathematics	56	91%	1,602	85%
Sociology	47	89%	1,551	90%
Education	49	92%	1,471	94%
Computer Science	51	86%	1,423	86%
Earth Sciences	64	94%	1,395	92%
History	36	86%	1,375	48%
Chemistry	29	79%	1,308	75%
Ecology	39	77%	1,226	57%
Other Sciences	20	80%	1,213	73%
Law	29	93%	911	81%
Physics	23	91%	862	84%
Psychology	23	100%	774	100%
Philosophy	25	96%	716	96%
Arts & Architecture	29	97%	693	88%
Religion	11	100%	317	100%
Library Science	10	100%	182	100%
Media & Communications	11	100%	173	100%

# Bosnia and Herzegovina

This country's 13 OAWorld journals published 300 articles in 2016. Average cost per article in APC-based journals: \$223. Overall average: \$88.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	13	13	12	11	10	9
%Free	69%	69%	75%	82%	80%	78%
Articles	300	327	309	380	297	262
%Free	60%	64%	64%	68%	78%	59%



**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Med.: 60-149	3	67%	99	64%
Small: 20-59	6	67%	151	58%
Smallest: 0-19	4	75%	50	62%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$200-\$599	2	84	\$24,816	\$295
\$2-\$199	2	35	\$1,665	\$48
Free	9	181		
Total	13	300	\$26,481	\$88

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Univ/college	7	86%	149	89%
Society/govt	3	33%	114	26%
Open Access	2	50%	31	39%
Miscellaneous	1	100%	6	100%

**Growth and Shrinkage**

<b>Change 2015-16</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 25-49.9%	2	15.4%	
Grew 10-24.99%	3	23.1%	38.5%
Even, $\pm$ 9.99%	5	38.5%	76.9%
Shrank 25-49.99%	3	23.1%	

**Subjects**

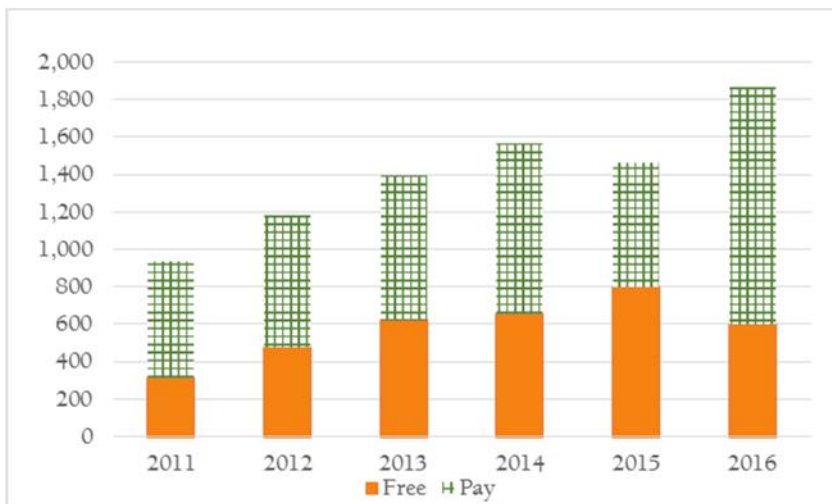
<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Medicine	5	40%	149	33%
Language & Literature	1	100%	44	100%
Economics	2	50%	31	39%
Miscellany	1	100%	29	100%
Engineering	2	100%	25	100%
Anthropology	1	100%	16	100%
Earth Sciences	1	100%	6	100%

# Bulgaria

Bulgaria's 36 OAWorld journals published 1,867 articles in 2016. Average cost per article in APC-based journals: \$455. Overall average: \$310.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	34	34	30	27	25	19
%Free	56%	62%	63%	67%	68%	63%
Articles	1,867	1,465	1,565	1,392	1,182	937
%Free	32%	54%	42%	45%	40%	33%





**Article Volume**

	Journals	%Free	Articles	%Free
Large: 150-599	2	50%	643	10%
Med.: 60-149	6	33%	562	26%
Small: 20-59	17	71%	533	61%
Smallest: 0-19	9	44%	129	46%

**APC Levels and Revenue**

	Journals	Articles	Revenue	\$/article
\$200-\$599	11	1,101	\$563,328	\$512
\$2-\$199	4	170	\$14,718	\$87
Free	21	596		
Total	36	1,867	\$578,046	\$310

**Publisher Category**

Category	Journals	%Free	Articles	%Free
Traditional	12	8%	1,118	2%
Univ/college	10	100%	404	100%
Miscellaneous	9	78%	198	48%
Society/govt	2	50%	75	23%
Open Access	3	67%	72	86%

**Growth and Shrinkage**

Change 2015-16	Count	Percent	Cum%
Grew 50%+	14	38.9%	
Grew 25-49.9%	3	8.3%	47.2%
Grew 10-24.99%	2	5.6%	52.8%
Even, $\pm$ 9.99%	6	16.7%	69.4%
Shrank 10-24.99%	4	11.1%	80.6%
Shrank 25-49.99%	3	8.3%	88.9%
Shrank 50%+	4	11.1%	

**Starting Date**



**Subjects**

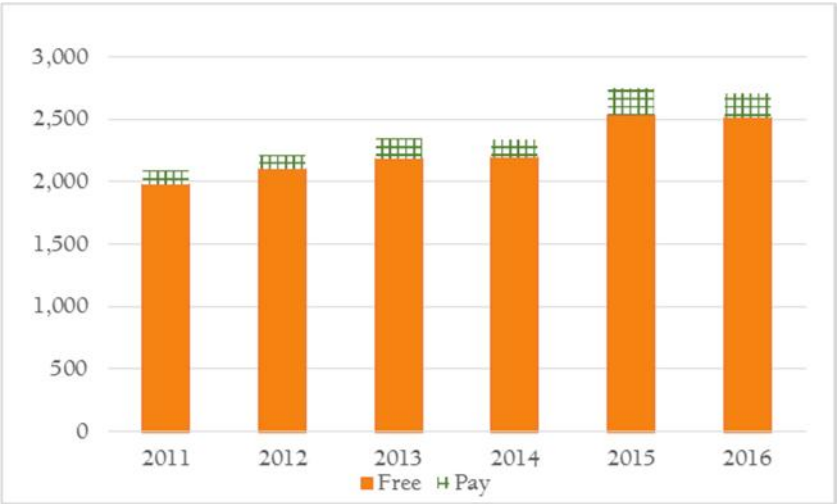
Subject	Journals	%Free	Articles	%Free
Zoology	6	50%	723	10%
Biology	6	17%	280	12%
Other Sciences	2	50%	137	45%
Agriculture	2	0%	129	0%
Computer Science	3	100%	118	100%
Medicine	3	67%	98	41%
Technology	3	100%	89	100%
Mathematics	1	0%	87	0%
Miscellany	2	50%	72	79%
Economics	1	100%	32	100%
Anthropology	2	50%	27	63%
Ecology	1	100%	27	100%
Education	1	100%	21	100%
Language & Literature	1	100%	19	100%
Physics	1	100%	8	100%
Library Science	1	100%	0	

# Croatia

Croatia’s 86 OAWorld journals published 2,706 articles in 2016. Average cost per article in APC-based journals: \$224. Overall average: \$16.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	85	86	85	81	79	78
%Free	94%	94%	94%	95%	96%	96%
Articles	2,706	2,743	2,335	2,350	2,218	2,088
%Free	93%	92%	94%	93%	95%	95%



**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Large: 150-599	1	100%	223	100%
Med.: 60-149	18	89%	958	87%
Small: 20-59	55	95%	1,409	95%
Smallest: 0-19	11	100%	116	100%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$600-\$1.399	1	13	\$7,800	\$600
\$200-\$599	1	60	\$22,440	\$374
\$2-\$199	3	121	\$13,174	\$109
Free	81	2,512		
Total	86	2,706	\$43,414	\$16

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Univ/college	46	96%	1,272	93%
Society/govt	23	100%	840	100%
Miscellaneous	13	85%	506	82%
Open Access	4	75%	88	85%

Starting Date



Growth and Shrinkage

Change 2015-16	Count	Percent	Cum%
Grew 50%+	14	16.3%	
Grew 25-49.9%	11	12.8%	29.1%
Grew 10-24.99%	12	14.0%	43.0%
Even, ±9.99%	26	30.2%	73.3%
Shrank 10-24.99%	7	8.1%	81.4%
Shrank 25-49.99%	8	9.3%	90.7%
Shrank 50%+	8	9.3%	

**Subjects**

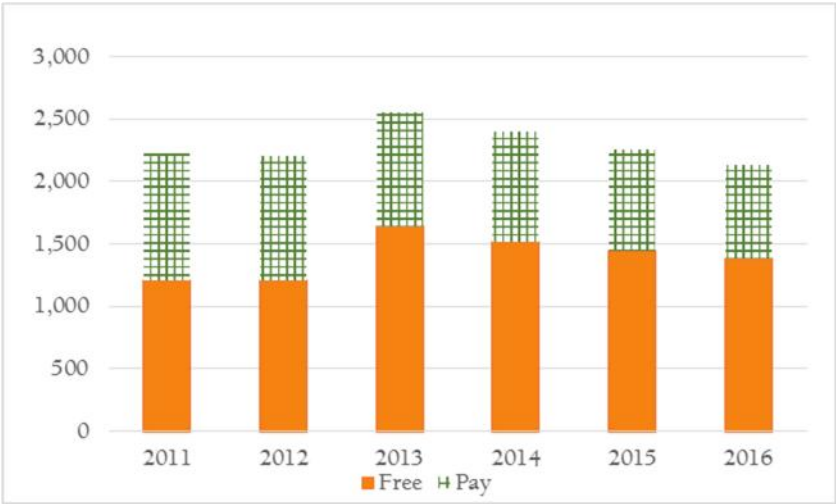
<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Economics	12	92%	330	82%
Engineering	4	50%	326	78%
Medicine	5	100%	273	100%
Agriculture	6	100%	272	100%
Anthropology	7	100%	168	100%
Sociology	5	100%	142	100%
Chemistry	3	100%	134	100%
Technology	3	100%	132	100%
Earth Sciences	6	83%	131	79%
Law	4	100%	114	100%
Language & Literature	3	100%	92	100%
Ecology	3	67%	88	63%
History	3	100%	86	100%
Arts & Architecture	5	100%	81	100%
Philosophy	3	100%	78	100%
Computer Science	3	100%	69	100%
Library Science	2	100%	41	100%
Zoology	2	100%	39	100%
Media & Communications	1	100%	30	100%
Psychology	1	100%	24	100%
Miscellany	1	100%	18	100%
Education	1	100%	17	100%
Political Science	2	100%	12	100%
Mathematics	1	100%	9	100%

# Czech Republic

This country’s 82 OAWorld journals published 2,132 articles in 2016. Average article cost in APC-based journals: \$242. Overall average: \$85.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	81	82	80	75	67	61
%Free	75%	76%	75%	73%	70%	67%
Articles	2,132	2,256	2,394	2,550	2,200	2,223
%Free	65%	64%	63%	64%	55%	54%



**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Large: 150-599	3	67%	183	45%
Med.: 60-149	14	36%	744	36%
Small: 20-59	50	80%	1,050	84%
Smallest: 0-19	14	100%	155	100%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$200-\$599	13	662	\$169,776	\$256
\$2-\$199	7	84	\$10,666	\$127
Free	62	1,386		
Total	82	2,132	\$180,442	\$85

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Univ/college	54	74%	1,516	62%
Miscellaneous	13	62%	313	53%
Society/govt	6	100%	161	100%
Open Access	9	89%	142	85%



Growth and Shrinkage

Change 2015-16	Count	Percent	Cum%
Grew 50%+	9	11.0%	
Grew 25-49.9%	8	9.8%	20.7%
Grew 10-24.99%	14	17.1%	37.8%
Even, ±9.99%	18	22.0%	59.8%
Shrank 10-24.99%	15	18.3%	78.0%
Shrank 25-49.99%	11	13.4%	91.5%
Shrank 50%+	7	8.5%	

Starting Year



**Subjects**

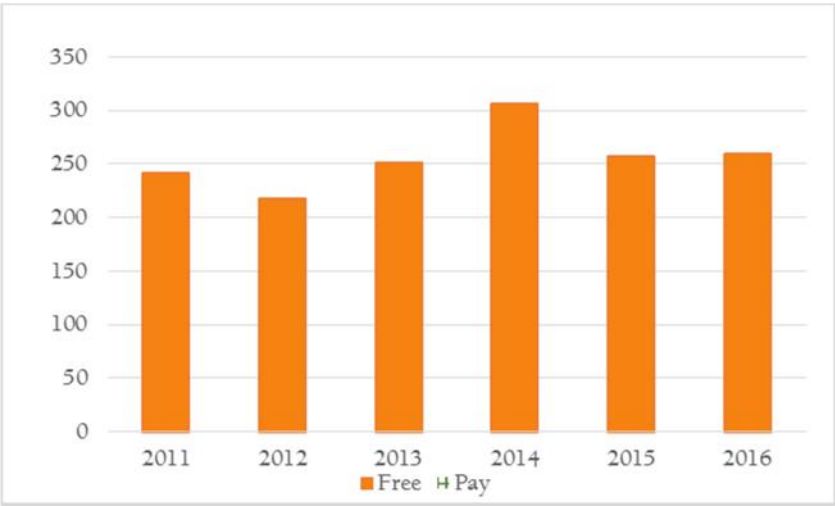
<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Agriculture	11	27%	536	28%
Engineering	6	83%	305	67%
Economics	13	77%	225	87%
Education	7	86%	152	88%
Zoology	2	0%	149	0%
Anthropology	6	100%	99	100%
Medicine	5	60%	86	83%
Earth Sciences	3	67%	75	53%
Language & Literature	4	100%	61	100%
Technology	4	100%	59	100%
Other Sciences	1	100%	51	100%
Political Science	4	100%	51	100%
Chemistry	1	100%	50	100%
Mathematics	2	100%	46	100%
Computer Science	2	100%	36	100%
Psychology	2	100%	33	100%
Media & Communications	2	100%	30	100%
Ecology	2	50%	24	67%
Biology	1	100%	23	100%
Sociology	1	100%	16	100%
Religion	1	100%	10	100%
Physics	1	100%	9	100%
Miscellany	1	0%	6	0%

# Estonia

Estonia’s 16 OAWorld journals, none of which charge APCs, published 259 articles in 2016.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	15	14	15	15	13	13
Articles	259	257	306	251	218	242



**Article Volume**

	<b>Journals</b>	<b>Articles</b>
Small: 20-59	9	186
Smallest: 0-19	6	73

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>Articles</b>
Univ/college	8	121
Miscellaneous	5	91
Society/govt	3	47

**Growth and Shrinkage**

<b>Change 2015-16</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	3	18.8%	
Grew 25-49.9%	3	18.8%	37.5%
Grew 10-24.99%	1	6.3%	43.8%
Even, $\pm 9.99\%$	4	25.0%	68.8%
Shrank 10-24.99%	2	12.5%	81.3%
Shrank 25-49.99%	2	12.5%	93.8%
Shrank 50%+	1	6.3%	

**Subjects**

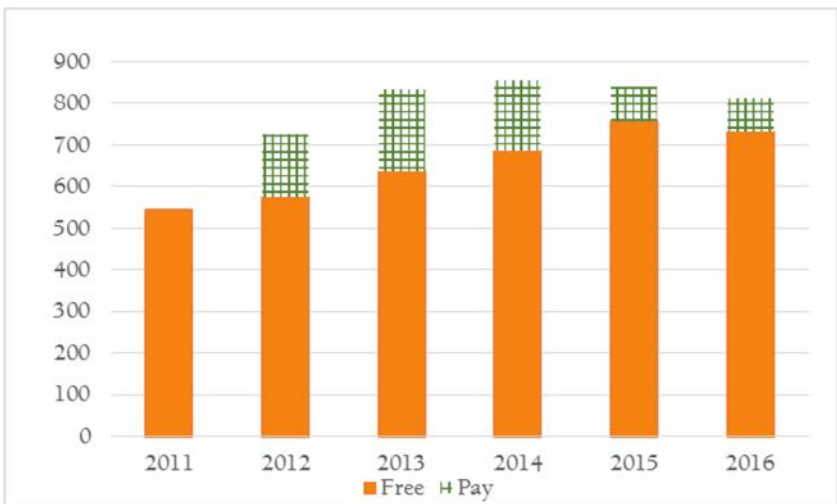
<b>Subject</b>	<b>Journals</b>	<b>Articles</b>
Anthropology	3	75
Language & Literature	4	71
History	2	24
Education	1	23
Earth Sciences	2	19
Political Science	1	19
Law	1	13
Philosophy	1	9
Agriculture	1	6

# Hungary

Hungary's 26 OAWorld journals published 812 articles in 2016. The single APC journal (79 articles) charges \$107; overall average cost \$10.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	25	26	24	23	20	17
%Free	96%	96%	96%	96%	95%	100%
Articles	812	840	856	833	727	544
%Free	90%	90%	80%	76%	79%	100%



Article Volume

	Journals	%Free	Articles	%Free
Large: 150-599	1	0%	79	0%
Med.: 60-149	3	100%	310	100%
Small: 20-59	14	100%	352	100%
Smallest: 0-19	7	100%	71	100%

Publisher Category

Category	Journals	%Free	Articles	%Free
Univ/college	11	100%	454	100%
Miscellaneous	6	83%	221	64%
Society/govt	5	100%	97	100%
Open Access	4	100%	40	100%

Starting Date



**Growth and Shrinkage**

<b>Change 2015-16</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	4	15.4%	
Grew 10-24.99%	4	15.4%	30.8%
Even, $\pm 9.99\%$	9	34.6%	65.4%
Shrank 10-24.99%	3	11.5%	76.9%
Shrank 25-49.99%	3	11.5%	88.5%
Shrank 50%+	3	11.5%	

**Subjects**

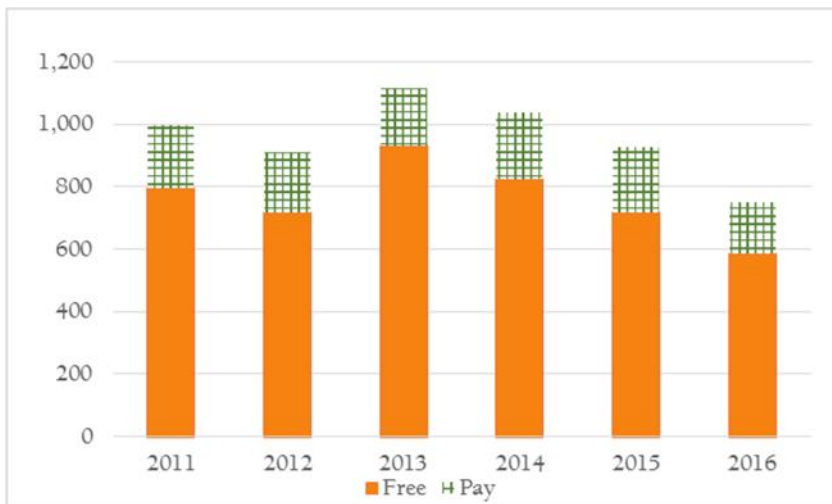
<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Technology	2	100%	188	100%
Mathematics	1	100%	122	100%
History	2	100%	100	100%
Chemistry	2	50%	85	7%
Ecology	3	100%	55	100%
Language & Literature	4	100%	55	100%
Agriculture	2	100%	39	100%
Medicine	2	100%	38	100%
Earth Sciences	1	100%	35	100%
Engineering	1	100%	22	100%
Sociology	1	100%	20	100%
Media & Communications	1	100%	16	100%
Zoology	1	100%	15	100%
Anthropology	2	100%	13	100%
Education	1	100%	9	100%

# Lithuania

Lithuania's 35 OAWorld journals published 748 articles in 2016. Average cost per article in APC-based journals: \$384. Overall average: \$83.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	29	34	32	32	28	27
%Free	83%	85%	91%	91%	89%	93%
Articles	748	926	1,039	1,115	910	997
%Free	78%	78%	79%	83%	79%	80%





### Article Volume

	Journals	%Free	Articles	%Free
Med.: 60-149	6	67%	357	61%
Small: 20-59	18	94%	333	97%
Smallest: 0-19	5	60%	58	79%

### APC Levels and Revenues

	Journals	Articles	Revenue	\$/article
\$200-\$599	1	103	\$55,002	\$534
\$2-\$199	4	58	\$6,758	\$117
Free	30	587		
Total	35	748	\$61,760	\$83

### Publisher Category

Category	Journals	%Free	Articles	%Free
Univ/college	26	88%	590	75%
Miscellaneous	6	100%	129	100%
Open Access	3	33%	29	59%

### Growth and Shrinkage

Change 2015-16	Count	Percent	Cum%
Grew 50%+	2	5.7%	
Grew 25-49.9%	3	8.6%	14.3%
Grew 10-24.99%	1	2.9%	17.1%
Even, $\pm$ 9.99%	9	25.7%	42.9%
Shrank 10-24.99%	5	14.3%	57.1%
Shrank 25-49.99%	6	17.1%	74.3%
Shrank 50%+	9	25.7%	

Starting Date



Subjects

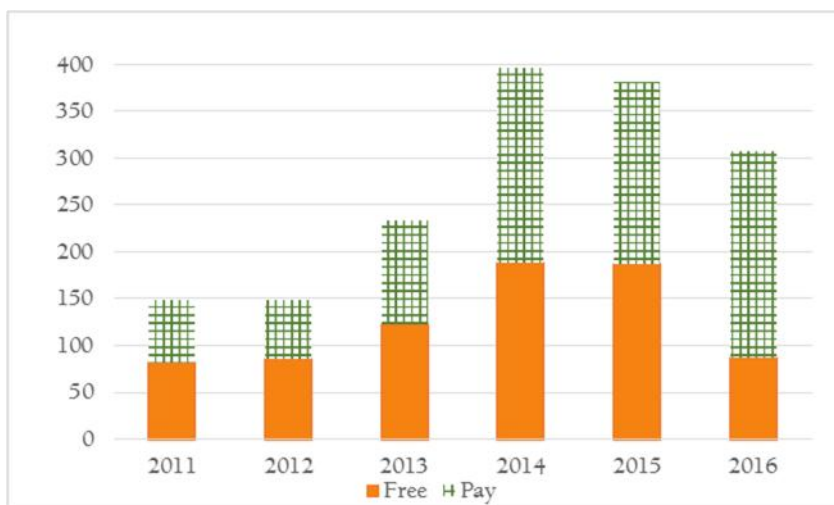
Subject	Journals	%Free	Articles	%Free
Technology	1	0%	103	0%
Education	3	67%	88	93%
Biology	1	100%	84	100%
Language & Literature	7	100%	84	100%
Economics	3	67%	65	45%
Sociology	5	60%	55	71%
Agriculture	1	100%	54	100%
Library Science	1	100%	35	100%
Law	2	100%	33	100%
Medicine	1	100%	32	100%
Religion	1	100%	30	100%
Computer Science	2	100%	19	100%
Ecology	2	100%	18	100%
Political Science	2	100%	18	100%
Media & Communications	1	100%	17	100%
Mathematics	2	100%	13	100%

# Macedonia, the Former Yugoslav Republic of

Macedonia's ten OAWorld journals published 307 articles in 2016. Average cost per article in APC-based journals: \$268. Overall average: \$192.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	9	10	9	9	8	8
%Free	56%	60%	67%	67%	75%	75%
Articles	307	382	397	234	149	149
%Free	28%	49%	48%	53%	57%	54%



**Article Volume**

	Journals	%Free	Articles	%Free
Med.: 60-149	2	0%	167	0%
Small: 20-59	5	60%	118	55%
Smallest: 0-19	2	100%	22	100%

**APC Levels and Revenue**

	Journals	Articles	Revenue	\$/article
\$600-\$1.399	1	30	\$19,230	\$641
\$200-\$599	2	167	\$37,282	\$223
\$2-\$199	1	23	\$2,438	\$106
Free	6	87		
Total	10	307	\$58,950	\$192

**Publisher Category**

Category	Journals	%Free	Articles	%Free
Miscellaneous	3	33%	167	0%
Univ/college	6	83%	110	79%
Open Access	1	0%	30	0%

**Growth and Shrinkage**

<b>Change 2015-16</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	2	20.0%	
Grew 25-49.9%	1	10.0%	30.0%
Even, $\pm 9.99\%$	3	30.0%	60.0%
Shrank 25-49.99%	3	30.0%	90.0%
Shrank 50%+	1	10.0%	

**Subjects**

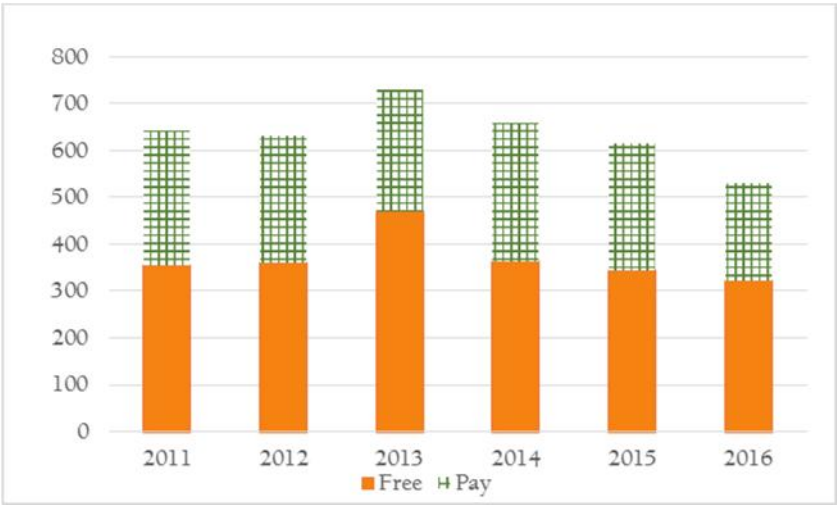
<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Medicine	3	67%	161	13%
Biology	2	0%	57	0%
Zoology	1	100%	31	100%
Political Science	1	0%	23	0%
Economics	1	100%	21	100%
Other Sciences	1	100%	14	100%
Sociology	1	100%	0	

# Moldova, Republic of

Moldova’s 15 OAWorld journals published 531 articles in 2016. Average cost per article in APC-based journals: \$33. Overall average: \$13.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	14	14	15	14	13	13
%Free	64%	64%	67%	71%	69%	69%
Articles	531	614	658	729	630	642
%Free	61%	56%	55%	64%	57%	55%



**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Med.: 60-149	7	43%	356	46%
Small: 20-59	7	86%	175	90%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$2-\$199	5	209	\$6,830	\$33
Free	10	322		
Total	15	531	\$6,830	\$13

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Univ/college	11	55%	379	45%
Society/govt	4	100%	152	100%

**Growth and Shrinkage**

<b>Change 2015-16</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 10-24.99%	2	13.3%	
Even, $\pm$ 9.99%	6	40.0%	53.3%
Shrank 10-24.99%	1	6.7%	60.0%
Shrank 25-49.99%	4	26.7%	86.7%
Shrank 50%+	2	13.3%	

**Subjects**

<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Economics	4	50%	125	54%
Chemistry	2	50%	77	26%
Psychology	1	100%	75	100%
Arts & Architecture	1	100%	62	100%
Sociology	1	0%	56	0%
Technology	1	100%	43	100%
Political Science	1	0%	39	0%
Computer Science	1	100%	26	100%
Mathematics	1	100%	21	100%
Language & Literature	2	100%	7	100%

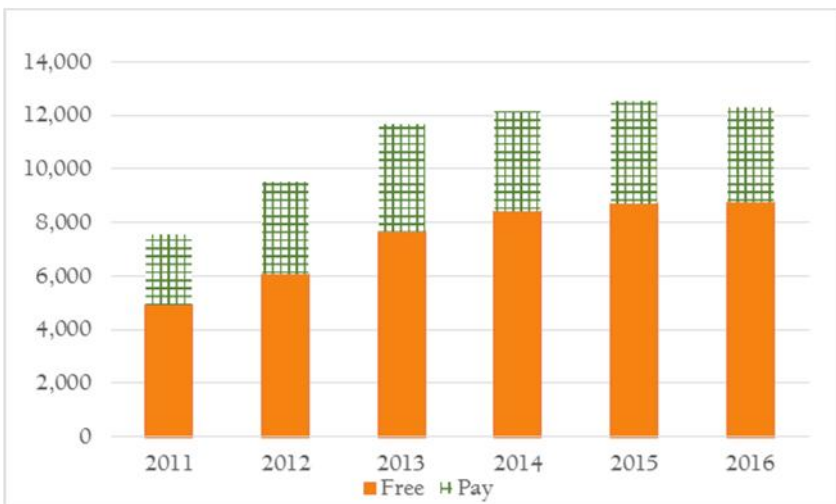


# Poland

Poland's 380 OAWorld journals published 12,317 articles in 2016. Average cost per article in APC-based journals: \$412. Overall average: \$119.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	346	365	351	312	235	186
%Free	82%	83%	83%	82%	80%	79%
Articles	12,317	12,529	12,129	11,687	9,509	7,553
%Free	71%	70%	69%	65%	64%	65%



**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Large: 150-599	15	33%	2,041	45%
Med.: 60-149	65	62%	4,369	63%
Small: 20-59	192	88%	5,186	85%
Smallest: 0-19	74	97%	721	96%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$1,400+	3	178	\$283,781	\$1,594
\$600-\$1,399	9	598	\$531,122	\$888
\$200-\$599	21	1,379	\$492,747	\$357
\$2-\$199	29	1,392	\$155,456	\$112
Free	318	8,770		
Total	380	12,317	\$1,463,106	\$119

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Open Access	248	85%	7,025	74%
Univ/college	77	86%	2,709	80%
Miscellaneous	32	84%	1,401	64%
Society/govt	14	50%	705	21%
Traditional	9	89%	477	77%

Starting Date



Growth and Shrinkage

Change 2015-16	Count	Percent	Cum%
Grew 50%+	52	13.7%	
Grew 25-49.9%	48	12.6%	26.3%
Grew 10-24.99%	41	10.8%	37.1%
Even, ±9.99%	89	23.4%	60.5%
Shrank 10-24.99%	41	10.8%	71.3%
Shrank 25-49.99%	51	13.4%	84.7%
Shrank 50%+	58	15.3%	

**Subjects**

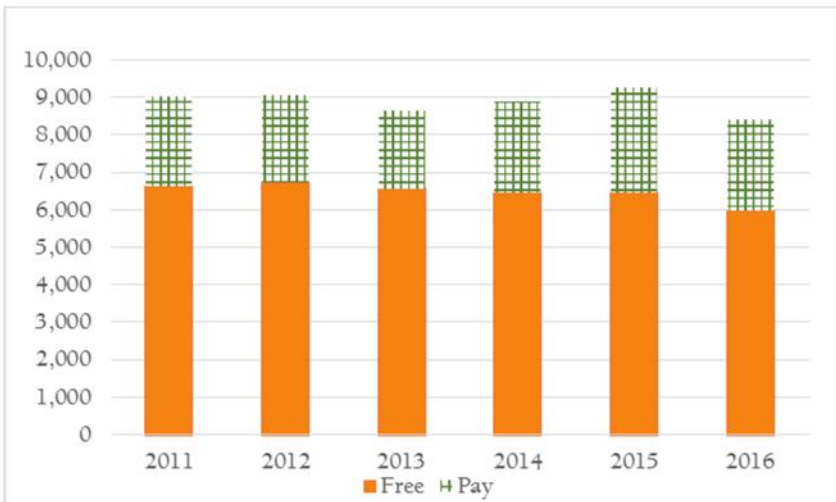
<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Medicine	62	66%	3,175	54%
Engineering	27	74%	961	72%
Agriculture	26	69%	802	50%
Economics	26	88%	740	82%
Technology	11	91%	683	84%
Mathematics	22	91%	682	83%
Earth Sciences	24	92%	677	92%
Ecology	18	72%	653	41%
Sociology	9	100%	526	100%
Language & Literature	21	100%	429	100%
Anthropology	15	93%	378	69%
Political Science	10	100%	330	100%
Biology	17	82%	279	57%
Physics	8	75%	265	46%
Zoology	12	75%	257	53%
Education	7	100%	221	100%
Chemistry	10	80%	206	65%
Philosophy	8	100%	204	100%
Religion	6	100%	165	100%
Psychology	5	100%	153	100%
Computer Science	10	90%	113	96%
Library Science	4	100%	76	100%
Other Sciences	3	67%	76	32%
Law	5	100%	71	100%
Miscellany	2	100%	60	100%
History	4	100%	57	100%
Arts & Architecture	5	100%	46	100%
Media & Communications	3	100%	32	100%

# Romania

Romania's 273 OAWorld journals published 8,415 articles in 2016. Average cost per article in APC-based journals: \$107. Overall average: \$31.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	253	269	260	248	228	214
%Free	81%	82%	82%	83%	85%	84%
Articles	8,415	9,261	8,895	8,656	9,058	9,023
%Free	71%	70%	73%	76%	74%	74%



**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Large: 150-599	14	50%	1,603	51%
Med.: 60-149	54	65%	3,243	62%
Small: 20-59	138	90%	3,081	88%
Smallest: 0-19	47	85%	488	86%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$200-\$599	4	347	\$102,600	\$296
\$2-\$199	44	2,086	\$157,563	\$76
Free	225	5,982		
Total	273	8,415	\$260,163	\$31

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Univ/college	167	84%	5,734	69%
Miscellaneous	68	85%	1,570	79%
Open Access	19	63%	583	62%
Society/govt	16	88%	488	85%
Traditional	3	33%	40	50%

Starting Date



Growth and Shrinkage

Change 2015-16	Count	Percent	Cum%
Grew 50%+	37	13.6%	
Grew 25-49.9%	20	7.3%	20.9%
Grew 10-24.99%	30	11.0%	31.9%
Even, ±9.99%	49	17.9%	49.8%
Shrank 10-24.99%	40	14.7%	64.5%
Shrank 25-49.99%	52	19.0%	83.5%
Shrank 50%+	45	16.5%	

**Subjects**

<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Economics	59	69%	2,101	60%
Political Science	22	95%	723	76%
Agriculture	13	62%	714	42%
Anthropology	11	73%	476	35%
Engineering	11	100%	424	100%
Medicine	14	86%	399	77%
Zoology	9	33%	345	44%
Language & Literature	9	78%	310	94%
Sociology	10	90%	289	96%
Earth Sciences	17	100%	267	100%
Computer Science	15	73%	262	54%
Miscellany	5	60%	246	47%
Biology	7	100%	243	100%
Law	6	100%	207	100%
Chemistry	2	100%	173	100%
Education	9	89%	165	85%
Technology	5	100%	155	100%
Arts & Architecture	5	100%	152	100%
Philosophy	7	86%	149	79%
History	10	90%	128	87%
Mathematics	10	100%	127	100%
Ecology	3	67%	90	36%
Other Sciences	3	100%	84	100%
Physics	4	100%	81	100%
Media & Communications	3	100%	48	100%
Religion	1	100%	26	100%
Psychology	2	100%	23	100%
Library Science	1	100%	8	100%

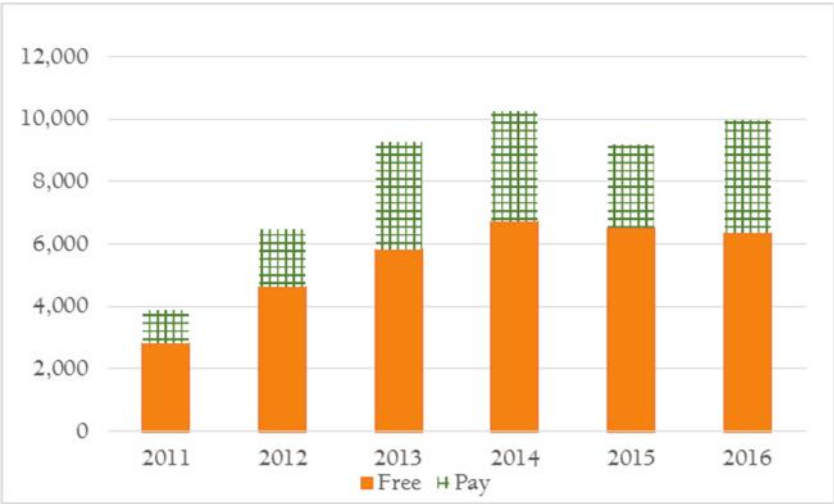


# Russian Federation

Russia’s 145 OAWorld journals published 9,972 articles in 2016. Average cost per article in APC-based journals: \$178. Overall average: \$65.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	139	141	137	115	91	64
%Free	90%	90%	91%	90%	88%	88%
Articles	9,972	9,178	10,236	9,265	6,489	3,871
%Free	64%	71%	66%	63%	71%	73%



**Article Volume**

	Journals	%Free	Articles	%Free
Largest: 600+	1	0%	2,138	0%
Large: 150-599	12	67%	2,202	62%
Med.: 60-149	49	86%	3,390	82%
Small: 20-59	68	99%	2,148	99%
Smallest: 0-19	9	89%	94	87%

**APC Levels and Revenue**

	Journals	Articles	Revenue	\$/article
\$200-\$599	4	2,350	\$490,381	\$209
\$2-\$199	10	1,281	\$154,225	\$120
Free	131	6,341		
Total	145	9,972	\$644,606	\$65

**Publisher Category**

Category	Journals	%Free	Articles	%Free
Miscellaneous	53	83%	5,414	40%
Univ/college	67	94%	3,752	91%
Open Access	19	95%	540	98%
Traditional	4	100%	139	100%
Society/govt	2	100%	127	100%

Starting Date



Growth and Shrinkage

Change 2015-16	Count	Percent	Cum%
Grew 50%+	23	15.9%	
Grew 25-49.9%	7	4.8%	20.7%
Grew 10-24.99%	20	13.8%	34.5%
Even, ±9.99%	38	26.2%	60.7%
Shrank 10-24.99%	29	20.0%	80.7%
Shrank 25-49.99%	13	9.0%	89.7%
Shrank 50%+	15	10.3%	

**Subjects**

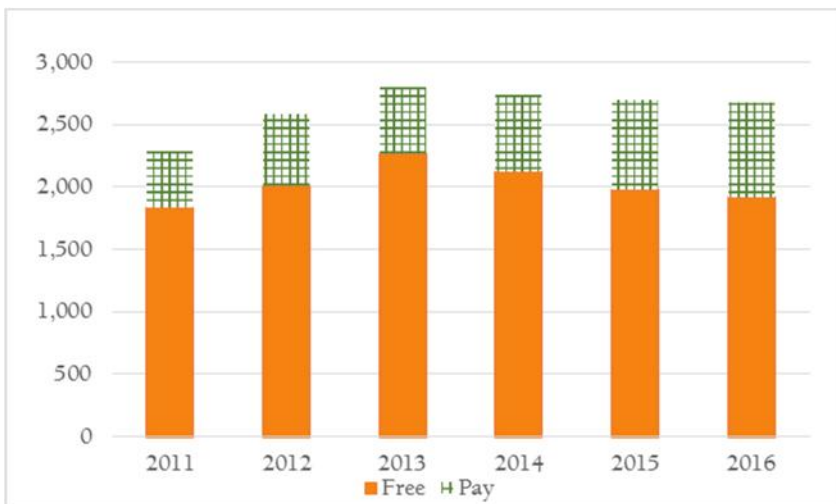
<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Miscellany	6	67%	2,520	13%
Medicine	36	100%	1,632	100%
History	9	67%	803	17%
Political Science	6	100%	613	100%
Law	10	80%	459	62%
Computer Science	5	100%	456	100%
Language & Literature	10	80%	421	54%
Agriculture	4	75%	370	48%
Psychology	8	100%	344	100%
Education	4	100%	284	100%
Anthropology	5	100%	246	100%
Arts & Architecture	4	75%	232	66%
Sociology	5	80%	226	68%
Economics	4	100%	225	100%
Other Sciences	5	100%	186	100%
Chemistry	1	100%	182	100%
Technology	7	86%	177	84%
Biology	2	100%	121	100%
Ecology	3	67%	106	63%
Mathematics	2	100%	85	100%
Earth Sciences	2	100%	75	100%
Religion	1	100%	75	100%
Zoology	3	100%	68	100%
Philosophy	1	100%	36	100%
Physics	2	100%	30	100%

# Serbia

Serbia's 73 OAWorld journals published 2,677 articles in 2016. Average cost per 2016 article in APC-based journals: \$140. Overall average: \$40.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	70	70	71	71	65	63
%Free	91%	91%	92%	93%	92%	92%
Articles	2,677	2,694	2,739	2,794	2,585	2,281
%Free	72%	73%	77%	81%	78%	80%



**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Large: 150-599	3	33%	653	16%
Med.: 60-149	14	79%	849	78%
Small: 20-59	41	98%	1,049	97%
Smallest: 0-19	12	100%	126	100%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$2-\$199	6	760	\$106,593	\$140
Free	67	1,917		
Total	73	2,677	\$106,593	\$40

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Univ/college	40	95%	1,455	62%
Society/govt	16	88%	715	83%
Miscellaneous	15	87%	467	81%
Open Access	2	100%	40	100%

Starting Date



Growth and Shrinkage

Change 2015-16	Count	Percent	Cum%
Grew 50%+	5	6.8%	
Grew 25-49.9%	6	8.2%	15.1%
Grew 10-24.99%	15	20.5%	35.6%
Even, ±9.99%	28	38.4%	74.0%
Shrank 10-24.99%	6	8.2%	82.2%
Shrank 25-49.99%	9	12.3%	94.5%
Shrank 50%+	4	5.5%	

**Subjects**

<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Engineering	10	90%	632	42%
Medicine	4	50%	387	45%
Chemistry	5	60%	268	53%
Economics	10	90%	247	77%
Biology	2	100%	175	100%
Agriculture	4	100%	124	100%
Education	3	100%	116	100%
Technology	3	100%	115	100%
Anthropology	3	100%	113	100%
Mathematics	4	100%	101	100%
Computer Science	2	100%	69	100%
Arts & Architecture	5	100%	64	100%
Philosophy	1	100%	46	100%
History	3	100%	42	100%
Language & Literature	3	100%	35	100%
Earth Sciences	4	100%	30	100%
Psychology	1	100%	30	100%
Ecology	1	100%	29	100%
Zoology	2	100%	22	100%
Law	1	100%	14	100%
Other Sciences	1	100%	12	100%
Political Science	1	100%	6	100%

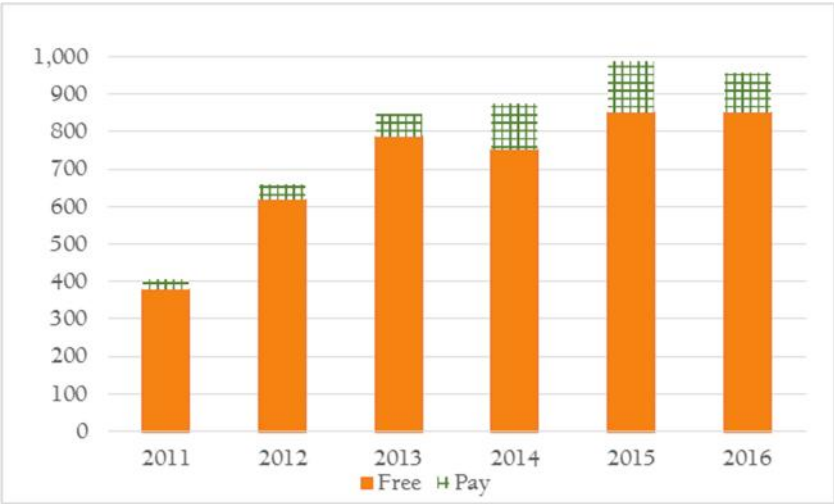


# Slovakia

Slovakia’s 40 OAWorld journals published 957 articles in 2016. Average cost per article for APC-based journals: \$233. Overall average: \$26.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	39	39	35	31	26	25
%Free	90%	90%	91%	94%	96%	96%
Articles	957	989	874	847	658	406
%Free	89%	86%	86%	93%	94%	94%



**Article Volume**

	Journals	%Free	Articles	%Free
Large: 150-599	1	100%	158	100%
Med.: 60-149	3	100%	178	100%
Small: 20-59	17	82%	407	76%
Smallest: 0-19	18	94%	214	96%

**APC Levels and Revenue**

	Journals	Articles	Revenue	\$/article
\$200-\$599	1	40	\$14,960	\$374
\$2-\$199	3	65	\$9,532	\$147
Free	36	852		
Total	40	957	\$24,492	\$26

**Publisher Category**

Category	Journals	%Free	Articles	%Free
Univ/college	12	100%	462	100%
Open Access	18	83%	261	74%
Miscellaneous	8	88%	195	81%
Society/govt	2	100%	39	100%

Starting Date



Growth and Shrinkage

Change 2015-16	Count	Percent	Cum%
Grew 50%+	5	12.5%	
Grew 25-49.9%	3	7.5%	20.0%
Grew 10-24.99%	4	10.0%	30.0%
Even, ±9.99%	13	32.5%	62.5%
Shrank 10-24.99%	6	15.0%	77.5%
Shrank 25-49.99%	7	17.5%	95.0%
Shrank 50%+	2	5.0%	

**Subjects**

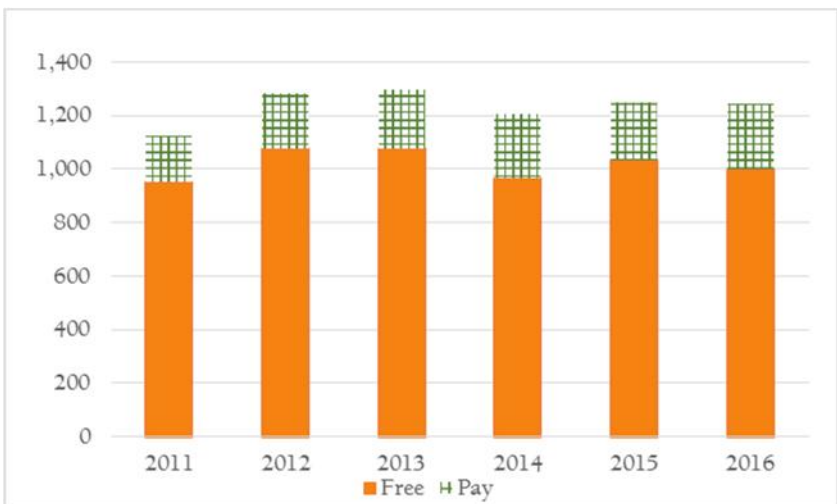
<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Technology	3	100%	185	100%
Agriculture	4	100%	123	100%
Language & Literature	4	75%	90	59%
Engineering	4	75%	77	74%
History	1	100%	72	100%
Mathematics	2	50%	70	43%
Anthropology	2	100%	41	100%
Philosophy	1	100%	39	100%
Education	2	100%	36	100%
Economics	2	100%	34	100%
Sociology	2	100%	32	100%
Earth Sciences	2	100%	31	100%
Biology	1	100%	24	100%
Arts & Architecture	1	100%	23	100%
Medicine	3	100%	23	100%
Zoology	2	100%	14	100%
Ecology	1	100%	12	100%
Psychology	1	100%	12	100%
Religion	1	100%	11	100%
Computer Science	1	0%	8	0%

# Slovenia

Slovenia's 44 OAWorld journals published 1,243 articles in 2016. Average cost per article for APC-based journals: \$417. Overall average: \$81.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	43	44	43	42	40	36
%Free	93%	93%	93%	93%	93%	92%
Articles	1,243	1,247	1,206	1,298	1,281	1,122
%Free	81%	83%	80%	83%	84%	85%



**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Large: 150-599	1	0%	168	0%
Med.: 60-149	6	83%	358	84%
Small: 20-59	24	96%	580	97%
Smallest: 0-19	12	100%	137	100%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$600-\$1.399	1	58	\$43,152	\$744
\$200-\$599	2	184	\$57,824	\$314
Free	41	1,001		
Total	44	1,243	\$100,976	\$81

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Univ/college	25	96%	663	75%
Society/govt	5	80%	257	94%
Miscellaneous	9	100%	196	100%
Open Access	5	80%	127	54%

Starting Date



Growth and Shrinkage

Change 2015-16	Count	Percent	Cum%
Grew 50%+	3	6.8%	
Grew 25-49.9%	5	11.4%	18.2%
Grew 10-24.99%	9	20.5%	38.6%
Even, ±9.99%	13	29.5%	68.2%
Shrank 10-24.99%	7	15.9%	84.1%
Shrank 25-49.99%	6	13.6%	97.7%
Shrank 50%+	1	2.3%	

**Subjects**

<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Language & Literature	9	100%	184	100%
Technology	2	50%	174	3%
Medicine	3	33%	153	52%
Economics	6	100%	130	100%
Chemistry	1	100%	114	100%
Education	4	100%	84	100%
Agriculture	3	100%	83	100%
Anthropology	3	100%	65	100%
Earth Sciences	2	100%	49	100%
Sociology	1	100%	34	100%
Arts & Architecture	3	100%	33	100%
Miscellany	1	100%	33	100%
Biology	1	100%	26	100%
History	1	100%	25	100%
Library Science	1	100%	22	100%
Political Science	2	100%	20	100%
Psychology	1	100%	14	100%

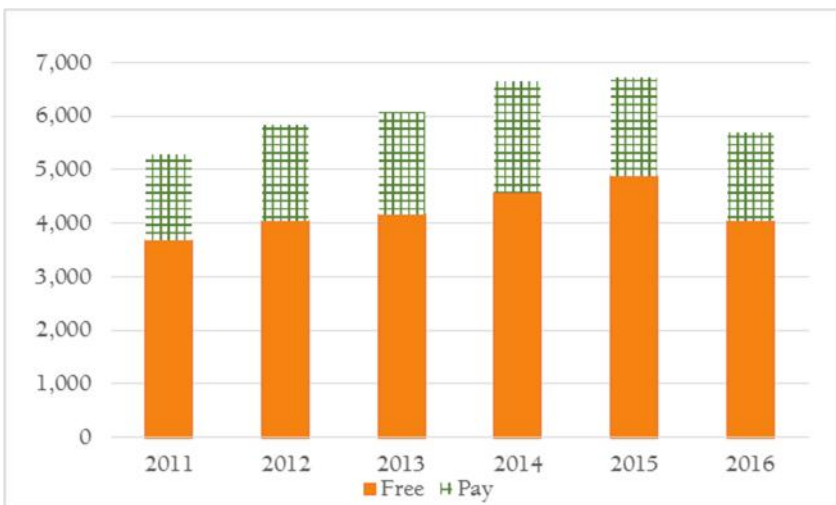


# Ukraine

Ukraine's 80 OAWorld journals published 5,701 articles in 2016. Average cost per article in APC-based journals: \$34. Overall average: \$10.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	74	77	76	66	58	48
%Free	74%	74%	76%	79%	81%	81%
Articles	5,701	6,714	6,661	6,066	5,830	5,287
%Free	71%	73%	69%	69%	69%	70%



**Article Volume**

	Journals	%Free	Articles	%Free
Largest: 600+	3	67%	1,488	64%
Large: 150-599	11	64%	1,289	68%
Med.: 60-149	35	71%	2,282	73%
Small: 20-59	18	78%	580	82%
Smallest: 0-19	7	100%	62	100%

**APC Levels and Revenue**

	Journals	Articles	Revenue	\$/article
\$2-\$199	20	1,672	\$56,752	\$34
Free	60	4,029		
Total	80	5,701	\$56,752	\$10

**Publisher Category**

Category	Journals	%Free	Articles	%Free
Univ/college	57	74%	3,783	64%
Miscellaneous	16	69%	1,520	79%
Society/govt	6	100%	345	100%
Open Access	1	100%	53	100%

### Starting Date



### Growth and Shrinkage

Change 2015-16	Count	Percent	Cum%
Grew 50%+	6	7.5%	
Grew 25-49.9%	4	5.0%	12.5%
Grew 10-24.99%	6	7.5%	20.0%
Even, $\pm 9.99\%$	23	28.8%	48.8%
Shrank 10-24.99%	16	20.0%	68.8%
Shrank 25-49.99%	9	11.3%	80.0%
Shrank 50%+	16	20.0%	

**Subjects**

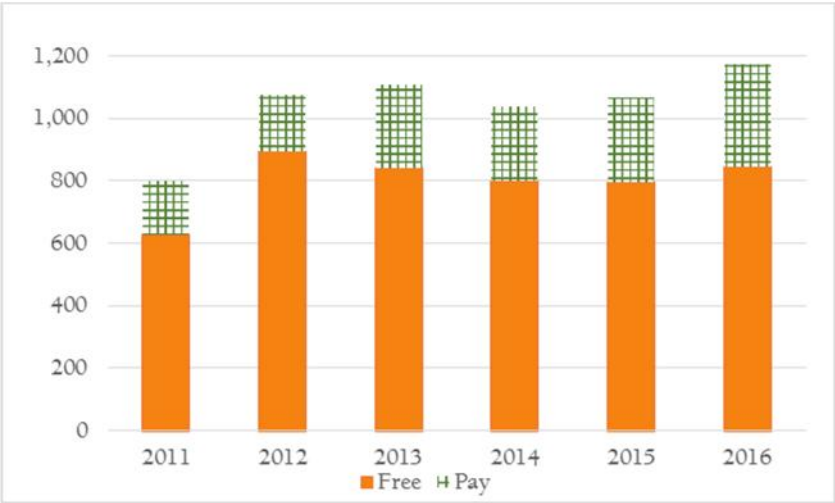
<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Economics	11	36%	1,144	14%
Medicine	11	55%	675	62%
Technology	3	67%	638	93%
Other Sciences	2	50%	525	74%
Physics	6	100%	437	100%
Biology	4	100%	334	100%
Engineering	5	80%	271	78%
Anthropology	3	100%	209	100%
Mathematics	5	100%	207	100%
Miscellany	3	67%	193	78%
Agriculture	4	100%	184	100%
Education	3	67%	173	80%
Philosophy	3	100%	155	100%
Political Science	3	100%	128	100%
Computer Science	4	100%	122	100%
Zoology	2	50%	92	58%
Sociology	3	100%	66	100%
Ecology	1	100%	59	100%
Language & Literature	2	50%	47	34%
History	1	0%	38	0%
Chemistry	1	100%	4	100%

# Other Eastern European Countries

Ten other countries have a total of 32 OAWorld journals publishing 1,172 articles in 2016. Average cost per article in APC-based journals: \$225. Overall average: \$63.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	30	32	29	26	25	22
%Free	83%	81%	83%	81%	80%	77%
Articles	1,172	1,068	1,037	1,106	1,076	800
%Free	72%	74%	77%	76%	83%	78%



**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Large: 150-599	2	50%	44	34%
Med.: 60-149	8	63%	589	56%
Small: 20-59	15	93%	488	92%
Smallest: 0-19	5	100%	51	100%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$200-\$599	1	65	\$34,645	\$533
\$2-\$199	5	263	\$39,139	\$149
Free	26	844		
Total	32	1,172	\$73,784	\$63

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Univ/college	19	84%	697	87%
Miscellaneous	6	67%	270	36%
Open Access	6	83%	183	67%
Society/govt	1	100%	22	100%

Starting Date



Growth and Shrinkage

Change 2015-16	Count	Percent	Cum%
Grew 50%+	7	21.9%	
Grew 25-49.9%	4	12.5%	34.4%
Grew 10-24.99%	5	15.6%	50.0%
Even, ±9.99%	7	21.9%	71.9%
Shrank 10-24.99%	5	15.6%	87.5%
Shrank 50%+	4	12.5%	

**Subjects**

<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Economics	4	50%	242	28%
Engineering	5	100%	221	100%
Other Sciences	2	50%	128	53%
Computer Science	3	67%	125	48%
Sociology	3	100%	89	100%
Education	3	100%	82	100%
Psychology	1	100%	66	100%
Ecology	1	100%	65	100%
Mathematics	3	67%	32	100%
Physics	1	100%	32	100%
Biology	1	100%	30	100%
Agriculture	1	0%	29	0%
Language & Literature	2	100%	16	100%
Chemistry	1	100%	15	100%
Political Science	1	100%	0	

**Country Summaries****Albania**

Three journals publishing 193 articles in 2016. Two with APCs.

**Armenia**

Two free university-based journals publishing 42 articles in 2016.

**Azerbaijan**

Two free journals (one university, one society), 49 articles in 2016.



**Belarus**

Five free university-based journals publishing 267 articles in 2016.

**Cyprus**

Four free journals publishing 67 articles in 2016.

**Georgia**

One free university-based journal publishing 66 articles in 2016.

**Kazakhstan**

One free university-based journal publishing 15 articles in 2016.

**Kosova**

Two APC-charging journals publishing 39 articles in 2016.

**Latvia**

Nine journals—two with APCs, seven free; three university-based, six from OA publishers—publishing 304 articles in 2016.

**Montenegro**

Three free university-based journals publishing 130 articles in 2016.

# Latin America

Latin America's 1,572 OAWorld journals published 57,259 articles in 2016. Average cost per article in APC-based journals: \$351. Average overall cost: \$50.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	1,493	1,545	1,524	1,475	1,386	1,304
%Free	94%	94%	94%	94%	94%	93%
Articles	57,259	57,320	54,840	51,586	50,061	46,652
%Free	86%	85%	84%	84%	83%	82%

## Article Volume

	Journals	%Free	Articles	%Free
Largest: 600+	1	0%	240	0%
Large: 150-599	61	66%	9,598	63%
Med.: 60-149	284	82%	19,605	81%
Small: 20-59	901	98%	24,965	98%
Smallest: 0-19	246	96%	2,851	97%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$1,400+	2	210	\$294,000	\$1,400
\$600-\$1.399	15	1,623	\$1,356,712	\$836
\$200-\$599	30	2,753	\$865,802	\$314
\$2-\$199	49	3,512	\$326,009	\$93
Free	1,476	49,161		
Total	1,572	57,259	\$2,842,523	\$50

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Univ/college	1,275	95%	42,111	88%
Society/govt	165	87%	9,760	80%
Miscellaneous	124	90%	4,981	81%
Open Access	5	100%	266	100%
Traditional	3	100%	141	100%

**Growth and Shrinkage**

<b>Change 2015-16</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	207	13.2%	
Grew 25-49.9%	152	9.7%	22.8%
Grew 10-24.99%	219	13.9%	36.8%
Even, $\pm$ 9.99%	466	29.6%	66.4%
Shrank 10-24.99%	170	10.8%	77.2%
Shrank 25-49.99%	182	11.6%	88.8%
Shrank 50%+	176	11.2%	

**Subjects**

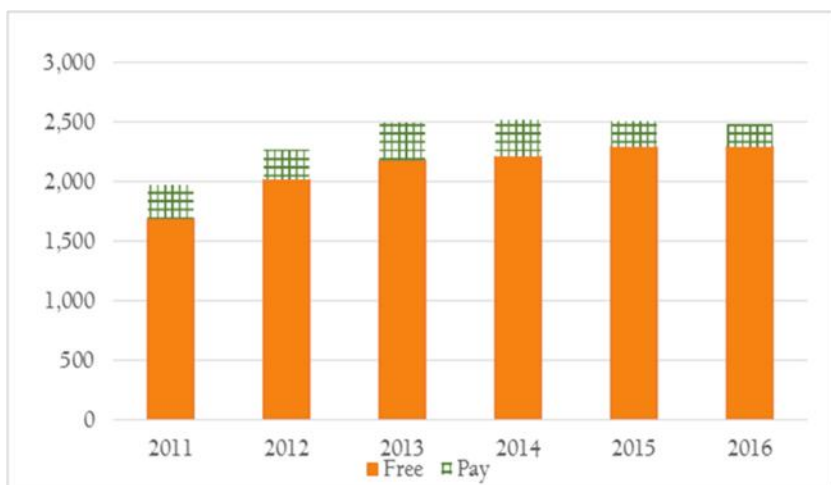
<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Medicine	215	90%	13,103	82%
Agriculture	90	67%	5,241	53%
Education	127	98%	4,464	95%
Sociology	113	100%	3,045	100%
Economics	131	99%	2,724	100%
Language & Literature	84	100%	2,722	100%
Biology	28	64%	2,106	47%
Law	76	100%	2,060	100%
Zoology	37	70%	2,009	39%
History	71	100%	1,894	100%
Earth Sciences	59	93%	1,820	92%
Miscellany	39	100%	1,577	100%
Psychology	51	98%	1,505	99%
Anthropology	57	96%	1,370	95%
Political Science	52	98%	1,298	99%
Media & Communications	43	98%	1,272	99%
Arts & Architecture	40	98%	1,242	98%
Technology	28	100%	1,224	100%
Ecology	42	90%	1,205	77%
Engineering	37	95%	1,186	95%
Philosophy	42	100%	901	100%
Other Sciences	25	100%	868	100%
Religion	21	95%	655	94%
Library Science	24	100%	505	100%
Computer Science	18	100%	494	100%
Chemistry	9	89%	364	95%
Mathematics	9	100%	224	100%
Physics	4	75%	181	96%

# Argentina

Argentina's 126 OAWorld journals published 2,485 articles in 2016. Average cost per article in APC-based journals: \$422. Overall average: \$34.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	115	122	122	120	112	103
%Free	93%	93%	93%	93%	93%	92%
Articles	2,485	2,504	2,512	2,491	2,269	1,965
%Free	92%	91%	88%	87%	89%	86%



### Article Volume

	Journals	%Free	Articles	%Free
Large: 150-599	2	50%	169	66%
Med.: 60-149	5	80%	301	80%
Small: 20-59	64	97%	1,536	97%
Smallest: 0-19	44	91%	479	93%

### APC Levels and Revenue

	Journals	Articles	Revenue	\$/article
\$600-\$1.399	1	58	\$63,800	\$1,100
\$200-\$599	3	49	\$13,828	\$282
\$2-\$199	4	93	\$6,804	\$73
Free	118	2,285		
Total	126	2,485	\$84,432	\$34

### Publisher Category

Category	Journals	%Free	Articles	%Free
Univ/college	89	97%	1,659	97%
Society/govt	23	91%	548	86%
Miscellaneous	14	79%	278	74%

### Starting Date



### Growth and Shrinkage

Change 2015-16	Count	Percent	Cum%
Grew 50%+	24	19.0%	
Grew 25-49.9%	12	9.5%	28.6%
Grew 10-24.99%	17	13.5%	42.1%
Even, $\pm 9.99\%$	26	20.6%	62.7%
Shrank 10-24.99%	9	7.1%	69.8%
Shrank 25-49.99%	20	15.9%	85.7%
Shrank 50%+	18	14.3%	

**Subjects**

<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Medicine	12	92%	408	86%
History	14	100%	323	100%
Sociology	16	100%	280	100%
Anthropology	14	100%	278	100%
Media & Communications	5	100%	211	100%
Agriculture	8	38%	147	14%
Language & Literature	5	100%	121	100%
Economics	9	100%	103	100%
Earth Sciences	7	86%	95	92%
Education	5	100%	80	100%
Other Sciences	2	100%	69	100%
Psychology	3	100%	46	100%
Arts & Architecture	3	100%	44	100%
Zoology	3	100%	42	100%
Religion	2	100%	39	100%
Philosophy	5	100%	34	100%
Computer Science	2	100%	30	100%
Library Science	2	100%	30	100%
Technology	1	100%	30	100%
Ecology	3	100%	28	100%
Law	3	100%	27	100%
Biology	1	100%	12	100%
Physics	1	0%	8	0%

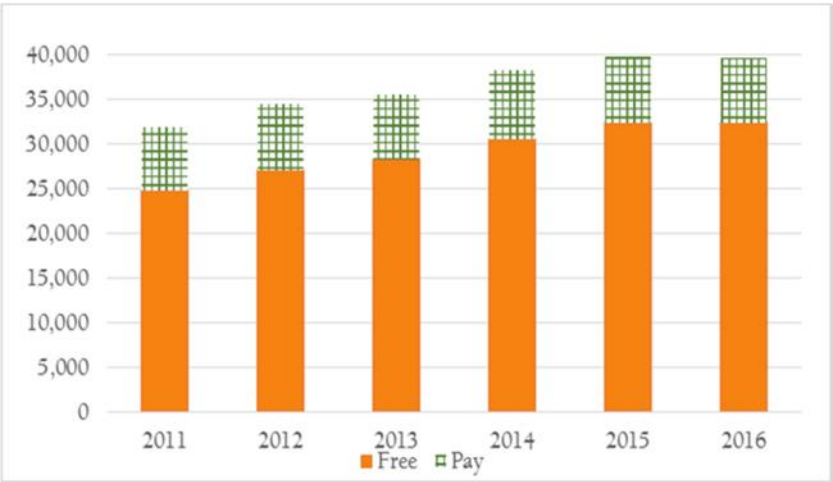


# Brazil

Brazil’s 879 OAWorld journals published 39,600 articles in 2016. Average cost per article in APC-based journals: \$349. Overall average: \$64.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	841	864	847	819	764	716
%Free	92%	92%	92%	92%	91%	91%
Articles	39,600	39,760	38,180	35,496	34,514	31,898
%Free	82%	81%	80%	80%	78%	78%



### Article Volume

	Journals	%Free	Articles	%Free
Largest: 600+	1	0%	240	0%
Large: 150-599	49	59%	8,160	57%
Med.: 60-149	217	82%	15,311	79%
Small: 20-59	501	99%	15,002	99%
Smallest: 0-19	73	96%	887	96%

### APC Levels and Revenue

	Journals	Articles	Revenue	\$/article
\$1,400+	2	210	\$294,000	\$1,400
\$600-\$1,399	11	1,358	\$1,162,712	\$856
\$200-\$599	20	2,394	\$756,649	\$316
\$2-\$199	37	3,246	\$304,855	\$94
Free	809	32,392		
Total	879	39,600	\$2,518,216	\$64

### Publisher Category

Category	Journals	%Free	Articles	%Free
Univ/college	685	94%	27,241	83%
Society/govt	121	84%	8,524	79%
Miscellaneous	67	90%	3,453	79%
Open Access	4	100%	256	100%
Traditional	2	100%	126	100%

Starting Date



Growth and Shrinkage

Change 2015-16	Count	Percent	Cum%
Grew 50%+	109	12.4%	
Grew 25-49.9%	74	8.4%	20.8%
Grew 10-24.99%	123	14.0%	34.8%
Even, ±9.99%	294	33.4%	68.3%
Shrank 10-24.99%	97	11.0%	79.3%
Shrank 25-49.99%	94	10.7%	90.0%
Shrank 50%+	88	10.0%	

**Subjects**

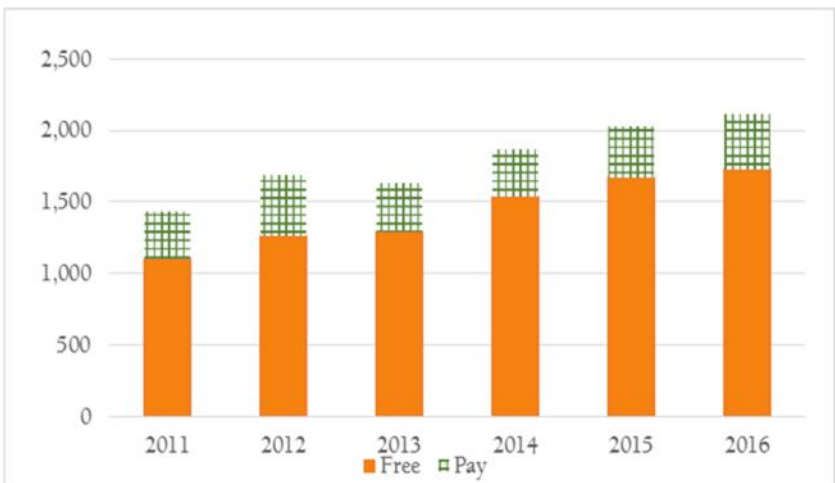
<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Medicine	134	86%	10,141	79%
Agriculture	55	62%	4,080	45%
Education	74	97%	2,923	94%
Economics	82	100%	1,895	100%
Language & Literature	54	100%	1,884	100%
Biology	17	47%	1,724	42%
Zoology	23	57%	1,714	32%
Sociology	47	100%	1,476	100%
Law	43	100%	1,475	100%
Earth Sciences	30	97%	1,192	94%
Ecology	25	88%	956	73%
History	31	100%	956	100%
Psychology	22	100%	920	100%
Technology	15	100%	919	100%
Media & Communications	28	100%	879	100%
Arts & Architecture	24	96%	853	97%
Anthropology	26	92%	821	91%
Miscellany	24	100%	796	100%
Political Science	29	100%	715	100%
Engineering	14	93%	602	95%
Philosophy	24	100%	583	100%
Religion	15	93%	487	92%
Other Sciences	7	100%	371	100%
Chemistry	5	100%	307	100%
Library Science	13	100%	306	100%
Computer Science	9	100%	273	100%
Mathematics	6	100%	179	100%
Physics	3	100%	173	100%

# Chile

Chile's 80 OAWorld journals published 2,119 articles in 2016. Average cost per article in APC-based journals: \$471. Overall average: \$88.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	77	78	77	72	68	63
%Free	94%	94%	94%	93%	93%	92%
Articles	2,119	2,031	1,872	1,636	1,685	1,435
%Free	81%	82%	82%	79%	75%	77%



**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Med.: 60-149	9	44%	712	44%
Small: 20-59	43	100%	1,107	100%
Smallest: 0-19	25	100%	300	100%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$600-\$1.399	2	200	\$123,200	\$616
\$200-\$599	3	196	\$63,120	\$322
Free	75	1,723		
Total	80	2,119	\$186,320	\$88

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Univ/college	68	96%	1,748	87%
Miscellaneous	10	80%	295	43%
Society/govt	2	100%	76	100%

Growth and Shrinkage

Change 2015-16	Count	Percent	Cum%
Grew 50%+	9	11.3%	
Grew 25-49.9%	10	12.5%	23.8%
Grew 10-24.99%	13	16.3%	40.0%
Even, ±9.99%	24	30.0%	70.0%
Shrank 10-24.99%	7	8.8%	78.8%
Shrank 25-49.99%	10	12.5%	91.3%
Shrank 50%+	7	8.8%	

Starting Date



**Subjects**

<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Medicine	9	89%	378	64%
Political Science	7	100%	190	100%
Language & Literature	6	100%	188	100%
History	7	100%	134	100%
Technology	1	100%	133	100%
Biology	2	50%	120	3%
Engineering	3	67%	113	73%
Sociology	5	100%	98	100%
Agriculture	2	50%	94	32%
Media & Communications	4	100%	88	100%
Law	3	100%	75	100%
Education	3	100%	73	100%
Arts & Architecture	5	100%	63	100%
Religion	2	100%	56	100%
Earth Sciences	3	100%	50	100%
Zoology	1	0%	48	0%
Philosophy	3	100%	45	100%
Psychology	2	100%	39	100%
Economics	4	100%	35	100%
Anthropology	2	100%	29	100%
Ecology	2	100%	29	100%
Computer Science	1	100%	25	100%
Miscellany	1	100%	9	100%
Chemistry	1	100%	5	100%
Library Science	1	100%	2	100%

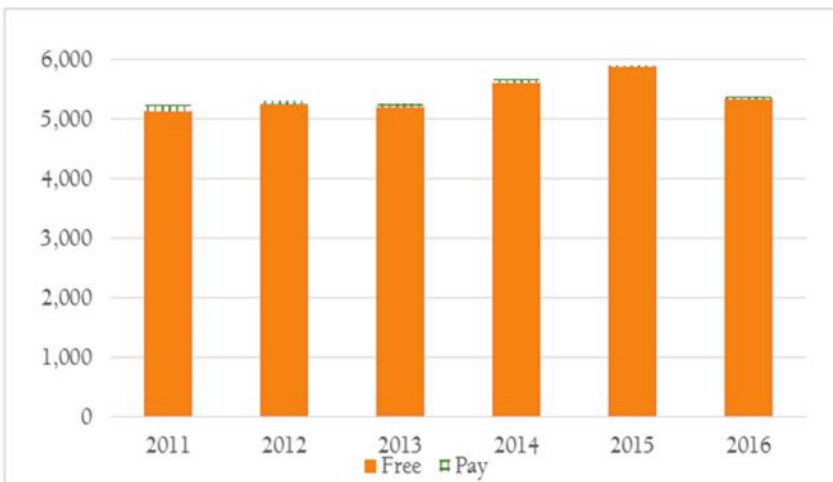


# Colombia

Colombia's 220 OAWorld journals published 5,377 articles in 2016. Average cost per article in APC-based journals was \$170. Overall average cost was \$1 (\$1.26, to be more precise).

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	206	218	218	213	207	201
%Free	99%	99%	99%	99%	99%	99%
Articles	5,377	5,901	5,667	5,257	5,310	5,246
%Free	99%	99%	99%	99%	99%	98%



**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Large: 150-599	4	100%	314	100%
Med.: 60-149	19	95%	1,090	98%
Small: 20-59	143	99%	3,467	99%
Smallest: 0-19	40	100%	506	100%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$200-\$599	1	22	\$6,600	\$300
\$2-\$199	1	18	\$198	\$11
Free	218	5,337		
Total	220	5,377	\$6,798	\$1

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Univ/college	204	99%	4,873	99%
Miscellaneous	14	100%	455	100%
Society/govt	1	100%	34	100%
Traditional	1	100%	15	100%

Starting Date



Growth and Shrinkage

Change 2015-16	Count	Percent	Cum%
Grew 50%+	26	11.8%	
Grew 25-49.9%	22	10.0%	21.8%
Grew 10-24.99%	27	12.3%	34.1%
Even, ±9.99%	55	25.0%	59.1%
Shrank 10-24.99%	35	15.9%	75.0%
Shrank 25-49.99%	24	10.9%	85.9%
Shrank 50%+	31	14.1%	

**Subjects**

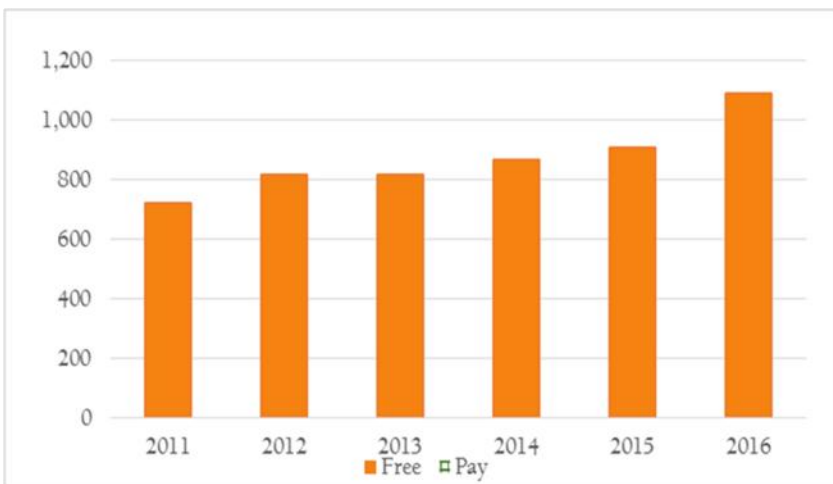
<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Medicine	23	100%	854	100%
Sociology	24	100%	614	100%
History	11	100%	329	100%
Economics	17	100%	311	100%
Agriculture	11	100%	309	100%
Education	18	100%	307	100%
Law	20	100%	304	100%
Psychology	13	92%	297	93%
Engineering	10	100%	254	100%
Language & Literature	7	100%	207	100%
Political Science	8	100%	192	100%
Arts & Architecture	4	100%	181	100%
Earth Sciences	6	100%	172	100%
Philosophy	6	100%	163	100%
Zoology	4	100%	120	100%
Anthropology	6	100%	118	100%
Other Sciences	5	100%	115	100%
Miscellany	5	100%	96	100%
Biology	3	100%	85	100%
Media & Communications	3	100%	75	100%
Technology	4	100%	66	100%
Computer Science	3	100%	58	100%
Chemistry	2	50%	37	51%
Mathematics	2	100%	35	100%
Ecology	3	100%	29	100%
Religion	1	100%	28	100%
Library Science	1	100%	21	100%

# Costa Rica

Costa Rica's 38 OAWorld journals, none of which charge APCs, published 1,086 articles in 2016.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	38	38	47	37	35	35
Articles	1,086	907	863	813	817	720



Article Volume

	Journals	Articles
Large: 150-599	1	163
Med.: 60-149	5	347
Small: 20-59	16	405
Smallest: 0-19	16	171

Publisher Category

Category	Journals	Articles
Univ/college	35	985
Society/govt	1	64
Miscellaneous	2	37

Starting Date



**Growth and Shrinkage**

<b>Change 2015-16</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	9	23.7%	
Grew 25-49.9%	4	10.5%	34.2%
Grew 10-24.99%	10	26.3%	60.5%
Even, $\pm 9.99\%$	6	15.8%	76.3%
Shrank 10-24.99%	1	2.6%	78.9%
Shrank 25-49.99%	5	13.2%	92.1%
Shrank 50%+	3	7.9%	

**Subjects**

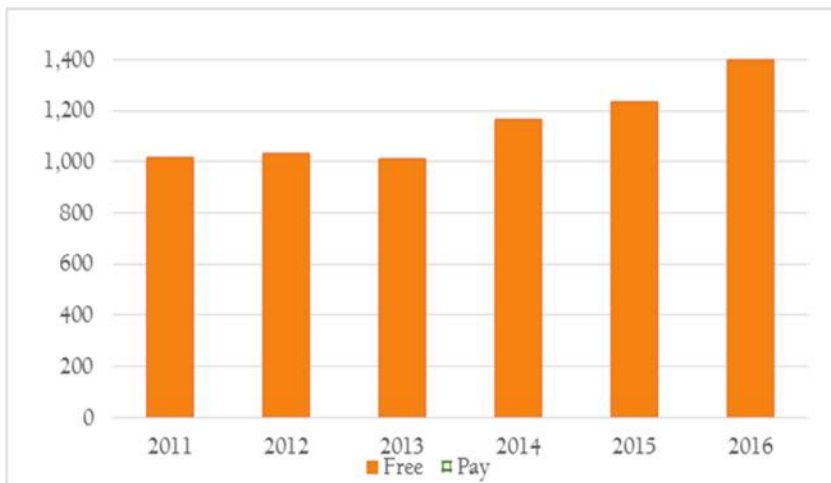
<b>Subject</b>	<b>Journals</b>	<b>Articles</b>
Agriculture	4	248
Medicine	8	240
Education	5	192
Other Sciences	2	102
Law	2	54
Anthropology	4	52
Religion	1	45
Economics	3	41
Psychology	3	34
Philosophy	1	24
Language & Literature	1	18
Library Science	1	12
Sociology	1	11
Mathematics	1	10
Ecology	1	3

# Cuba

Cuba's 29 OAWorld journals, none of which charge APCs, published 1,398 articles in 2016.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	26	27	28	28	27	24
Articles	1,398	1,234	1,161	1,010	1,033	1,016





Article Volume

	Journals	Articles
Large: 150-599	2	264
Med.: 60-149	7	607
Small: 20-59	17	527

Publisher Category

Category	Journals	Articles
Univ/college	20	1,113
Society/govt	5	198
Miscellaneous	4	87

Starting Date



**Growth and Shrinkage**

<b>Change 2015-16</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	6	20.7%	
Grew 25-49.9%	2	6.9%	27.6%
Grew 10-24.99%	6	20.7%	48.3%
Even, $\pm 9.99\%$	6	20.7%	69.0%
Shrank 10-24.99%	3	10.3%	79.3%
Shrank 25-49.99%	2	6.9%	86.2%
Shrank 50%+	4	13.8%	

**Subjects**

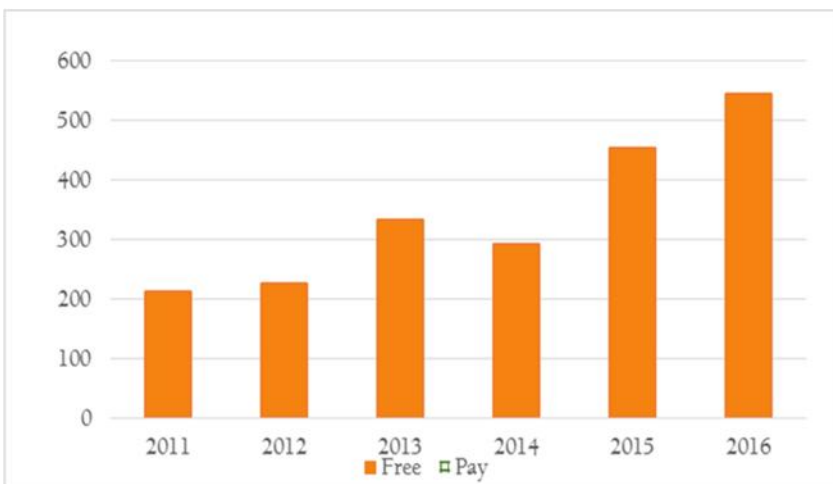
<b>Subject</b>	<b>Journals</b>	<b>Articles</b>
Medicine	9	494
Education	4	364
Miscellany	1	110
Engineering	4	105
Computer Science	1	97
Library Science	3	65
Biology	1	50
Agriculture	2	48
Earth Sciences	2	41
Technology	1	24
Anthropology	1	0

# Ecuador

Ecuador's 21 OAWorld journals, none of which has APCs, published 544 articles in 2016.

## Journals, Articles and Article Volume

	2016	2015	2014	2013	2012	2011
Journals	21	20	20	16	14	12
Articles	544	453	291	332	226	213



	Journals	Articles
Med.: 60-149	2	159
Small: 20-59	10	291
Smallest: 0-19	9	94

**Publisher Category, Growth and Shrinkage, and Subjects**

Category	Journals	Articles
Univ/college	19	474
Miscellaneous	2	70

Change 2015-16	Count	Percent	Cum%
Grew 50%+	3	14.3%	
Grew 25-49.9%	3	14.3%	28.6%
Grew 10-24.99%	2	9.5%	38.1%
Even, $\pm 9.99\%$	9	42.9%	81.0%
Shrank 10-24.99%	1	4.8%	85.7%
Shrank 25-49.99%	2	9.5%	95.2%
Shrank 50%+	1	4.8%	

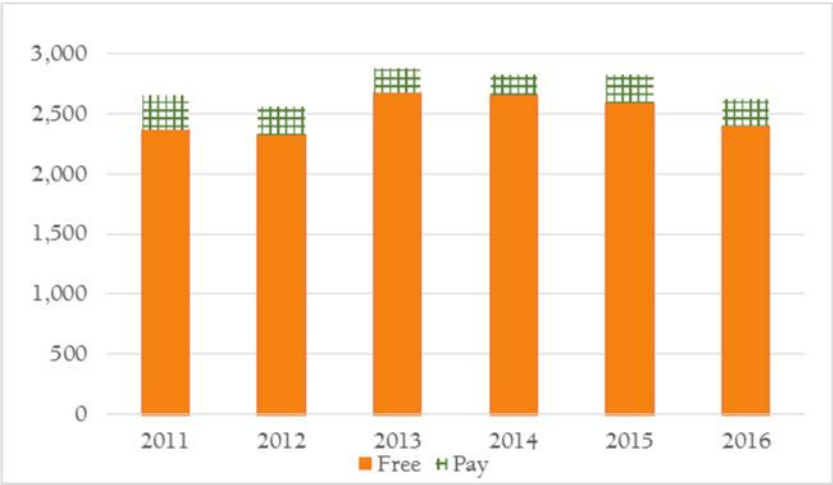
Subject	Journals	Articles
Sociology	4	148
Language & Literature	1	94
Education	2	59
Engineering	2	53
History	1	32
Biology	1	29
Arts & Architecture	1	24
Philosophy	1	23
Miscellany	1	22
Agriculture	1	13
Economics	1	12
Computer Science	1	11
Technology	1	8
Ecology	1	7
Medicine	1	5
Law	1	4

# Mexico

Mexico’s 97 OAWorld journals published 2,623 articles in 2016. Average cost per article in APC-based journals: \$150. Overall average: \$13.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	92	97	95	93	87	82
%Free	91%	92%	92%	91%	91%	91%
Articles	2,623	2,830	2,821	2,883	2,560	2,656
%Free	91%	92%	94%	93%	91%	89%



**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Large: 150-599	2	100%	98	100%
Med.: 60-149	13	77%	818	85%
Small: 20-59	61	95%	1,540	95%
Smallest: 0-19	16	88%	167	84%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$200-\$599	2	81	\$20,655	\$255
\$2-\$199	6	143	\$12,952	\$91
Free	89	2,399		
Total	97	2,623	\$33,607	\$13

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Univ/college	86	92%	2,272	92%
Miscellaneous	6	100%	208	100%
Society/govt	4	75%	133	74%
Open Access	1	100%	10	100%

Starting Date



Growth and Shrinkage

Change 2015-16	Count	Percent	Cum%
Grew 50%+	6	6.2%	
Grew 25-49.9%	12	12.4%	18.6%
Grew 10-24.99%	14	14.4%	33.0%
Even, ±9.99%	27	27.8%	60.8%
Shrank 10-24.99%	13	13.4%	74.2%
Shrank 25-49.99%	15	15.5%	89.7%
Shrank 50%+	10	10.3%	

**Subjects**

<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Education	10	90%	358	83%
Sociology	13	100%	355	100%
Agriculture	5	40%	222	67%
Economics	9	100%	218	100%
Earth Sciences	7	71%	195	72%
Other Sciences	4	100%	171	100%
Medicine	4	100%	163	100%
Political Science	6	83%	153	95%
Language & Literature	5	100%	129	100%
History	6	100%	111	100%
Miscellany	5	100%	111	100%
Ecology	4	75%	92	71%
Arts & Architecture	3	100%	77	100%
Engineering	3	100%	52	100%
Psychology	2	100%	52	100%
Library Science	1	100%	37	100%
Anthropology	2	100%	35	100%
Zoology	3	100%	35	100%
Technology	2	100%	26	100%
Law	1	100%	24	100%
Media & Communications	1	100%	7	100%
Computer Science	1	100%	0	

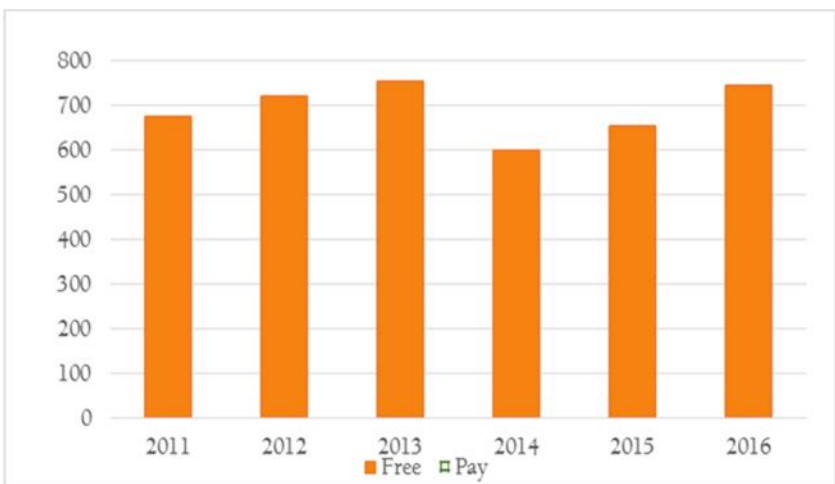


# Peru

Peru's 30 OAWorld journals, none of which have APCs, published 742 articles in 2016.

## Journals, Articles and Article Volume

	2016	2015	2014	2013	2012	2011
Journals	29	29	29	30	28	28
Articles	742	654	599	754	719	674



	Journals	Articles
Med.: 60-149	5	218
Small: 20-59	16	431
Smallest: 0-19	8	93

**Publisher Category**

Category	Journals	Articles
Univ/college	26	616
Society/govt	3	106
Miscellaneous	1	20

**Starting Date**



**Growth and Shrinkage**

Change 2015-16	Count	Percent	Cum%
Grew 50%+	6	20.0%	
Grew 25-49.9%	7	23.3%	43.3%
Grew 10-24.99%	4	13.3%	56.7%
Even, $\pm$ 9.99%	6	20.0%	76.7%
Shrank 10-24.99%	1	3.3%	80.0%
Shrank 25-49.99%	3	10.0%	90.0%
Shrank 50%+	3	10.0%	

**Subjects**

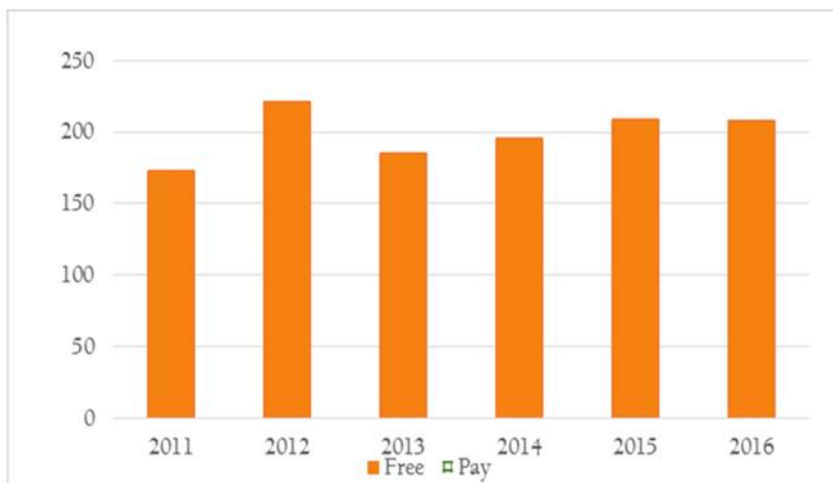
<b>Subject</b>	<b>Journals</b>	<b>Articles</b>
Medicine	5	221
Agriculture	2	80
Biology	2	73
Psychology	3	63
Language & Literature	2	46
Economics	3	45
Law	1	44
Anthropology	2	37
Zoology	2	33
Education	2	30
Other Sciences	1	25
Ecology	1	18
Philosophy	1	18
Earth Sciences	1	6
Miscellany	1	3
Media & Communications	1	0

# Uruguay

Uruguay's eleven OAWorld journals, none of which have APC charges, published 208 articles in 2016.

## Journals, Articles and Article Volume

	2016	2015	2014	2013	2012	2011
Journals	11	11	11	10	10	9
Articles	208	209	195	185	221	173



	Journals	Articles
Med.: 60-149	1	31
Small: 20-59	6	137
Smallest: 0-19	4	40

**Publisher Category**

Category	Journals	Articles
Univ/college	9	172
Miscellaneous	2	36

**Growth and Shrinkage**

Change 2015-16	Count	Percent	Cum%
Grew 50%+	2	18.2%	
Grew 25-49.9%	1	9.1%	27.3%
Even, $\pm 9.99\%$	6	54.5%	81.8%
Shrank 10-24.99%	1	9.1%	90.9%
Shrank 25-49.99%	1	9.1%	

**Subjects**

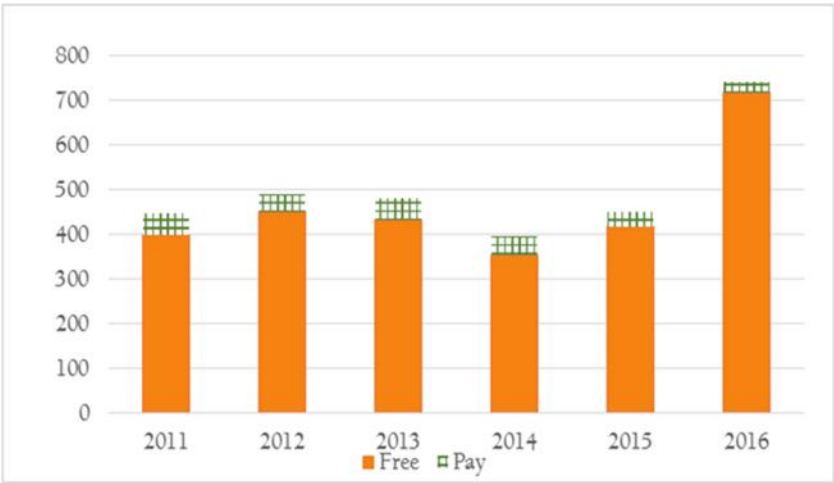
Subject	Journals	Articles
Psychology	2	52
Ecology	1	31
Education	1	31
Medicine	2	29
Law	1	22
Technology	1	15
Political Science	1	13
Library Science	1	8
Engineering	1	7

# Venezuela, Bolivarian Republic of

Venezuela’s 21 OAWorld journals published 739 articles in 2016. Average cost per article in APC-based journals: \$267. Overall average: \$8.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	20	21	21	21	20	19
%Free	90%	90%	90%	90%	90%	89%
Articles	739	451	394	481	490	446
%Free	97%	92%	90%	89%	92%	89%



**Article Volume**

	Journals	%Free	Articles	%Free
Large: 150-599	1	100%	430	100%
Med.: 60-149	1	100%	11	100%
Small: 20-59	12	83%	232	90%
Smallest: 0-19	6	100%	66	100%

**APC Levels and Revenue**

	Journals	Articles	Revenue	\$/article
\$200-\$599	1	11	\$4,950	\$450
\$2-\$199	1	12	\$1,200	\$100
Free	19	716		
Total	21	739	\$6,150	\$8

**Publisher Category**

Category	Journals	%Free	Articles	%Free
Univ/college	19	89%	717	97%
Society/govt	2	100%	22	100%

**Growth and Shrinkage**

Change 2015-16	Count	Percent	Cum%
Grew 50%+	4	19.0%	
Grew 25-49.9%	2	9.5%	28.6%
Grew 10-24.99%	2	9.5%	38.1%
Even, $\pm$ 9.99%	2	9.5%	47.6%
Shrank 10-24.99%	1	4.8%	52.4%
Shrank 25-49.99%	4	19.0%	71.4%
Shrank 50%+	6	28.6%	

**Subjects**

<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Miscellany	1	100%	430	100%
Sociology	3	100%	63	100%
Economics	2	50%	52	79%
Medicine	2	100%	47	100%
Language & Literature	2	100%	24	100%
Library Science	1	100%	24	100%
Earth Sciences	1	100%	19	100%
Education	2	100%	17	100%
Zoology	1	100%	17	100%
Chemistry	1	100%	15	100%
Media & Communications	1	0%	12	0%
Philosophy	1	100%	11	100%
Other Sciences	2	100%	5	100%
Technology	1	100%	3	100%

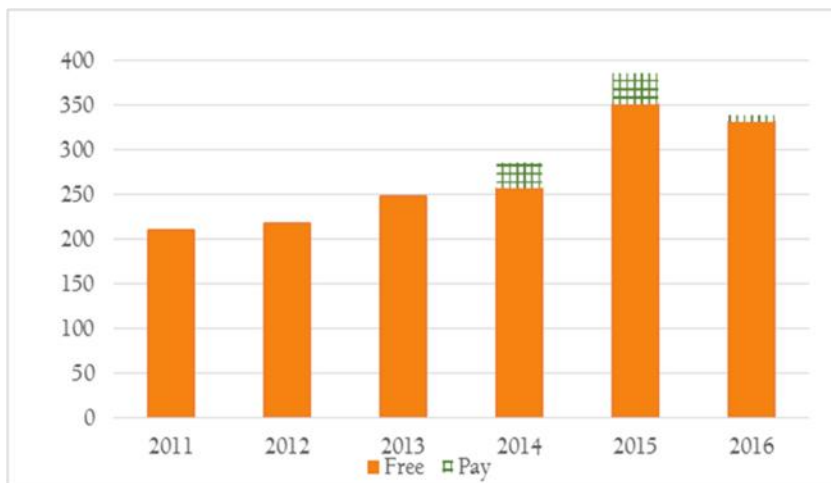


## Other Latin American Countries

These ten countries (some of which are Caribbean and/or Anglophone) have 20 OAWorld journals that published 338 articles in 2016. The single APC-based journal charges \$1,000; overall average was \$21.

### Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	17	20	19	16	14	12
%Free	94%	95%	95%	100%	100%	100%
Articles	338	386	285	248	217	210
%Free	98%	91%	90%	100%	100%	100%



**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Small: 20-59	12	92%	290	98%
Smallest: 0-19	5	100%	48	100%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$600-\$1.399	1	7	\$7,000	\$1,000
Free	19	331		
Total	20	338	\$7,000	\$21

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Univ/college	15	93%	241	97%
Society/govt	3	100%	55	100%
Miscellaneous	2	100%	42	100%

**Growth and Shrinkage**

<b>Change 2015-16</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	3	15.0%	
Grew 25-49.9%	3	15.0%	30.0%
Grew 10-24.99%	1	5.0%	35.0%
Even, $\pm$ 9.99%	5	25.0%	60.0%
Shrank 10-24.99%	1	5.0%	65.0%
Shrank 25-49.99%	2	10.0%	75.0%
Shrank 50%+	5	25.0%	

## Subjects

Subject	Journals	%Free	Articles	%Free
Medicine	6	83%	123	94%
Earth Sciences	2	100%	50	100%
Political Science	1	100%	35	100%
Law	1	100%	31	100%
Education	1	100%	30	100%
Biology	1	100%	13	100%
Ecology	1	100%	12	100%
Economics	1	100%	12	100%
Language & Literature	1	100%	11	100%
Other Sciences	2	100%	10	100%
History	1	100%	9	100%
Psychology	1	100%	2	100%
Technology	1	100%	0	

## Country Summaries

### Bahamas

One free university-based journal published nine articles in 2016.

### Barbados

One free university-based journal published 30 articles in 2016

### Bolivia, Plurinational State of

Three free journals—two university, one society—published a total of 55 articles in 2016.

### British Virgin Islands

One free journal (miscellaneous publisher) published eleven articles in 2016.

### **El Salvador**

One free university-based journal published 35 articles in 2016.

### **Guam**

One free university-based journal published five articles in 2016.

### **Guatemala**

Three free university-based journals published a total of twelve articles in 2016.

### **Jamaica**

One \$1,000-APC university-based journal published seven articles in 2016.

### **Nicaragua**

Four free university-based journals published a total of 57 articles in 2016.

### **Paraguay**

Four free journals (one university, two society, one miscellaneous) published a total of 117 articles in 2016.

# Middle East

The Middle East's 552 OAWorld journals published 26,294 articles in 2016. Average cost per article in APC-based journals: \$321. Overall average: \$98.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	529	540	516	455	387	303
%Free	83%	83%	83%	82%	80%	79%
Articles	26,294	24,054	21,917	18,226	15,584	11,047
%Free	70%	75%	74%	73%	71%	71%

## Article Volume

	Journals	%Free	Articles	%Free
Largest: 600+	2	100%	927	100%
Large: 150-599	31	45%	7,553	31%
Med.: 60-149	112	78%	7,587	79%
Small: 20-59	311	88%	9,427	88%
Smallest: 0-19	73	86%	800	88%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$1,400+	2	116	\$196,660	\$1,695
\$600-\$1,399	8	1,040	\$1,090,733	\$1,049
\$200-\$599	23	3,107	\$975,614	\$314
\$2-\$199	58	3,748	\$311,183	\$83
Free	461	18,283		
Total	552	26,294	\$2,574,190	\$98

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Univ/college	341	87%	15,002	75%
Miscellaneous	124	86%	6,623	70%
Open Access	45	53%	2,878	37%
Society/govt	26	96%	1,117	100%
Traditional	16	63%	674	35%

**Growth and Shrinkage**

<b>Change 2015-16</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	92	16.7%	
Grew 25-49.9%	62	11.2%	27.9%
Grew 10-24.99%	53	9.6%	37.5%
Even, $\pm$ 9.99%	158	28.6%	66.1%
Shrank 10-24.99%	82	14.9%	81.0%
Shrank 25-49.99%	56	10.1%	91.1%
Shrank 50%+	49	8.9%	

**Subjects**

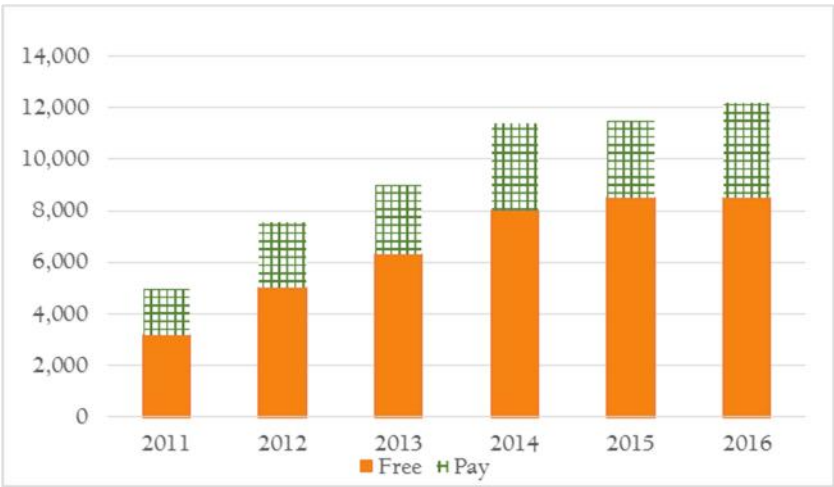
<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Medicine	231	90%	11,237	81%
Education	56	88%	2,167	70%
Economics	31	71%	2,147	32%
Agriculture	24	42%	1,329	45%
Mathematics	16	88%	1,277	31%
Language & Literature	10	80%	1,172	95%
Other Sciences	15	67%	1,049	41%
Engineering	21	95%	909	95%
Sociology	16	69%	884	29%
Biology	21	76%	619	83%
Zoology	15	47%	608	47%
Anthropology	7	86%	428	79%
Chemistry	9	100%	351	100%
Miscellany	7	100%	303	100%
Arts & Architecture	8	88%	284	100%
Ecology	8	88%	222	94%
Earth Sciences	8	75%	219	84%
Computer Science	8	75%	207	60%
Library Science	7	100%	159	100%
History	8	88%	157	66%
Physics	4	100%	132	100%
Media & Communications	2	100%	77	100%
Philosophy	4	75%	74	92%
Religion	5	80%	73	73%
Technology	3	100%	64	100%
Political Science	4	100%	63	100%
Law	2	50%	47	23%
Psychology	2	100%	36	100%

# Iran, Islamic Republic of

Iran's 282 OAWorld journals published 12,189 articles in 2016. Average cost per article in APC-based journals: \$405. Overall average: \$123.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	268	274	262	222	180	131
%Free	82%	81%	81%	78%	74%	74%
Articles	12,189	11,512	11,402	9,022	7,565	4,942
%Free	70%	74%	70%	70%	66%	64%





**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Large: 150-599	16	38%	3,302	34%
Med.: 60-149	50	74%	3,294	75%
Small: 20-59	171	89%	5,199	88%
Smallest: 0-19	31	77%	394	81%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$600-\$1,399	6	975	\$1,025,823	\$1,052
\$200-\$599	10	1,188	\$335,016	\$282
\$2-\$199	35	1,534	\$135,410	\$88
Free	231	8,492		
Total	282	12,189	\$1,496,249	\$123

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Univ/college	215	86%	9,395	73%
Miscellaneous	31	81%	1,158	63%
Society/govt	12	100%	708	100%
Traditional	15	60%	621	29%
Open Access	9	0%	307	0%

Starting Date



Growth and Shrinkage

Change 2015-16	Count	Percent	Cum%
Grew 50%+	31	11.0%	
Grew 25-49.9%	28	9.9%	20.9%
Grew 10-24.99%	20	7.1%	28.0%
Even, ±9.99%	106	37.6%	65.6%
Shrank 10-24.99%	46	16.3%	81.9%
Shrank 25-49.99%	25	8.9%	90.8%
Shrank 50%+	26	9.2%	

**Subjects**

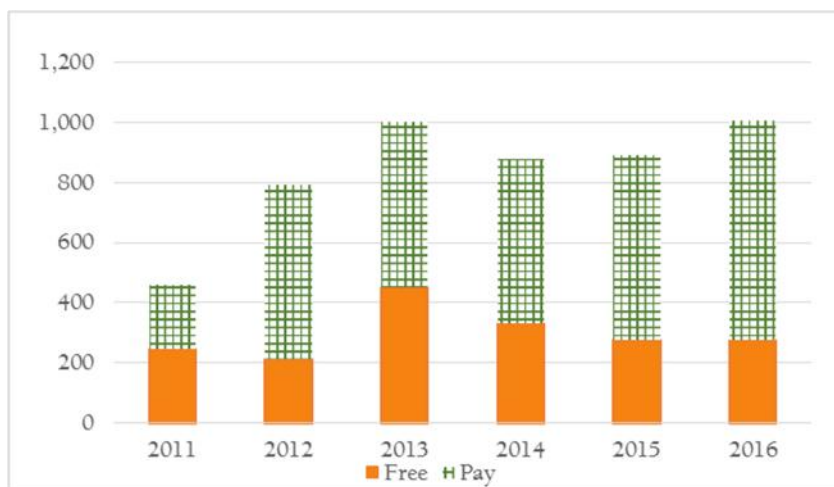
<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Medicine	160	89%	7,767	74%
Mathematics	9	89%	754	21%
Engineering	10	100%	534	100%
Biology	16	69%	495	79%
Agriculture	11	18%	462	19%
Economics	11	91%	302	87%
Zoology	7	43%	291	56%
Education	11	91%	277	82%
Ecology	7	86%	213	93%
Chemistry	5	100%	186	100%
Earth Sciences	7	71%	179	81%
Sociology	3	0%	121	0%
Computer Science	4	75%	118	61%
Physics	3	100%	79	100%
Language & Literature	3	33%	76	17%
Library Science	3	100%	74	100%
Technology	2	100%	44	100%
Philosophy	2	50%	41	85%
Law	1	0%	36	0%
Anthropology	1	100%	32	100%
Psychology	1	100%	23	100%
Miscellany	1	100%	22	100%
Other Sciences	1	0%	22	0%
Arts & Architecture	1	100%	21	100%
Religion	2	50%	20	0%

# Iraq

Iraq's 15 OAWorld journals published 1,008 articles in 2016. Average cost per article in APC-based journals: \$72. Overall average: \$52.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	14	15	13	12	11	9
%Free	57%	60%	62%	58%	55%	56%
Articles	1,008	892	880	1,001	794	461
%Free	28%	31%	38%	45%	27%	53%



**Article Volume, APC Levels and Revenue, Publisher Category, Growth and Shrinkage**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Large: 150-599	2	50%	476	5%
Med.: 60-149	5	40%	341	33%
Small: 20-59	6	67%	177	73%
Smallest: 0-19	1	100%	14	100%

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$2-\$199	6	730	\$52,272	\$72
Free	9	278		
Total	15	1,008	\$52,272	\$52

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Univ/college	13	54%	931	22%
Miscellaneous	1	100%	53	100%
Society/govt	1	100%	24	100%

<b>Change 2015-16</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	3	20.0%	
Grew 25-49.9%	2	13.3%	33.3%
Grew 10-24.99%	2	13.3%	46.7%
Even, $\pm$ 9.99%	3	20.0%	66.7%
Shrank 10-24.99%	2	13.3%	80.0%
Shrank 25-49.99%	2	13.3%	93.3%
Shrank 50%+	1	6.7%	

**Subjects**

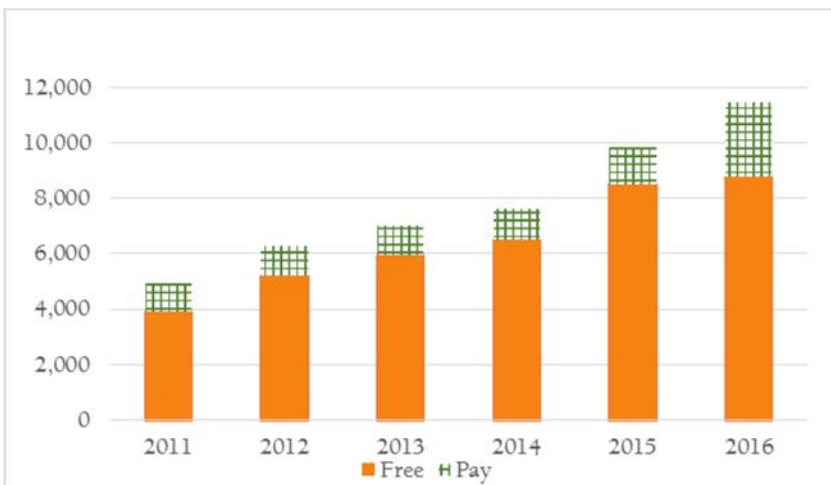
<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Education	3	67%	553	18%
Engineering	4	75%	145	68%
Agriculture	1	0%	130	0%
History	1	0%	53	0%
Physics	1	100%	53	100%
Medicine	1	0%	36	0%
Other Sciences	1	100%	14	100%
Chemistry	1	100%	13	100%
Zoology	1	0%	11	0%
Miscellany	1	100%	0	

# Turkey

Turkey's 221 OAWorld journals published 11,451 articles in 2016. Average cost per article in APC-based journals: \$317. Overall average: \$74.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	217	218	208	191	167	142
%Free	90%	90%	90%	90%	90%	89%
Articles	11,451	9,855	7,619	7,001	6,267	4,941
%Free	77%	86%	85%	85%	83%	79%



**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Largest: 600+	2	100%	927	100%
Large: 150-599	10	50%	2,923	31%
Med.: 60-149	50	90%	3,606	91%
Small: 20-59	119	92%	3,643	91%
Smallest: 0-19	36	94%	352	96%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$1,400+	1	88	\$140,800	\$1,600
\$600-\$1,399	1	47	\$47,000	\$1,000
\$200-\$599	10	1,803	\$617,398	\$342
\$2-\$199	9	736	\$43,247	\$59
Free	200	8,777		
Total	221	11,451	\$848,445	\$74

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>
Miscellaneous	84	90%	4,653
Univ/college	100	93%	4,247
Open Access	26	77%	2,137
Society/govt	10	100%	361
Traditional	1	100%	53



### Starting Date



### Growth and Shrinkage

Change 2015-16	Count	Percent	Cum%
Grew 50%+	53	24.0%	
Grew 25-49.9%	28	12.7%	36.7%
Grew 10-24.99%	30	13.6%	50.2%
Even, ±9.99%	44	19.9%	70.1%
Shrank 10-24.99%	27	12.2%	82.4%
Shrank 25-49.99%	24	10.9%	93.2%
Shrank 50%+	15	6.8%	

**Subjects**

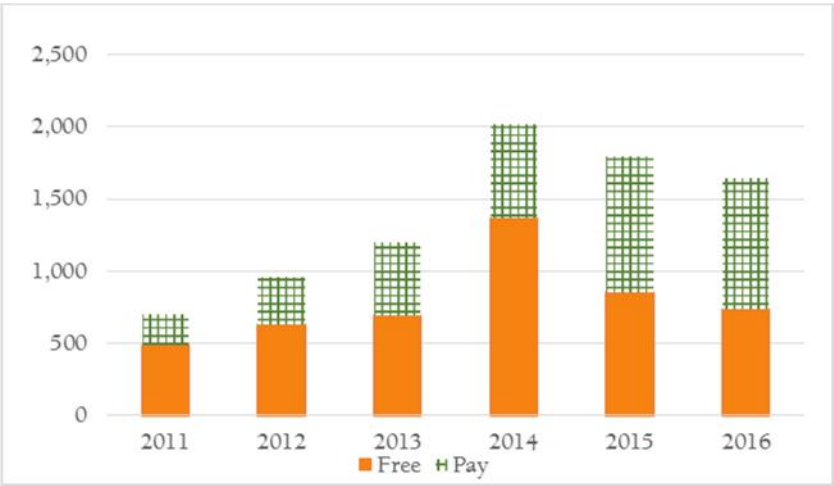
<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Medicine	58	100%	2,791	100%
Economics	18	67%	1,721	25%
Education	41	90%	1,310	91%
Language & Literature	5	100%	1,062	100%
Agriculture	12	67%	737	70%
Sociology	12	92%	728	35%
Mathematics	5	80%	485	40%
Other Sciences	8	88%	406	97%
Anthropology	6	83%	396	78%
Zoology	7	57%	306	40%
Arts & Architecture	6	100%	263	100%
Miscellany	4	100%	263	100%
Engineering	6	100%	230	100%
Chemistry	3	100%	152	100%
History	6	100%	104	100%
Biology	3	100%	82	100%
Media & Communications	2	100%	77	100%
Political Science	4	100%	63	100%
Library Science	3	100%	54	100%
Computer Science	3	100%	53	100%
Religion	3	100%	53	100%
Earth Sciences	1	100%	40	100%
Philosophy	2	100%	33	100%
Technology	1	100%	20	100%
Psychology	1	100%	13	100%
Ecology	1	100%	9	100%

# Other Middle East Countries

These ten countries have 34 OAWorld journals that published 1,646 articles in 2016. Average cost per article in APC-based journals: \$195. Overall average: \$108.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	30	33	33	30	29	21
%Free	60%	61%	64%	63%	66%	57%
Articles	1,646	1,795	2,016	1,202	958	703
%Free	45%	47%	68%	57%	66%	70%



**Article Volume**

	Journals	%Free	Articles	%Free
Largest: 600+	0		0	
Large: 150-599	3	67%	852	34%
Med.: 60-149	7	43%	346	46%
Small: 20-59	15	60%	408	62%
Smallest: 0-19	5	80%	40	80%

That is: there is one very large journal but it didn't publish in 2016.

**APC Levels and Revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	1	28	\$55,860	\$1,995
\$600-\$1,399	1	18	\$17,910	\$995
\$200-\$599	3	116	\$23,200	\$200
\$2-\$199	8	748	\$80,254	\$107
Free	21	736		
Total	34	1,646	\$177,224	\$108

**Publisher Category**

Category	Journals	%Free	Articles	%Free
Miscellaneous	8	63%	759	20%
Open Access	10	40%	434	42%
Univ/college	13	77%	429	87%
Society/govt	3	67%	24	100%

Starting Date



Growth and Shrinkage

Change 2015-16	Count	Percent	Cum%
Grew 50%+	5	14.7%	
Grew 25-49.9%	4	11.8%	26.5%
Grew 10-24.99%	1	2.9%	29.4%
Even, ±9.99%	5	14.7%	44.1%
Shrank 10-24.99%	7	20.6%	64.7%
Shrank 25-49.99%	5	14.7%	79.4%
Shrank 50%+	7	20.6%	

## Subjects

Subject	Journals	%Free	Articles	%Free
Medicine	12	67%	643	84%
Other Sciences	5	40%	607	3%
Economics	2	0%	124	0%
Biology	2	100%	42	100%
Mathematics	2	100%	38	100%
Computer Science	1	0%	36	0%
Sociology	1	0%	35	0%
Language & Literature	2	100%	34	100%
Library Science	1	100%	31	100%
Education	1	0%	27	0%
Miscellany	1	100%	18	100%
Law	1	100%	11	100%
Arts & Architecture	1	0%	0	
Engineering	1	100%	0	
History	1	100%	0	

## Country Summaries

### Egypt

Seven OAWorld journals—two with fees—published 141 articles in 2016. Three OA publishers, one university, three miscellaneous.

### Israel

Five OAWorld journals, one with an APC (inactive in 2016), published 71 articles in 2016. Two society, two university, one miscellaneous.

### Jordan

Two OAWorld journals—one with an APC—published 593 articles in 2016. One university, one miscellaneous.

### **Lebanon**

One free society-based journal with 19 articles in 2016.

### **Oman**

Two free journals (one university, one miscellaneous) published 157 articles in 2016.

### **Palestine, State of**

One free society-based journal, inactive in 2016.

### **Qatar**

Six journals, two with APCs, published 261 articles in 2016. Five university-based, one OA publisher,

### **Saudi Arabia**

Two OA-publisher journals, one with an APC, published 156 articles in 2016.

### **United Arab Emirates**

Six journals, five with APCs, all but two from OA publishers, published a total of 222 articles in 2016.

### **Yemen**

Two university-based journals, one with an APC, published 26 articles in 2016.

## Pacific/English

These four countries' 832 OAWorld journals published 38,861 articles in 2016. Average cost per article in APC-based journals: \$1,375. Average overall cost: \$821.

### Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	781	806	783	726	645	586
%Free	66%	67%	66%	67%	69%	69%
Articles	38,861	32,432	27,789	24,278	21,011	18,529
%Free	40%	47%	51%	52%	56%	58%

### Article Volume

	Journals	%Free	Articles	%Free
Largest: 600+	10	20%	11,200	6%
Large: 150-599	53	38%	10,667	36%
Med.: 60-149	91	46%	5,630	49%
Small: 20-59	356	73%	8,962	72%
Smallest: 0-19	271	71%	2,402	77%



**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$1,400+	99	11,424	\$23,486,878	\$2,056
\$600-\$1.399	80	6,214	\$6,738,623	\$1,084
\$200-\$599	68	3,846	\$1,400,607	\$364
\$2-\$199	28	1,737	\$294,526	\$170
Free	557	15,640		
Total	832	38,861	\$31,920,634	\$821

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Open Access	144	15%	10,390	8%
Society/govt	126	74%	9,448	32%
Miscellaneous	203	78%	8,999	52%
Univ/college	303	93%	8,463	83%
Traditional	56	4%	1,561	4%

**Growth and Shrinkage**

<b>Change 2015-16</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	188	22.6%	
Grew 25-49.9%	81	9.7%	32.3%
Grew 10-24.99%	93	11.2%	43.5%
Even, $\pm$ 9.99%	144	17.3%	60.8%
Shrank 10-24.99%	80	9.6%	70.4%
Shrank 25-49.99%	107	12.9%	83.3%
Shrank 50%+	139	16.7%	

**Subjects**

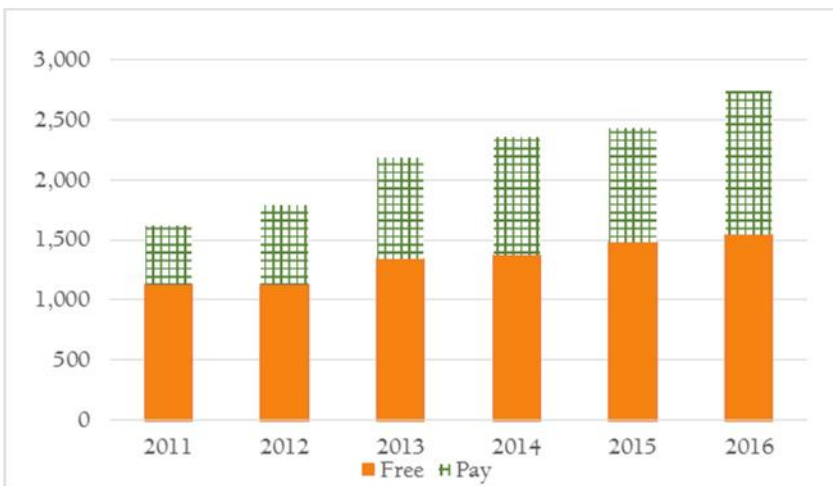
<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Medicine	205	34%	14,628	22%
Computer Science	24	54%	3,090	21%
Other Sciences	14	57%	1,921	4%
Biology	38	34%	1,917	16%
Education	83	94%	1,710	88%
Sociology	51	92%	1,463	74%
Language & Literature	55	95%	1,441	83%
Engineering	16	38%	1,344	9%
History	36	100%	1,273	100%
Physics	10	40%	1,107	24%
Ecology	29	41%	1,079	46%
Chemistry	5	40%	937	19%
Mathematics	20	90%	842	96%
Economics	33	70%	777	56%
Media & Communications	19	100%	754	100%
Technology	12	75%	737	62%
Library Science	29	100%	564	100%
Agriculture	16	31%	488	28%
Political Science	20	90%	400	94%
Arts & Architecture	19	95%	387	79%
Philosophy	18	100%	357	100%
Anthropology	13	85%	325	86%
Zoology	6	0%	317	0%
Religion	14	100%	302	100%
Psychology	14	57%	265	57%
Earth Sciences	11	64%	188	45%
Law	14	93%	134	100%
Miscellany	8	75%	114	96%

# Australia

Australia's 77 OAWorld journals published 2,738 articles in 2016. Average cost per article in APC-based journals: \$1,183. Overall average: \$520.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	69	75	72	66	55	53
%Free	83%	84%	83%	82%	87%	89%
Articles	2,738	2,436	2,359	2,183	1,795	1,622
%Free	56%	61%	58%	61%	63%	70%



**Article Volume**

	Journals	%Free	Articles	%Free
Large: 150-599	8	38%	1,519	38%
Med.: 60-149	4	50%	196	47%
Small: 20-59	32	88%	810	83%
Smallest: 0-19	25	96%	213	95%

**APC Levels and Revenue**

	Journals	Articles	Revenue	\$/article
\$1,400+	5	825	\$1,353,516	\$1,641
\$200-\$599	2	223	\$55,499	\$249
\$2-\$199	5	146	\$15,382	\$105
Free	65	1,544		
Total	77	2,738	\$1,424,397	\$520

**Publisher Category**

Category	Journals	%Free	Articles	%Free
Open Access	11	9%	1,271	14%
Univ/college	39	100%	746	100%
Miscellaneous	18	94%	616	84%
Society/govt	9	89%	105	93%

**Growth and Shrinkage**

Change 2015-16	Count	Percent	Cum%
Grew 50%+	14	18.2%	
Grew 25-49.9%	6	7.8%	26.0%
Grew 10-24.99%	8	10.4%	36.4%
Even, $\pm$ 9.99%	16	20.8%	57.1%
Shrank 10-24.99%	5	6.5%	63.6%
Shrank 25-49.99%	10	13.0%	76.6%
Shrank 50%+	18	23.4%	

Starting Date and Subjects



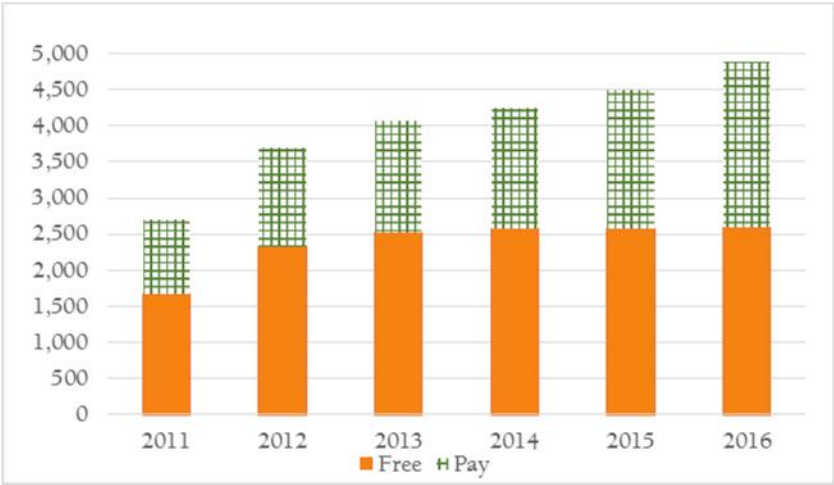
Subject	Journals	%Free	Articles	%Free
Medicine	14	64%	1,025	31%
Language & Literature	7	71%	481	48%
Computer Science	3	100%	282	100%
Education	11	91%	193	77%
Sociology	7	100%	160	100%
Biology	3	33%	152	1%
Media & Communications	6	100%	134	100%
History	8	100%	56	100%
Political Science	3	100%	53	100%
Economics	4	75%	36	81%
Technology	1	100%	31	100%
Anthropology	1	0%	30	0%
Religion	1	100%	26	100%
Earth Sciences	2	100%	24	100%
Ecology	1	100%	22	100%
Miscellany	1	100%	17	100%
Arts & Architecture	1	100%	9	100%
Mathematics	1	100%	7	100%
Law	2	100%	0	

# Canada

Canada’s 137 OAWorld journals published 4,892 articles in 2016. Average cost per article in APC-based journals: \$1,250. Average overall: \$587.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	131	135	132	131	122	103
%Free	75%	76%	75%	76%	79%	81%
Articles	4,892	4,500	4,249	4,064	3,689	2,698
%Free	53%	57%	60%	62%	63%	62%



**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Large: 150-599	10	20%	1,780	15%
Med.: 60-149	18	72%	1,167	71%
Small: 20-59	65	77%	1,539	74%
Smallest: 0-19	38	87%	406	89%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$1,400+	8	948	\$1,872,000	\$1,975
\$600-\$1,399	8	815	\$759,379	\$932
\$200-\$599	17	530	\$241,468	\$456
\$2-\$199	1	6	\$870	\$145
Free	103	2,593		
Total	137	4,892	\$2,873,717	\$587

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Open Access	24	21%	1,672	12%
Miscellaneous	39	77%	1,328	44%
Univ/college	54	93%	1,215	98%
Society/govt	20	90%	677	91%

Starting Date



Growth and Shrinkage

Change 2015-16	Count	Percent	Cum%
Grew 50%+	23	16.8%	
Grew 25-49.9%	18	13.1%	29.9%
Grew 10-24.99%	14	10.2%	40.1%
Even, ±9.99%	30	21.9%	62.0%
Shrank 10-24.99%	16	11.7%	73.7%
Shrank 25-49.99%	21	15.3%	89.1%
Shrank 50%+	15	10.9%	



**Subjects**

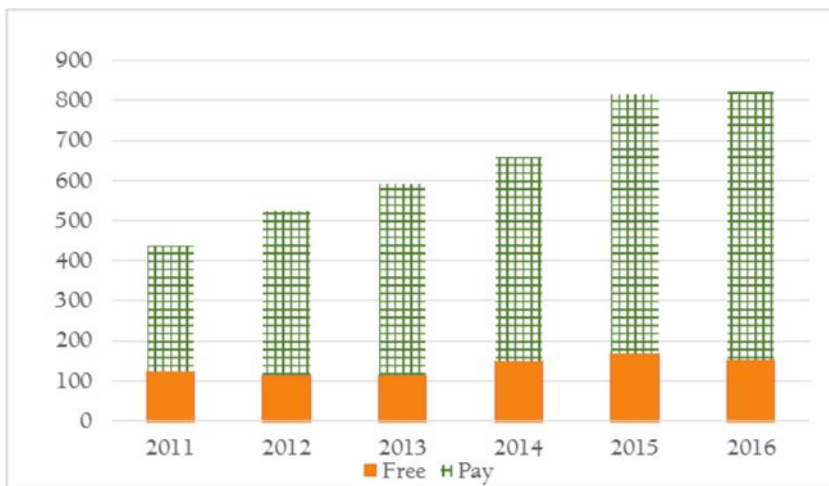
<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Medicine	32	38%	1,896	12%
Education	16	100%	349	100%
Economics	8	75%	348	47%
Technology	2	100%	291	100%
Ecology	4	25%	271	19%
Sociology	9	100%	216	100%
Mathematics	4	100%	168	100%
Computer Science	4	50%	159	63%
Language & Literature	11	91%	152	100%
Library Science	3	100%	149	100%
Media & Communications	3	100%	124	100%
Political Science	5	100%	116	100%
Philosophy	7	100%	112	100%
Psychology	3	33%	74	28%
Law	4	100%	68	100%
Biology	2	100%	62	100%
Earth Sciences	2	50%	59	0%
Other Sciences	3	67%	57	28%
History	5	100%	54	100%
Engineering	2	100%	47	100%
Anthropology	2	100%	41	100%
Arts & Architecture	1	100%	27	100%
Agriculture	2	50%	21	71%
Chemistry	1	100%	18	100%
Zoology	1	0%	7	0%
Miscellany	1	100%	6	100%

# New Zealand

New Zealand's 62 OAWorld journals published 821 articles in 2016. Average cost per article in APC-based journals: \$1,811. Overall average: \$1,471.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	62	61	62	57	55	51
%Free	18%	18%	18%	16%	18%	20%
Articles	821	815	658	593	525	439
%Free	19%	21%	23%	19%	22%	28%



**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Med.: 60-149	2	0%	77	0%
Small: 20-59	19	26%	433	24%
Smallest: 0-19	41	15%	311	16%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$1,400+	50	641	\$1,179,502	\$1,840
\$600-\$1.399	1	26	\$28,210	\$1,085
Free	11	154		
Total	62	821	\$1,207,712	\$1,471

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Open Access	51	0%	667	0%
Society/govt	4	100%	70	100%
Univ/college	4	100%	47	100%
Miscellaneous	3	100%	37	100%

**Growth and Shrinkage**

<b>Change 2015-16</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	20	32.3%	
Grew 25-49.9%	4	6.5%	38.7%
Grew 10-24.99%	11	17.7%	56.5%
Even, $\pm$ 9.99%	7	11.3%	67.7%
Shrank 10-24.99%	4	6.5%	74.2%
Shrank 25-49.99%	6	9.7%	83.9%
Shrank 50%+	10	16.1%	

Starting Date



Subjects

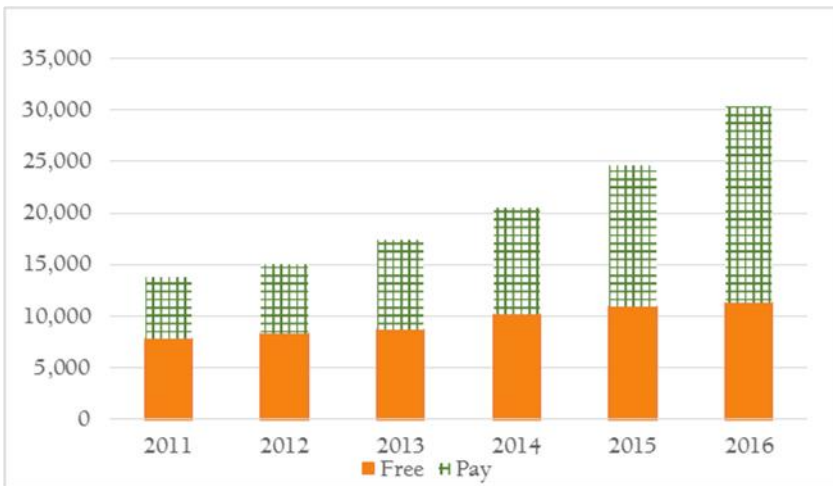
Subject	Journals	%Free	Articles	%Free
Medicine	37	0%	483	0%
Biology	11	9%	146	5%
Education	3	100%	71	100%
Psychology	1	100%	21	100%
Religion	1	100%	14	100%
Sociology	1	100%	14	100%
Ecology	1	0%	13	0%
Mathematics	1	100%	13	100%
Agriculture	1	0%	12	0%
Chemistry	1	0%	10	0%
Zoology	1	0%	10	0%
Arts & Architecture	1	100%	9	100%
Economics	1	100%	4	100%
Computer Science	1	100%	1	100%

# United States

USAs 556 OAWorld journals published 30,410 articles in 2016. Average cost per article in APC-based journals: \$1,386. Overall average: \$869.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	519	535	517	472	413	379
%Free	67%	67%	68%	68%	70%	70%
Articles	30,410	24,681	20,523	17,438	15,002	13,770
%Free	37%	44%	50%	50%	55%	56%



**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Largest: 600+	10	20%	11,200	6%
Large: 150-599	35	43%	7,368	41%
Med.: 60-149	67	40%	4,190	44%
Small: 20-59	240	73%	6,180	74%
Smallest: 0-19	167	77%	1,472	83%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$1,400+	36	9,010	\$19,081,860	\$2,118
\$600-\$1,399	71	5,373	\$5,951,034	\$1,108
\$200-\$599	49	3,093	\$1,103,640	\$357
\$2-\$199	22	1,585	\$278,274	\$176
Free	378	11,349		
Total	556	30,410	\$26,414,808	\$869

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Miscellaneous	143	76%	7,018	51%
Society/govt	93	68%	8,596	26%
Open Access	58	28%	6,780	7%
Traditional	56	4%	1,561	4%
Univ/college	206	92%	6,455	79%

Starting Date



Growth and Shrinkage

Change 2015-16	Count	Percent	Cum%
Grew 50%+	131	23.6%	
Grew 25-49.9%	53	9.5%	33.1%
Grew 10-24.99%	60	10.8%	43.9%
Even, ±9.99%	91	16.4%	60.3%
Shrank 10-24.99%	55	9.9%	70.1%
Shrank 25-49.99%	70	12.6%	82.7%
Shrank 50%+	96	17.3%	

**Subjects**

<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Medicine	122	40%	11,224	24%
Computer Science	16	44%	2,648	10%
Other Sciences	11	55%	1,864	3%
Biology	22	41%	1,557	15%
Engineering	14	29%	1,297	5%
History	23	100%	1,163	100%
Physics	10	40%	1,107	24%
Education	53	92%	1,097	86%
Sociology	34	88%	1,073	65%
Chemistry	3	33%	909	18%
Language & Literature	37	100%	808	100%
Ecology	23	43%	773	55%
Mathematics	14	86%	654	95%
Media & Communications	10	100%	496	100%
Agriculture	13	31%	455	27%
Library Science	26	100%	415	100%
Technology	9	67%	415	33%
Economics	20	65%	389	61%
Arts & Architecture	16	94%	342	76%
Zoology	4	0%	300	0%
Religion	12	100%	262	100%
Anthropology	10	90%	254	94%
Philosophy	11	100%	245	100%
Political Science	12	83%	231	90%
Psychology	10	60%	170	64%
Earth Sciences	7	57%	105	57%
Miscellany	6	67%	91	95%
Law	8	88%	66	100%



# Western Europe

Western Europe's 1,783 OAWorld journals published 81,878 articles in 2016. Average cost per article in APC-based journals: \$946. Overall average: \$255.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	1,673	1,721	1,659	1,526	1,412	1,250
%Free	81%	82%	83%	83%	84%	85%
Articles	81,878	69,947	67,771	61,496	56,451	48,140
%Free	73%	73%	71%	69%	71%	72%

## Article Volume

	Journals	%Free	Articles	%Free
Largest: 600+	16	69%	26,579	84%
Large: 150-599	62	50%	13,388	42%
Med.: 60-149	240	61%	15,129	60%
Small: 20-59	853	84%	21,813	84%
Smallest: 0-19	502	88%	4,969	90%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$1,400+	52	5,815	\$11,480,816	\$1,974
\$600-\$1.399	122	7,664	\$7,321,693	\$955
\$200-\$599	102	4,509	\$1,628,772	\$361
\$2-\$199	51	4,054	\$421,161	\$104
Free	1,456	59,836		
Total	1,783	81,878	\$20,852,442	\$255

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>
Miscellaneous	456	84%	28,730
Univ/college	795	96%	20,457
Traditional	108	31%	12,838
Open Access	231	46%	12,058
Society/govt	193	89%	7,795

**Growth and Shrinkage**

<b>Change 2015-16</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	347	19.5%	
Grew 25-49.9%	206	11.6%	31.0%
Grew 10-24.99%	194	10.9%	41.9%
Even, $\pm$ 9.99%	396	22.2%	64.1%
Shrank 10-24.99%	179	10.0%	74.1%
Shrank 25-49.99%	214	12.0%	86.1%
Shrank 50%+	247	13.9%	

**Subjects**

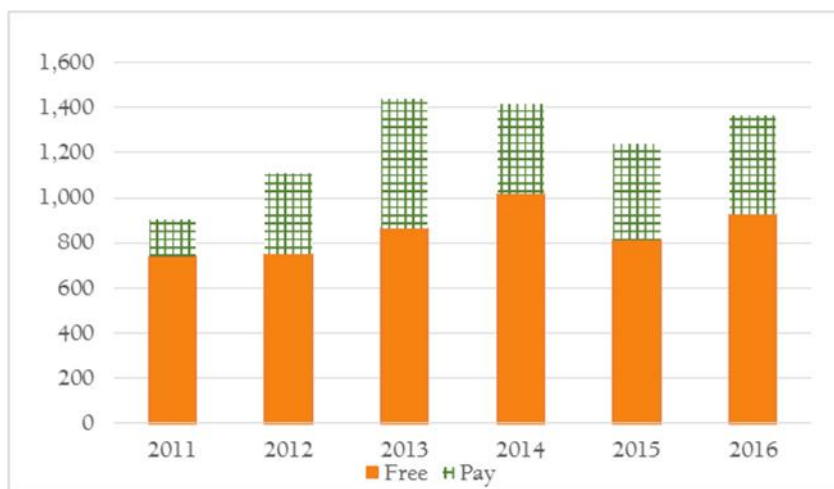
<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Medicine	237	59%	11,101	53%
Physics	12	42%	9,775	90%
Technology	33	64%	6,135	95%
Ecology	47	70%	6,023	53%
Engineering	27	44%	5,302	79%
Earth Sciences	87	71%	4,096	63%
Language & Literature	198	99%	3,932	98%
History	118	98%	3,441	99%
Education	134	90%	3,333	82%
Biology	31	42%	3,128	50%
Sociology	108	85%	2,750	82%
Chemistry	11	36%	2,475	19%
Agriculture	42	69%	2,206	56%
Other Sciences	21	67%	2,005	69%
Computer Science	35	77%	2,004	25%
Arts & Architecture	99	95%	1,992	87%
Anthropology	93	89%	1,864	88%
Media & Communications	53	94%	1,351	91%
Political Science	66	88%	1,279	84%
Law	52	96%	1,218	98%
Zoology	36	72%	1,013	62%
Psychology	42	79%	980	71%
Economics	55	84%	958	71%
Philosophy	40	95%	882	97%
Religion	27	93%	839	97%
Library Science	32	94%	655	96%
Miscellany	24	88%	603	75%
Mathematics	23	74%	538	54%

# Austria

Austria's 45 OAWorld journals published 1,362 articles in 2016. Average cost per article in APC-based journals: \$879. Overall average: \$280.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	40	45	39	32	31	29
%Free	88%	87%	85%	84%	87%	86%
Articles	1,362	1,240	1,416	1,440	1,110	902
%Free	68%	65%	72%	60%	67%	82%



**Article Volume, APC Levels. Publisher Category, Growth**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Large: 150-599	2	50%	287	16%
Med.: 60-149	8	63%	468	62%
Small: 20-59	21	95%	509	97%
Smallest: 0-19	9	100%	98	100%

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$600-\$1,399	2	316	\$319,632	\$1,011
\$200-\$599	3	118	\$61,744	\$523
\$2-\$199	1	0		
Free	39	928		
Total	45	1,362	\$381,376	\$280

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Miscellaneous	18	83%	439	59%
Traditional	11	100%	367	100%
Open Access	1	0%	240	0%
Univ/college	12	83%	184	92%
Society/govt	3	100%	132	100%

<b>Change 2015-16</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	10	22.2%	
Grew 25-49.9%	2	4.4%	26.7%
Grew 10-24.99%	7	15.6%	42.2%
Even, $\pm$ 9.99%	8	17.8%	60.0%
Shrank 10-24.99%	3	6.7%	66.7%
Shrank 25-49.99%	9	20.0%	86.7%
Shrank 50%+	6	13.3%	

Starting Date and Subjects



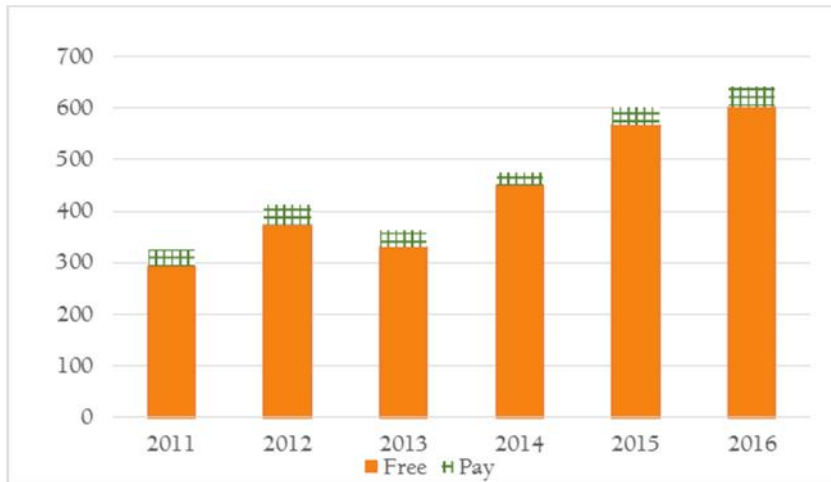
Subject	Journals	%Free	Articles	%Free
Medicine	12	92%	425	86%
Computer Science	2	50%	287	16%
Education	3	67%	115	88%
Biology	1	0%	76	0%
Media & Communications	1	100%	70	100%
Earth Sciences	2	50%	61	25%
Political Science	5	100%	59	100%
History	2	100%	58	100%
Religion	1	100%	38	100%
Miscellany	1	100%	25	100%
Mathematics	1	100%	23	100%
Philosophy	3	100%	22	100%
Agriculture	1	100%	20	100%
Language & Literature	1	100%	19	100%
Arts & Architecture	3	100%	16	100%
Psychology	2	100%	14	100%
Sociology	1	100%	14	100%
Ecology	1	100%	10	100%
Law	1	100%	10	100%
Anthropology	1	0%	0	

# Belgium

Belgium's 30 OAWorld journals published 642 articles in 2016. Average cost per article in APC-based journals: \$211. Overall average: \$13.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	30	30	28	23	19	20
%Free	97%	97%	96%	96%	95%	95%
Articles	642	603	475	362	412	325
%Free	94%	94%	95%	91%	91%	90%



**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Small: 20-59	24	96%	571	93%
Smallest: 0-19	6	100%	71	100%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$200-\$599	1	40	\$8,440	\$211
Free	29	602		
Total	30	642	\$8,440	\$13

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Society/govt	13	100%	265	100%
Univ/college	11	100%	219	100%
Miscellaneous	6	83%	158	75%

**Growth and Shrinkage**

<b>Change 2015-16</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	4	13.3%	
Grew 25-49.9%	3	10.0%	23.3%
Grew 10-24.99%	5	16.7%	40.0%
Even, $\pm$ 9.99%	10	33.3%	73.3%
Shrank 10-24.99%	4	13.3%	86.7%
Shrank 25-49.99%	3	10.0%	96.7%
Shrank 50%+	1	3.3%	



## Starting Date



## Subjects

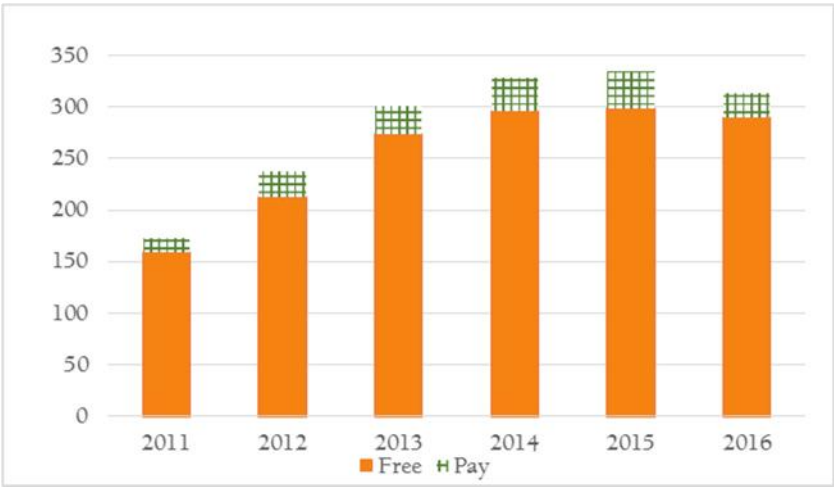
Subject	Journals	%Free	Articles	%Free
Language & Literature	6	100%	148	100%
Technology	6	100%	118	100%
Agriculture	2	50%	73	45%
Computer Science	3	100%	61	100%
Medicine	2	100%	58	100%
Education	2	100%	45	100%
Earth Sciences	2	100%	41	100%
Arts & Architecture	2	100%	29	100%
Economics	1	100%	21	100%
Zoology	1	100%	16	100%
Sociology	1	100%	14	100%
Media & Communications	1	100%	13	100%
Political Science	1	100%	5	100%

# Denmark

Denmark's 25 OAWorld journals published 313 articles in 2016. Average cost per article in APC-based journals: \$281. Overall average: \$21.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	22	23	21	19	18	13
%Free	95%	96%	95%	95%	94%	92%
Articles	313	335	329	301	238	173
%Free	93%	89%	90%	91%	89%	92%



**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Small: 20-59	11	91%	244	91%
Smallest: 0-19	11	100%	69	100%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$200-\$599	1	23	\$6,463	\$281
Free	24	290		
Total	25	313	\$6,463	\$21

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Univ/college	14	93%	147	84%
Miscellaneous	8	100%	128	100%
Society/govt	2	100%	27	100%
Open Access	1	100%	11	100%

**Growth and Shrinkage**

<b>Change 2015-16</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	3	12.0%	
Grew 25-49.9%	2	8.0%	20.0%
Grew 10-24.99%	2	8.0%	28.0%
Even, $\pm$ 9.99%	6	24.0%	52.0%
Shrank 10-24.99%	1	4.0%	56.0%
Shrank 25-49.99%	5	20.0%	76.0%
Shrank 50%+	6	24.0%	

Starting Date



Subjects

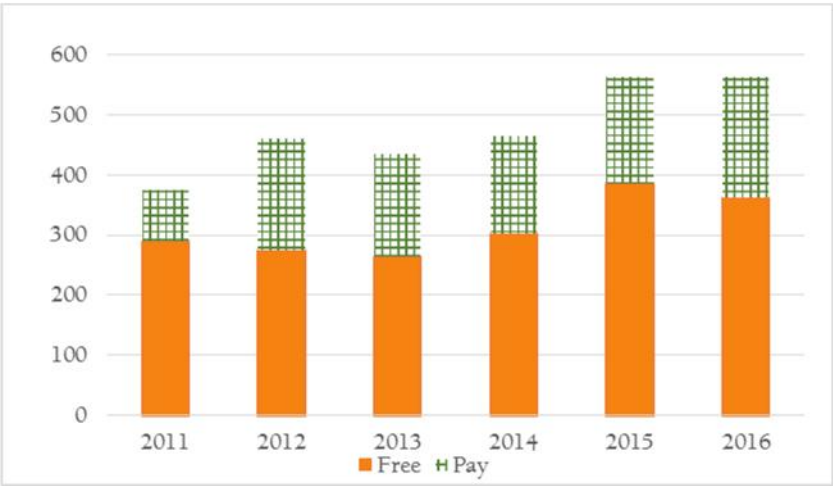
Subject	Journals	%Free	Articles	%Free
Media & Communications	2	100%	58	100%
History	1	100%	51	100%
Education	2	100%	38	100%
Earth Sciences	2	100%	27	100%
Sociology	2	50%	23	0%
Political Science	1	100%	22	100%
Anthropology	2	100%	21	100%
Economics	3	100%	18	100%
Ecology	2	100%	15	100%
Law	1	100%	11	100%
Arts & Architecture	1	100%	7	100%
Medicine	1	100%	6	100%
Philosophy	1	100%	6	100%
Psychology	1	100%	6	100%
Language & Literature	3	100%	4	100%

# Finland

Finland's 24 OAWorld journals published 564 articles in 2016. Average cost per article in APC-based journals: \$563. Overall average: \$200.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	22	24	23	23	22	21
%Free	77%	79%	78%	78%	77%	81%
Articles	564	563	465	434	460	375
%Free	64%	68%	65%	61%	60%	77%



**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Med.: 60-149	2	50%	128	48%
Small: 20-59	11	73%	358	64%
Smallest: 0-19	9	89%	78	92%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$600-\$1.399	1	42	\$31,206	\$743
\$200-\$599	4	159	\$81,861	\$515
Free	19	363		
Total	24	564	\$113,067	\$200

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Univ/college	9	67%	227	44%
Miscellaneous	6	100%	117	100%
Society/govt	7	86%	110	95%
Open Access	2	50%	110	39%

**Growth and Shrinkage**

<b>Change 2015-16</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	2	8.3%	
Grew 25-49.9%	4	16.7%	25.0%
Grew 10-24.99%	2	8.3%	33.3%
Even, $\pm$ 9.99%	6	25.0%	58.3%
Shrank 10-24.99%	4	16.7%	75.0%
Shrank 25-49.99%	3	12.5%	87.5%
Shrank 50%+	3	12.5%	

**Subjects**

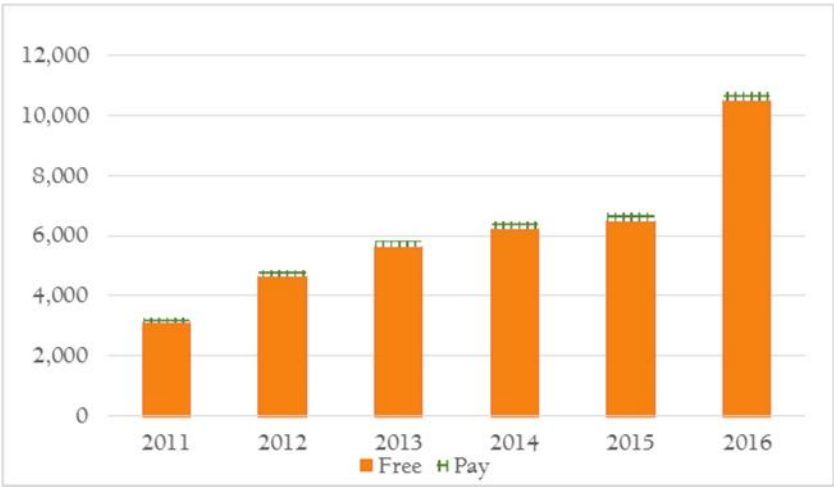
<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Biology	2	0%	86	0%
History	3	100%	83	100%
Medicine	1	0%	67	0%
Mathematics	1	100%	61	100%
Earth Sciences	3	33%	58	17%
Sociology	4	100%	44	100%
Agriculture	2	100%	41	100%
Ecology	1	100%	39	100%
Computer Science	2	100%	26	100%
Language & Literature	2	100%	21	100%
Religion	1	100%	21	100%
Anthropology	1	100%	11	100%
Economics	1	100%	6	100%

# France

France’s 167 OAWorld journals published 10,807 articles in 2016. Average cost per article in APC-based journals: \$621. Overall average: \$19.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	150	161	159	146	145	126
%Free	91%	92%	93%	95%	94%	94%
Articles	10,807	6,779	6,478	5,856	4,844	3,255
%Free	97%	96%	96%	96%	96%	95%





**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Largest: 600+	3	100%	6,292	100%
Large: 150-599	3	100%	531	100%
Med.: 60-149	23	96%	1,414	95%
Small: 20-59	79	91%	2,135	90%
Smallest: 0-19	42	88%	435	89%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$600-\$1,399	5	151	\$143,037	\$947
\$200-\$599	5	121	\$53,624	\$443
\$2-\$199	3	51	\$3,920	\$77
Free	154	10,484		
Total	167	10,807	\$200,581	\$19

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>
Traditional	18	56%	7,330
Univ/college	61	100%	1,416
Miscellaneous	53	94%	1,352
Society/govt	26	92%	660
Open Access	9	100%	49

Starting Date



Growth and Shrinkage

Change 2015-16	Count	Percent	Cum%
Grew 50%+	45	26.9%	
Grew 25-49.9%	18	10.8%	37.7%
Grew 10-24.99%	15	9.0%	46.7%
Even, ±9.99%	22	13.2%	59.9%
Shrank 10-24.99%	15	9.0%	68.9%
Shrank 25-49.99%	17	10.2%	79.0%
Shrank 50%+	35	21.0%	

## Subjects

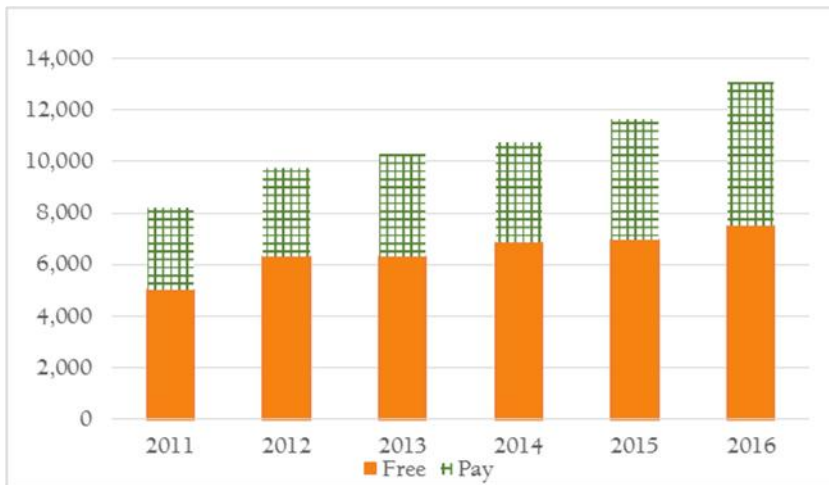
Subject	Journals	%Free	Articles	%Free
Technology	4	75%	3,848	99%
Physics	3	67%	1,990	99%
Other Sciences	2	100%	774	100%
Language & Literature	36	100%	702	100%
Ecology	6	83%	507	98%
History	19	100%	432	100%
Anthropology	17	100%	398	100%
Sociology	15	100%	398	100%
Earth Sciences	7	71%	265	83%
Biology	2	100%	156	100%
Agriculture	5	80%	148	84%
Chemistry	2	100%	140	100%
Arts & Architecture	4	100%	116	100%
Political Science	6	100%	113	100%
Medicine	2	0%	108	0%
Education	5	100%	94	100%
Zoology	2	100%	93	100%
Law	4	100%	89	100%
Philosophy	4	100%	85	100%
Economics	3	67%	83	81%
Engineering	3	0%	69	0%
Computer Science	3	100%	54	100%
Media & Communications	4	75%	54	63%
Miscellany	2	100%	41	100%
Religion	3	100%	38	100%
Mathematics	3	100%	11	100%
Library Science	1	100%	1	100%

# Germany

Germany's 182 OAWorld journals published 13,091 articles in 2016. Average cost per article in APC-based journals: \$594. Overall average: \$252.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	174	179	168	152	142	125
%Free	73%	74%	74%	76%	78%	78%
Articles	13,091	11,634	10,746	10,300	9,769	8,223
%Free	57%	60%	64%	61%	65%	61%



### Article Volume

	Journals	%Free	Articles	%Free
Largest: 600+	5	60%	4,498	56%
Large: 150-599	21	52%	4,749	51%
Med.: 60-149	24	54%	1,491	55%
Small: 20-59	78	78%	1,953	73%
Smallest: 0-19	46	85%	400	87%

### APC Levels and Revenue

	Journals	Articles	Revenue	\$/article
\$1,400+	9	625	\$1,109,545	\$1,775
\$600-\$1.399	11	2,102	\$1,668,177	\$794
\$200-\$599	17	1,493	\$470,728	\$315
\$2-\$199	11	1,345	\$56,605	\$42
Free	134	7,526		
Total	182	13,091	\$3,305,055	\$252

### Publisher Category

Category	Journals	%Free	Articles	%Free
Open Access	63	54%	7,729	52%
Univ/college	57	91%	2,521	52%
Miscellaneous	51	82%	2,409	88%
Traditional	4	50%	300	16%
Society/govt	7	57%	132	39%

Starting Date



Growth and Shrinkage

Change 2015-16	Count	Percent	Cum%
Grew 50%+	32	17.6%	
Grew 25-49.9%	18	9.9%	27.5%
Grew 10-24.99%	16	8.8%	36.3%
Even, ±9.99%	43	23.6%	59.9%
Shrank 10-24.99%	20	11.0%	70.9%
Shrank 25-49.99%	25	13.7%	84.6%
Shrank 50%+	28	15.4%	

**Subjects**

<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Ecology	15	47%	3,236	33%
Earth Sciences	32	56%	2,492	50%
Technology	5	80%	1,831	99%
Computer Science	5	40%	1,178	1%
History	8	100%	906	100%
Medicine	14	64%	756	41%
Education	10	70%	321	53%
Chemistry	1	100%	290	100%
Agriculture	6	83%	274	84%
Language & Literature	11	100%	269	100%
Zoology	6	33%	190	17%
Psychology	7	86%	167	94%
Sociology	6	83%	148	100%
Engineering	8	63%	147	52%
Political Science	8	100%	144	100%
Religion	6	100%	126	100%
Biology	3	67%	109	93%
Arts & Architecture	3	100%	95	100%
Library Science	5	100%	89	100%
Physics	2	50%	63	38%
Other Sciences	4	75%	48	35%
Media & Communications	2	100%	44	100%
Economics	3	100%	38	100%
Anthropology	4	100%	35	100%
Miscellany	2	100%	32	100%
Philosophy	2	100%	25	100%
Law	2	100%	21	100%
Mathematics	2	50%	17	59%

# Greece

Greece's 27 OAWorld journals published 738 articles in 2016. Average cost per article in APC-based journals: \$268. Overall average: \$44.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	26	26	27	25	26	26
%Free	85%	85%	85%	88%	88%	88%
Articles	738	679	664	593	537	498
%Free	83%	89%	89%	90%	91%	89%





**Article Volume, APC Levels, Publisher Category, and Growth**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Large: 150-599	1	100%	170	100%
Med.: 60-149	3	67%	268	72%
Small: 20-59	12	83%	218	80%
Smallest: 0-19	10	90%	82	94%

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$200-\$599	1	74	\$27,824	\$376
\$2-\$199	3	48	\$4,820	\$100
Free	23	616		
Total	27	738	\$32,644	\$44

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Miscellaneous	12	75%	382	75%
Univ/college	9	89%	282	90%
Society/govt	6	100%	74	100%

<b>Change 2015-16</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	4	14.8%	
Grew 25-49.9%	4	14.8%	29.6%
Grew 10-24.99%	1	3.7%	33.3%
Even, $\pm$ 9.99%	7	25.9%	59.3%
Shrank 10-24.99%	5	18.5%	77.8%
Shrank 25-49.99%	2	7.4%	85.2%
Shrank 50%+	4	14.8%	

Starting Date



Subjects

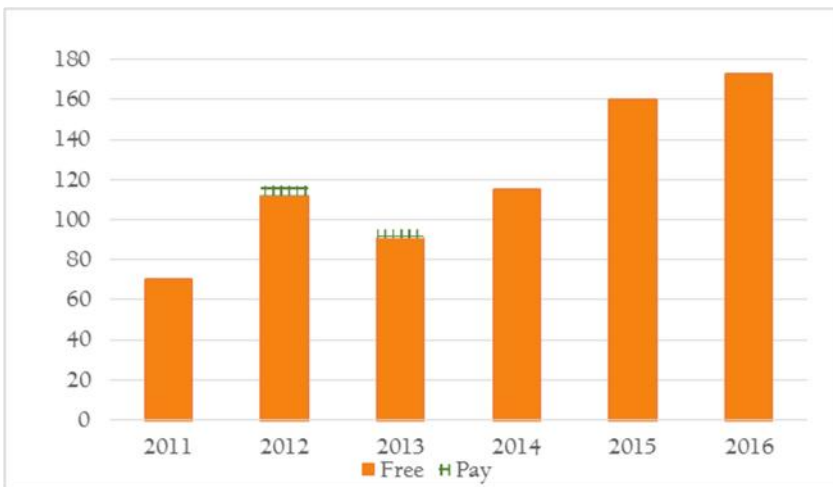
Subject	Journals	%Free	Articles	%Free
Engineering	2	50%	244	70%
Medicine	8	100%	224	100%
Earth Sciences	2	100%	79	100%
Economics	2	0%	43	0%
History	3	100%	43	100%
Arts & Architecture	2	100%	28	100%
Anthropology	2	100%	26	100%
Language & Literature	2	100%	24	100%
Education	2	100%	15	100%
Sociology	1	100%	7	100%
Other Sciences	1	0%	5	0%

# Ireland

Ireland's 13 OAWorld journals published 173 articles in 2016. The single APC-charging journal ceased in 2013; all current journals are free.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	10	12	9	11	9	6
%Free	100%	100%	100%	91%	89%	100%
Articles	173	160	115	95	117	70
%Free	100%	100%	100%	96%	96%	100%



**Article Volume**

	<b>Journals</b>	<b>Articles</b>
Small: 20-59	3	95
Smallest: 0-19	7	78

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Univ/college	7	100%	123	100%
Miscellaneous	5	80%	50	100%
Society/govt	1	100%	0	

**Growth and Shrinkage**

<b>Change 2015-16</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	3	23.1%	
Even, $\pm 9.99\%$	4	30.8%	53.8%
Shrank 25-49.99%	2	15.4%	69.2%
Shrank 50%+	4	30.8%	

**Subjects**

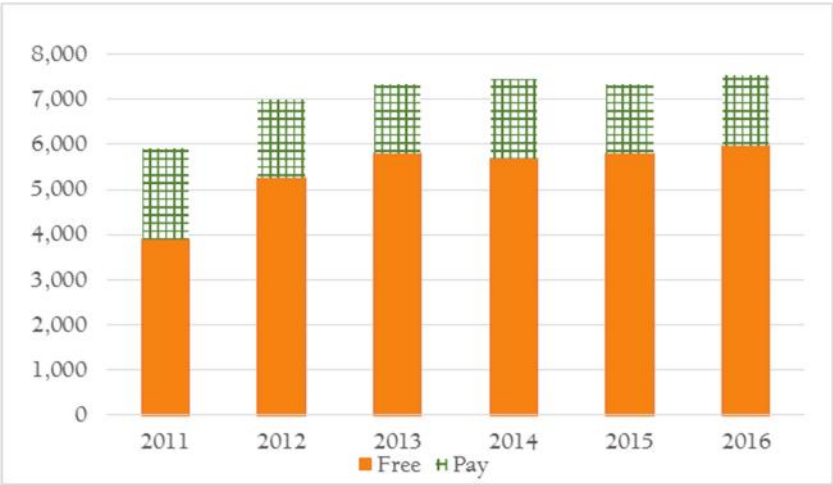
<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Religion	1	100%	45	100%
Media & Communications	2	100%	32	100%
Political Science	1	100%	29	100%
Medicine	1	100%	19	100%
Arts & Architecture	2	100%	14	100%
History	1	100%	13	100%
Education	1	100%	12	100%
Ecology	1	100%	5	100%
Language & Literature	2	100%	4	100%
Sociology	1	0%	0	

# Italy

Italy’s 273 OAWorld journals published 7,526 articles in 2016. Average cost per article in APC-based journals: \$759. Overall average: \$157.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	256	264	253	241	225	203
%Free	82%	83%	82%	82%	82%	80%
Articles	7,526	7,350	7,442	7,346	6,995	5,900
%Free	79%	79%	77%	79%	75%	66%



**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Large: 150-599	8	50%	1,207	64%
Med.: 60-149	41	71%	2,458	73%
Small: 20-59	146	83%	3,353	87%
Smallest: 0-19	61	92%	508	94%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$1,400+	1	382	\$673,084	\$1,762
\$600-\$1,399	18	386	\$269,422	\$698
\$200-\$599	20	672	\$228,822	\$341
\$2-\$199	7	122	\$13,624	\$112
Free	227	5,964		
Total	273	7,526	\$1,184,952	\$157

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Miscellaneous	86	92%	3,160	83%
Univ/college	115	98%	2,629	97%
Open Access	53	38%	1,273	34%
Society/govt	19	79%	464	83%

### Starting Date



### Growth and Shrinkage

Change 2015-16	Count	Percent	Cum%
Grew 50%+	53	19.4%	
Grew 25-49.9%	35	12.8%	32.2%
Grew 10-24.99%	27	9.9%	42.1%
Even, ±9.99%	40	14.7%	56.8%
Shrank 10-24.99%	35	12.8%	69.6%
Shrank 25-49.99%	33	12.1%	81.7%
Shrank 50%+	50	18.3%	

**Subjects**

<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Medicine	53	49%	1,636	41%
Language & Literature	28	100%	806	100%
Agriculture	12	67%	585	77%
Arts & Architecture	24	96%	459	85%
History	19	100%	395	100%
Law	8	100%	385	100%
Zoology	11	73%	353	64%
Earth Sciences	8	75%	326	81%
Education	12	100%	315	100%
Philosophy	16	94%	314	97%
Anthropology	16	100%	309	100%
Ecology	4	75%	264	86%
Engineering	1	100%	176	100%
Media & Communications	8	100%	164	100%
Sociology	6	100%	130	100%
Mathematics	6	83%	121	76%
Religion	2	100%	111	100%
Economics	7	86%	109	81%
Psychology	6	83%	106	92%
Political Science	7	100%	100	100%
Other Sciences	5	60%	97	66%
Biology	5	80%	60	80%
Library Science	2	100%	55	100%
Chemistry	1	0%	50	0%
Physics	1	100%	39	100%
Computer Science	2	100%	34	100%
Miscellany	1	100%	24	100%
Technology	2	100%	3	100%



# Netherlands

The Netherlands' 42 OAWorld journals published 2,085 articles in 2016. Average cost per article in APC-based journals: \$672. Average overall: \$63.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	40	41	40	37	34	31
%Free	80%	80%	83%	81%	79%	84%
Articles	2,085	2,321	2,150	2,226	2,176	2,229
%Free	91%	87%	87%	93%	96%	97%



**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Largest: 600+	1	100%	980	100%
Large: 150-599	1	100%	20	100%
Med.: 60-149	6	83%	470	95%
Small: 20-59	21	76%	522	72%
Smallest: 0-19	11	82%	93	73%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$1,400+	1	22	\$46,794	\$2,127
\$600-\$1,399	3	62	\$55,215	\$891
\$200-\$599	3	61	\$21,096	\$346
\$2-\$199	1	50	\$8,000	\$160
Free	34	1,890		
Total	42	2,085	\$131,105	\$63

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Miscellaneous	6	83%	1,063	99%
Univ/college	26	88%	562	84%
Traditional	10	60%	460	80%

Starting Date



Growth and Shrinkage

Change 2015-16	Count	Percent	Cum%
Grew 50%+	4	9.5%	
Grew 25-49.9%	6	14.3%	23.8%
Grew 10-24.99%	8	19.0%	42.9%
Even, ±9.99%	11	26.2%	69.0%
Shrank 10-24.99%	2	4.8%	73.8%
Shrank 25-49.99%	3	7.1%	81.0%
Shrank 50%+	8	19.0%	

**Subjects**

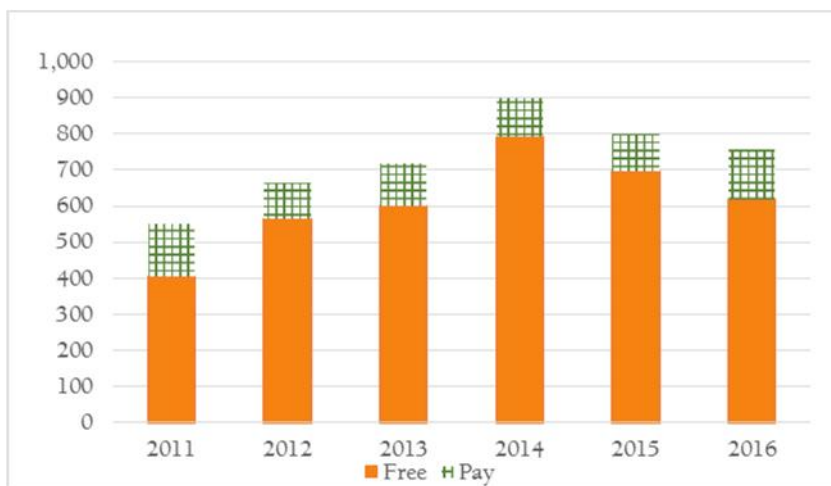
<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Medicine	3	67%	1,046	97%
Sociology	4	100%	211	100%
History	4	100%	156	100%
Religion	2	50%	156	89%
Miscellany	3	100%	93	100%
Political Science	3	33%	77	18%
Language & Literature	7	100%	70	100%
Engineering	3	33%	57	14%
Arts & Architecture	3	67%	44	50%
Media & Communications	1	100%	43	100%
Technology	2	100%	37	100%
Law	3	100%	35	100%
Library Science	1	100%	22	100%
Zoology	1	100%	22	100%
Biology	1	0%	12	0%
Anthropology	1	100%	4	100%

# Norway

Norway's 51 OAWorld journals published 756 articles in 2016. Average cost per article in APC-based journals: \$1,358. Overall average: \$246.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	46	49	48	40	37	32
%Free	87%	88%	92%	90%	89%	88%
Articles	756	800	900	718	666	550
%Free	82%	87%	88%	84%	85%	74%



**Article Volume, APC Levels, Publisher Categories, and Growth**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Med.: 60-149	4	75%	154	71%
Small: 20-59	17	88%	354	83%
Smallest: 0-19	25	88%	248	87%

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$1,400+	4	112	\$162,850	\$1,454
\$600-\$1,399	2	25	\$23,255	\$930
Free	45	619		
Total	51	756	\$186,105	\$246

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Univ/college	31	100%	403	100%
Miscellaneous	14	93%	211	93%
Open Access	5	0%	122	0%
Society/govt	1	100%	20	100%

<b>Change 2015-16</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	13	25.5%	
Grew 25-49.9%	2	3.9%	29.4%
Grew 10-24.99%	6	11.8%	41.2%
Even, $\pm$ 9.99%	8	15.7%	56.9%
Shrank 10-24.99%	3	5.9%	62.7%
Shrank 25-49.99%	7	13.7%	76.5%
Shrank 50%+	12	23.5%	

## Starting Date and Subjects



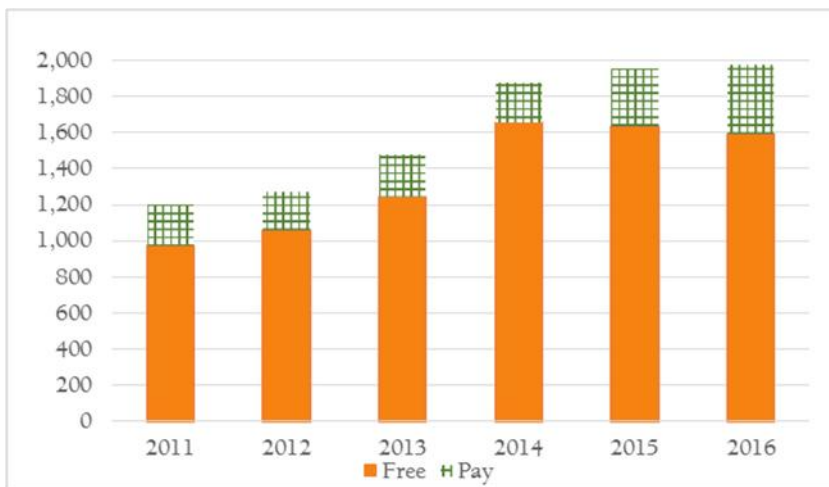
Subject	Journals	%Free	Articles	%Free
Education	10	80%	192	86%
Law	7	86%	142	93%
Medicine	5	100%	79	100%
Language & Literature	9	100%	78	100%
Political Science	1	0%	44	0%
Anthropology	1	0%	41	0%
Arts & Architecture	3	100%	41	100%
Sociology	4	100%	41	100%
Computer Science	1	100%	20	100%
Miscellany	1	100%	16	100%
Zoology	2	100%	16	100%
Philosophy	1	0%	15	0%
Other Sciences	1	100%	9	100%
Media & Communications	1	100%	8	100%
Religion	1	100%	7	100%
Library Science	1	100%	4	100%
Psychology	1	100%	3	100%
Biology	1	100%	0	

# Portugal

Portugal's 75 OAWorld journals published 1,980 articles in 2016. Average cost per article in APC-based journals: \$543. Overall average: \$106.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	75	73	71	65	55	51
%Free	89%	90%	90%	89%	93%	92%
Articles	1,980	1,953	1,880	1,480	1,270	1,198
%Free	81%	84%	88%	84%	83%	81%





### Article Volume

	Journals	%Free	Articles	%Free
Med.: 60-149	8	50%	449	50%
Small: 20-59	46	91%	1,310	88%
Smallest: 0-19	21	100%	221	100%

### APC Levels and Revenue

	Journals	Articles	Revenue	\$/article
\$600-\$1.399	4	199	\$172,930	\$869
\$200-\$599	2	86	\$20,690	\$241
\$2-\$199	2	101	\$16,058	\$159
Free	67	1,594		
Total	75	1,980	\$209,678	\$106

### Publisher Category

Category	Journals	%Free	Articles	%Free
Univ/college	44	95%	1,148	90%
Society/govt	12	92%	323	84%
Miscellaneous	15	93%	310	95%
Open Access	4	0%	199	0%

Starting Date



Growth and Shrinkage

Change 2015-16	Count	Percent	Cum%
Grew 50%+	11	14.7%	
Grew 25-49.9%	12	16.0%	30.7%
Grew 10-24.99%	7	9.3%	40.0%
Even, ±9.99%	16	21.3%	61.3%
Shrank 10-24.99%	9	12.0%	73.3%
Shrank 25-49.99%	18	24.0%	97.3%
Shrank 50%+	2	2.7%	

**Subjects**

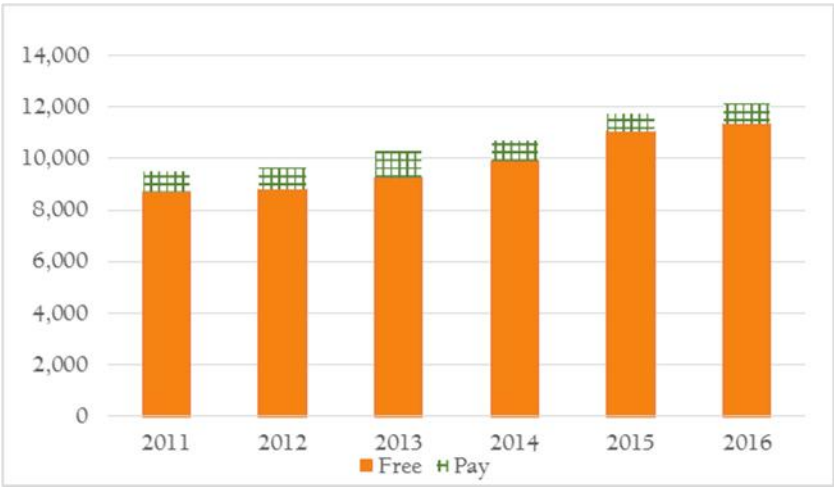
<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Medicine	10	90%	393	87%
Sociology	8	75%	249	63%
Media & Communications	7	86%	244	79%
Arts & Architecture	8	88%	205	66%
Language & Literature	9	100%	165	100%
Education	5	100%	125	100%
History	6	100%	112	100%
Anthropology	2	100%	75	100%
Political Science	3	67%	75	25%
Library Science	3	100%	65	100%
Agriculture	1	0%	51	0%
Miscellany	2	100%	46	100%
Earth Sciences	2	100%	38	100%
Computer Science	3	67%	37	57%
Technology	1	100%	37	100%
Economics	2	100%	35	100%
Religion	1	100%	11	100%
Ecology	1	100%	10	100%
Psychology	1	100%	7	100%

# Spain

Spain’s 484 OAWorld journals published 12,157 articles in 2016. Average cost per article in APC-based journals: \$287. Overall average: \$19.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	453	465	465	439	418	371
%Free	96%	97%	96%	96%	96%	96%
Articles	12,157	11,746	10,702	10,291	9,663	9,478
%Free	93%	94%	93%	90%	91%	92%



**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Large: 150-599	5	80%	512	68%
Med.: 60-149	50	90%	2,959	88%
Small: 20-59	256	96%	7,044	96%
Smallest: 0-19	142	99%	1,642	98%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$200-\$599	11	653	\$216,786	\$332
\$2-\$199	7	158	\$16,347	\$103
Free	466	11,346		
Total	484	12,157	\$233,133	\$19

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Univ/college	305	100%	7,191	98%
Miscellaneous	87	87%	2,335	86%
Society/govt	69	96%	2,119	89%
Open Access	23	87%	512	76%

Starting Date



Growth and Shrinkage

Change 2015-16	Count	Percent	Cum%
Grew 50%+	74	15.3%	
Grew 25-49.9%	70	14.5%	29.8%
Grew 10-24.99%	64	13.2%	43.0%
Even, ±9.99%	144	29.8%	72.7%
Shrank 10-24.99%	46	9.5%	82.2%
Shrank 25-49.99%	40	8.3%	90.5%
Shrank 50%+	46	9.5%	

## Subjects

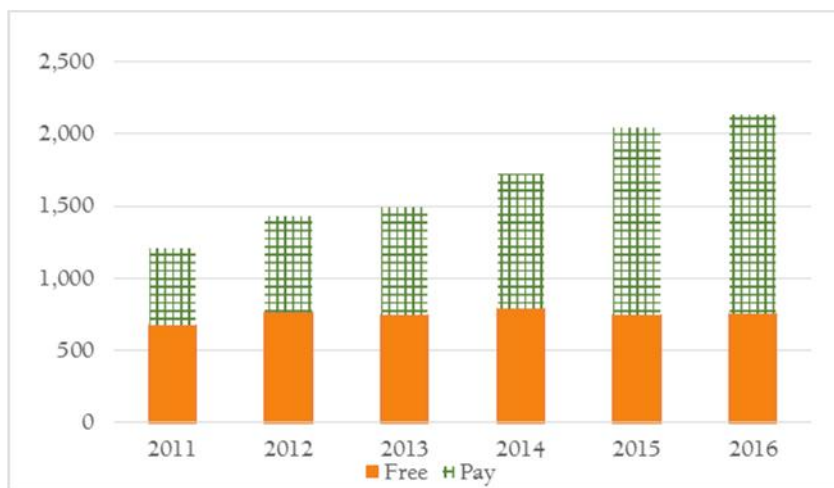
Subject	Journals	%Free	Articles	%Free
Medicine	37	89%	1,603	84%
Education	53	96%	1,464	92%
Language & Literature	62	100%	1,236	100%
History	42	100%	872	100%
Sociology	32	91%	753	92%
Anthropology	36	97%	677	95%
Arts & Architecture	31	100%	647	100%
Psychology	16	88%	513	71%
Earth Sciences	21	100%	510	100%
Media & Communications	17	94%	498	91%
Law	18	100%	457	100%
Political Science	16	100%	373	100%
Philosophy	10	100%	371	100%
Economics	23	100%	355	100%
Agriculture	8	100%	337	100%
Ecology	9	100%	237	100%
Zoology	8	88%	223	90%
Miscellany	8	88%	190	72%
Religion	4	100%	176	100%
Library Science	9	100%	174	100%
Computer Science	7	100%	156	100%
Other Sciences	4	100%	99	100%
Engineering	3	67%	93	43%
Mathematics	5	100%	87	100%
Technology	4	50%	49	27%
Biology	1	100%	7	100%

# Sweden

Sweden's 65 OAWorld journals published 2,136 articles in 2016. Average cost per article in APC-based journals: \$1,462. Overall average: \$948.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	63	62	60	57	54	48
%Free	52%	53%	52%	53%	54%	54%
Articles	2,136	2,045	1,723	1,496	1,432	1,211
%Free	35%	36%	46%	50%	53%	55%





**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Large: 150-599	3	33%	718	30%
Med.: 60-149	9	11%	576	5%
Small: 20-59	22	64%	571	59%
Smallest: 0-19	29	59%	271	65%

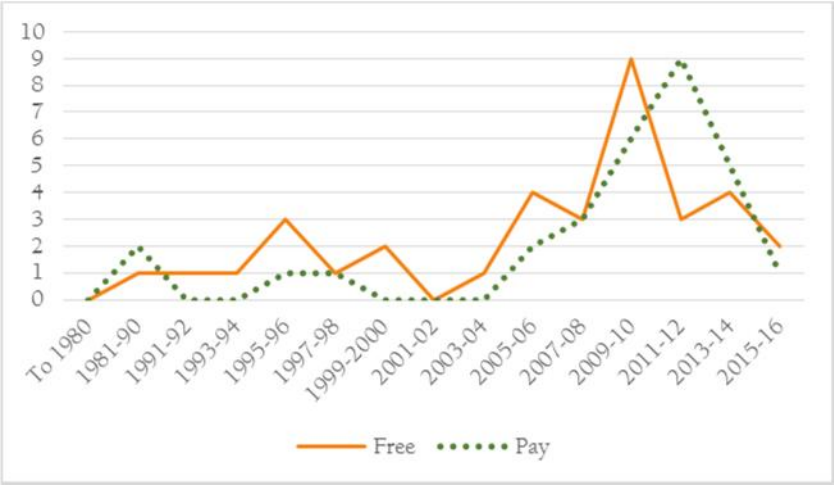
**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$1,400+	15	914	\$1,583,982	\$1,733
\$600-\$1,399	13	429	\$419,999	\$979
\$200-\$599	2	42	\$21,294	\$507
Free	35	751		
Total	65	2,136	\$2,025,275	\$948

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Open Access	32	19%	1,055	7%
Miscellaneous	16	88%	506	84%
Society/govt	1	0%	315	0%
Univ/college	16	94%	260	97%

Starting Date



Growth and Shrinkage

Change 2015-16	Count	Percent	Cum%
Grew 50%+	15	23.1%	
Grew 25-49.9%	3	4.6%	27.7%
Grew 10-24.99%	5	7.7%	35.4%
Even, ±9.99%	18	27.7%	63.1%
Shrank 10-24.99%	7	10.8%	73.8%
Shrank 25-49.99%	9	13.8%	87.7%
Shrank 50%+	8	12.3%	

## Subjects

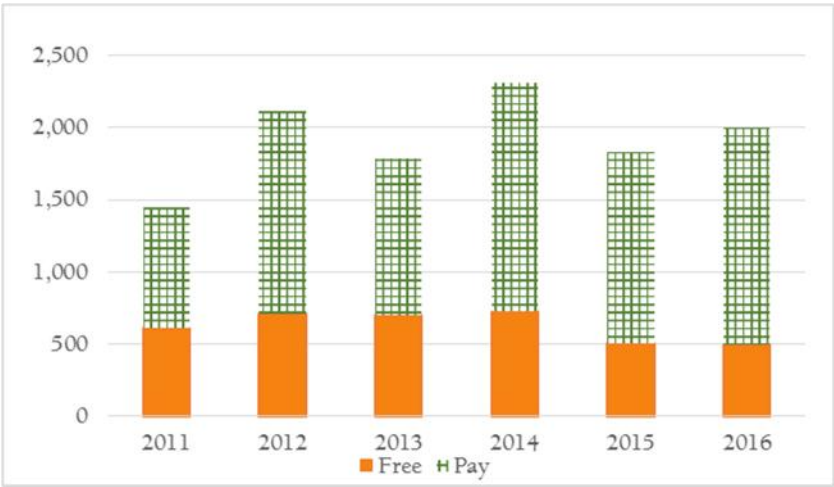
Subject	Journals	%Free	Articles	%Free
Medicine	15	27%	1,090	21%
Education	11	82%	219	64%
Agriculture	1	0%	110	0%
Language & Literature	4	100%	85	100%
Physics	2	0%	75	0%
Political Science	4	75%	67	75%
Religion	2	100%	61	100%
Sociology	6	67%	61	93%
Technology	3	33%	49	0%
Biology	2	0%	48	0%
Other Sciences	1	0%	48	0%
Zoology	2	50%	37	5%
Economics	3	67%	31	55%
Media & Communications	1	100%	31	100%
Arts & Architecture	1	100%	26	100%
Law	1	100%	19	100%
History	1	100%	18	100%
Miscellany	1	0%	16	0%
Psychology	1	0%	15	0%
Library Science	1	100%	12	100%
Chemistry	1	0%	11	0%
Earth Sciences	1	0%	7	0%

# Switzerland

Switzerland's 34 OAWorld journals published 1,995 articles in 2016. Average cost per article in APC-based journals: \$1,772. Overall average: \$1,335.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	32	33	32	30	23	21
%Free	44%	45%	47%	47%	39%	43%
Articles	1,995	1,830	2,306	1,784	2,113	1,448
%Free	25%	28%	32%	39%	34%	42%



**Article Volume, APC Levels, Publisher Category, and Growth**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Large: 150-599	4	50%	1,013	27%
Med.: 60-149	10	10%	768	10%
Small: 20-59	5	20%	99	49%
Smallest: 0-19	13	77%	115	77%

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$1,400+	8	965	\$2,317,568	\$2,402
\$600-\$1,399	9	489	\$340,722	\$697
\$2-\$199	2	49	\$5,124	\$105
Free	15	492		
Total	34	1,995	\$2,663,414	\$1,335

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Traditional	15	0%	1,282	0%
Miscellaneous	8	50%	436	49%
Open Access	1	100%	156	100%
Univ/college	9	100%	121	100%
Society/govt	1	100%	0	

<b>Change 2015-16</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	7	20.6%	
Grew 25-49.9%	3	8.8%	29.4%
Grew 10-24.99%	3	8.8%	38.2%
Even, $\pm$ 9.99%	9	26.5%	64.7%
Shrank 10-24.99%	4	11.8%	76.5%
Shrank 25-49.99%	3	8.8%	85.3%
Shrank 50%+	5	14.7%	

Starting Date



Subjects

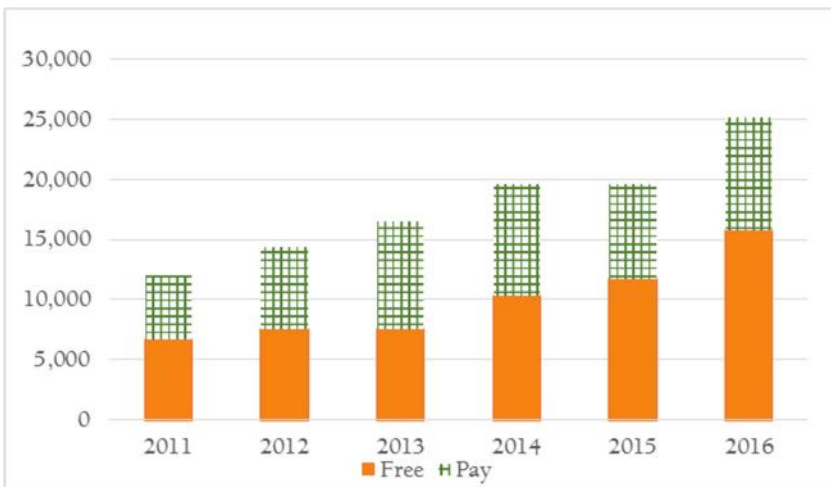
Subject	Journals	%Free	Articles	%Free
Medicine	19	16%	1,155	24%
Biology	2	0%	621	0%
Earth Sciences	1	100%	78	100%
Language & Literature	1	100%	49	100%
Miscellany	1	100%	17	100%
Religion	1	100%	17	100%
Education	2	100%	13	100%
Law	2	100%	13	100%
Library Science	1	100%	11	100%
Sociology	1	100%	9	100%
Agriculture	1	0%	4	0%
Computer Science	1	100%	4	100%
Political Science	1	100%	4	100%

# United Kingdom

The UK's 238 OAWorld journals published 25,163 articles in 2016. Average cost per article in APC-based journals: \$1,087. Overall average: \$404.

## Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	226	226	208	180	147	121
%Free	50%	53%	56%	59%	60%	64%
Articles	25,163	19,594	19,607	16,462	14,352	12,022
%Free	63%	60%	53%	46%	52%	56%



**Article Volume**

	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Largest: 600+	7	57%	14,809	85%
Large: 150-599	13	15%	3,961	15%
Med.: 60-149	50	28%	3,419	28%
Small: 20-59	99	57%	2,435	52%
Smallest: 0-19	57	67%	539	69%

**APC Levels and Revenue**

	<b>Journals</b>	<b>Articles</b>	<b>Revenue</b>	<b>\$/article</b>
\$1,400+	14	2,795	\$5,586,993	\$1,999
\$600-\$1,399	54	3,463	\$3,878,098	\$1,120
\$200-\$599	32	967	\$409,400	\$423
\$2-\$199	13	2,130	\$296,663	\$139
Free	125	15,808		
Total	238	25,163	\$10,171,154	\$404

**Publisher Category**

<b>Category</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Miscellaneous	62	56%	15,606	85%
Traditional	50	8%	3,099	7%
Society/govt	23	70%	2,931	25%
Univ/college	66	83%	2,925	48%
Open Access	37	41%	602	42%



### Starting Date



### Growth and Shrinkage

Change 2015-16	Count	Percent	Cum%
Grew 50%+	65	27.3%	
Grew 25-49.9%	23	9.7%	37.0%
Grew 10-24.99%	24	10.1%	47.1%
Even, ±9.99%	43	18.1%	65.1%
Shrank 10-24.99%	21	8.8%	73.9%
Shrank 25-49.99%	33	13.9%	87.8%
Shrank 50%+	29	12.2%	

**Subjects**

<b>Subject</b>	<b>Journals</b>	<b>%Free</b>	<b>Articles</b>	<b>%Free</b>
Physics	4	25%	7,608	88%
Engineering	7	29%	4,516	83%
Medicine	52	48%	2,207	32%
Chemistry	6	17%	1,984	2%
Biology	11	27%	1,953	65%
Ecology	7	43%	1,700	64%
Other Sciences	3	33%	925	46%
Sociology	15	60%	645	51%
Agriculture	3	0%	563	0%
Education	16	75%	365	40%
History	9	78%	302	90%
Anthropology	10	30%	267	44%
Arts & Architecture	11	82%	256	60%
Language & Literature	15	87%	252	75%
Library Science	8	75%	222	87%
Economics	7	43%	219	14%
Mathematics	5	20%	218	2%
Technology	6	0%	163	0%
Psychology	7	43%	149	28%
Computer Science	5	40%	135	43%
Miscellany	2	50%	103	22%
Media & Communications	6	100%	92	100%
Political Science	7	57%	77	65%
Earth Sciences	3	0%	67	0%
Zoology	3	67%	63	35%
Philosophy	3	100%	44	100%
Law	5	80%	36	69%
Religion	2	50%	32	72%

## Other Western European Countries

These countries have a total of eight OAWorld journals, all free, publishing 390 articles in 2016.

### Journals and Articles

	2016	2015	2014	2013	2012	2011
Journals	8	8	8	6	7	6
Articles	390	315	373	312	297	283



**Article Volume. Publisher Category, Growth, and Subjects**

	<b>Journals</b>	<b>Articles</b>
Large: 150-599	1	220
Med.: 60-149	2	107
Small: 20-59	2	42
Smallest: 0-19	3	21

<b>Category</b>	<b>Journals</b>	<b>Articles</b>
Society/govt	2	223
Univ/college	3	99
Miscellaneous	3	68

<b>Change 2015-16</b>	<b>Count</b>	<b>Percent</b>	<b>Cum%</b>
Grew 50%+	2	25.0%	
Grew 25-49.9%	1	12.5%	37.5%
Grew 10-24.99%	2	25.0%	62.5%
Even, $\pm 9.99\%$	1	12.5%	75.0%
Shrank 25-49.99%	2	25.0%	

<b>Subject</b>	<b>Journals</b>	<b>Articles</b>
Medicine	2	229
Political Science	2	90
Earth Sciences	1	47
Computer Science	1	12
Arts & Architecture	1	9
Sociology	1	3

## Country Summaries

### **Iceland**

Five journals (two university, two society) published 360 articles in 2016.

### **Luxembourg**

Two journals published 21 articles in 2016.

### **Malta**

One university-based journal published nine articles in 2016.

# Country and Region Index

- Africa, 4
- Albania, 126
- Algeria, 14
- Argentina, 131
- Armenia, 126
- Asia, 16
- Australia, 193
- Austria, 210
- Azerbaijan, 126
- Bahamas, 169
- Bangladesh, 19
- Barbados, 169
- Belarus, 127
- Belgium, 213
- Bolivia, Plurinational State of, 169
- Bosnia and Herzegovina, 67
- Brazil, 135
- British Virgin Islands, 169
- Brunei Darussalam, 63
- Bulgaria, 70
- Cambodia, 63
- Cameroon, 14
- Canada, 196
- Chile, 139
- China, 22
- Colombia, 143
- Congo, the Democratic Republic of the, 14
- Costa Rica, 147
- Croatia, 73
- Cuba, 150
- Cyprus, 127
- Czech Republic, 77
- Denmark, 216
- Eastern Europe, 64
- Ecuador, 153
- Egypt, 188
- El Salvador, 170
- Estonia, 81
- Ethiopia, 15
- Finland, 219
- France, 222
- Georgia, 127
- Germany, 226
- Ghana, 15
- Greece, 230
- Guam, 170
- Guatemala, 170
- Hong Kong, 26
- Hungary, 83
- Iceland, 267
- India, 30
- Indonesia, 34

- Iran, Islamic Republic of, 174  
Iraq, 178  
Ireland, 233  
Israel, 188  
Italy, 235  
Jamaica, 170  
Japan, 38  
Jordan, 188  
Kazakhstan, 127  
Kenya, 15  
Korea, Republic of, 41  
Kosova, 127  
Kyrgyzstan, 63  
Latin America, 128  
Latvia, 127  
Lebanon, 189  
Libya, 15  
Lithuania, 86  
Luxembourg, 267  
Macedonia, the Former Yugoslav  
  Republic of, 89  
Madagascar, 15  
Malaysia, 45  
Malta, 267  
Mauritius, 15  
Mexico, 155  
Middle East, 171  
Moldova, Republic of, 92  
Montenegro, 127  
Morocco, 15  
Nepal, 48  
Netherlands, 239  
New Zealand, 200  
Nicaragua, 170  
Nigeria, 5  
Norway, 243  
Oman, 189  
Pacific/English, 190  
Pakistan, 50  
Palestine, State of, 189  
Paraguay, 170  
Peru, 159  
Philippines, 53  
Poland, 95  
Portugal, 246  
Qatar, 189  
Romania, 99  
Russian Federation, 103  
Saudi Arabia, 189  
Serbia, 107  
Singapore, 63  
Slovakia, 111  
Slovenia, 115  
South Africa, 7  
Spain, 250  
Sri Lanka, 63  
Sweden, 254  
Switzerland, 258  
Taiwan, Province of China, 55  
Thailand, 58  
Tunisia, 15  
Turkey, 181  
Uganda, 15  
Ukraine, 119  
United Arab Emirates, 189  
United Kingdom, 261  
United States, 203  
Uruguay, 162  
Venezuela, Bolivarian Republic of,  
  164  
Viet Nam, 63  
Western Europe, 207  
Yemen, 189