# **SpringerOpen trends 2019-2020**

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## **Abstract**

307 SpringerOpen titles for which we have data on journals that were fully open at some point from 2010 to the present were studied, with a primary focus on pricing and status changes from 2019 – 2020 and a secondary focus on longitudinal status changes. Of the 307 titles, 226 are active, fully open access and are still published by SpringerOpen, 40 have ceased publication, 19 were transferred to another publisher, and 18 journals that were formerly open access are now hybrid. 6 of these journals transitioned from free to hybrid in the past year. An additional 2 journals were not found. An additional 2 journals were not found. Of the 226 active journals published by SpringerOpen, 51% charge APCs. The average APC is 1,233 EUR, an increase of 3% over the 2019 average. 46.5% of the 101 journals for which we have 2019 and 2020 data did not change in price; 13.9% decreased in price; and 39.6% increased in price. The extent of change in price was substantial, ranging from a 50% price drop to a 94% price increase.

#### Detail

#### Data sources

- The spreadsheet 2020 Springer Nature fully open access journals was downloaded from the SpringerNature website on May 7, 2020. This is the main source of 2020 data. Pricing is listed in 3 currencies: GBP, EUR, and USD. EUR was selected for analysis, as Springer's headquarters is in Germany so this was considered the primary currency.
- Where the SpringerNature spreadsheet states "see website", information is from the journal's website.
- Data from 2019 was screen-scraped from a price list on the Springer website on July 17, 2019.
- Data from previous years is available and documented as OA Main 2019 Morrison (2019a).

SpringerOpen was launched in June 2010, two years after Springer's acquisition of BioMedCentral (BMC). The history of BMC, its acquisition by Springer and the 2015 acquisition of Springer by Holtzbrinck to form a new company called SpringerNature, is discussed in Shi & Morrison (2020). SpringerOpen (2020) describes its portfolio as 200+ peer-reviewed fully open access journals across all areas of science. In 2012, SpringerOpen expanded their offering to open access books, not covered as it is outside the scope of this project.

We studied 307 journals in total in 2020. 2 of the titles cannot be found this year.

Table 1: 2020 SpringerOpen Journal Publication and APC status summary

Status*	number	percentage	
APC	115		38%
no publication fee	102		33%
ceased publication	40		13%
transferred	19		6%
now hybrid	18		6%
Merged	2		1%
cost not found	9		3%
Total**	306		100%

<sup>\*</sup> status data is found in " 2020 APC publisher website original currency (EUR)" column

#### Status changes 2019-2020

### Of the 306 journals in total

- 37 titles were new in 2020 (included in 2020 overall analysis but not 2019 2020 pricing trend analysis)
- 40 are ceased, 18 now hybrid, 19 transferred to a different publisher, 2 merged with a different journal: these titles are not included in the price trends analysis
- Of the 18 hybrid journals, 6 had switched from open access to hybrid in previous years and 12 transitioned from OA to hybrid in the past year. Of these, 6 had no publication fee in 2018, in 4 cases we could not tell if the journal had a cost or not in 2019 (cost not found), and the other 2 journals had an APC in 2019.
- Besides the changes related to hybrid, there are 33 journals that changed status in 2020. 8 journals ceased publication this year, 6 journals changed from fee to free, 4 journals changed from free to not specify the cost while 3 journals changed the other way, from no specific cost to free. 2 journals transferred to BiomedCentral and 5 journals transferred to a different publisher. Pacific Journal of Mathematics for Industry was state as transferred but has transferred back to SpringerOpen this year.

#### Pricing trends 2019-2020

Total journals included in price trend analysis:

2020 overall: 226

• 2019 – 2020 comparison: 101

<sup>\*\*</sup> total excludes 2 journal titles not found.

Of the 226 journal titles, as illustrated in the chart and table below, an APC amount is confirmed for just over half the journals (51%). 45% are confirmed as having no publication fee, while for 4% of the journals it was not possible to confirm whether or not a publication fee is charged. The journals with no publication fee appear to be supported by subsidies by other organizations. For example, the website for Cybersecurity states: "The publication costs for *Cybersecurity* are covered by the Institute of Information Engineering, CAS so authors do not need to pay an article-processing charge.

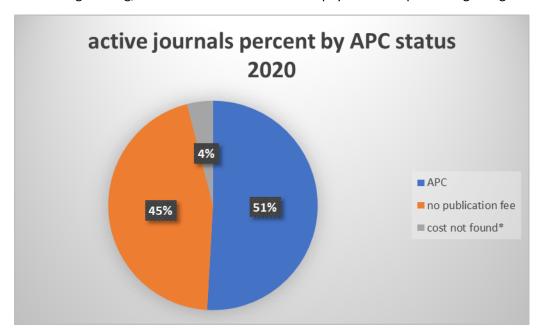


Chart 1: SpringerOpen active titles by APC status (has APC, no publication fee, no cost found)

Table 2: 2020 Springer Open active journals by APC status

status	number	percentage
APC	115	51%
no publication fee	102	45%
cost not found*	9	4%
total	226	100%

<sup>\*</sup> cost not found = we could not identify whether or not there is a publication charge.

#### **APC trends**

Among the 101 journals for which we have an APC amount in both 2019 and 2020, 2019 APC fee ranges from 510 EUR to 2,290 EUR.

Table 3: 2020 and 2019 SpringerOpen APC central tendency in EUR

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	2019	2020	% increase
average	1,212	1,233	2%
median	1,155	1,180	2%

The table above provides the central tendencies for all SpringerOpen titles with an APC for either 2020 (115 journals) or 2019 (117 journals) in EUR. There has been a 2% increase in the average APC and a 2% increase in the median APC. Overall, the pricing change from 2019 to 2020 is relatively modest compared to the 8% increase in the average APC and a 12% increase in the median APC from 2018 to 2019 (Morrison, H., 2019b). However, the average can be deceptive as it masks changes at the level of individual titles.

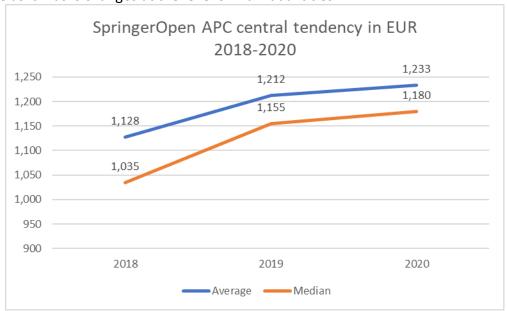


Chart 2: SpringerOpen price trend in EUR (2018-2020)

Price change 2019 - 2020

There are 101 journals for which we have an APC amount in both 2018 and 2019. As illustrated in the Table 4 below, almost half of these journals (46.5%) did not change prices in EUR from 2019 to 2020, while more than a third (39.6%) increased in price and a few (13.9%) decreased in price.

Table 4: SpringerOpen price changes 2019 – 2020 (101 journals)

	Frequency	Percent
decrease	14	14
same	47	47
increase	40	40
Total	101	100*

<sup>\*</sup> note rounding error

The APCs change from 2019 to 2020 ranges from -1230 to 845 EUR. From the percentage perspective, the change ranges from -50% to 94%.

Table 5 range & average of 40 journals with price increases 2019-2020

	Minimum	Maximum	average
APC 2019	650	2,170	1,335
APC 2020	840	2,290	1,474
Change in price	20	845	139
Change in percentage	2%	94%	12%

For the journals that increased in price, the average increase in percentage is 12% which is quite high compare to the euro inflation (1.3%).

Table 6. average of 14 journals that decreased in price 2019-2020

	Minimum	Maximum	average
APC 2019	800	2,480	1,247
APC 2020	690	1,480	1,021
Change in price	-1,230	-10	-226
Change in percentage	-50%	-1%	-15%

For the journals that decrease in price, the price decrease in price range from \$-10 to -1,230. The average decrease in percentage is -15%.

Table 7 below lists all SpringerOpen journals with APC changes from 2019 – 2020 in descending order by % change.

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Journal title	2019 APC	2020 APC	change	change in
	(EUR)	(EUR)	in price	percentage
Insights into Imaging	900	1,745	845	94%
Earth, Planets and Space	900	1,200	300	33%
Complex Adaptive Systems Modeling	885	1,180	295	33%
IPSJ Transactions on Computer Vision and Applications	650	840	190	29%
Journal of Experimental Orthopaedics	1,425	1,690	265	19%
Journal of Orthopaedics and Traumatology	1,745	2,040	295	17%
Journal of the European Optical Society-Rapid	1,450	1,690	240	17%
Publications				
ROBOMECH Journal	950	1,100	150	16%
Nanoscale Research Letters	1,570	1,790	220	14%
European Radiology Experimental	1,309	1,483	175	13%
International Journal of STEM Education	900	990	90	10%
Cancer Nanotechnology	1,180	1,290	110	9%
Boundary Value Problems	1,180	1,290	110	9%
Heritage Science	1,180	1,290	110	9%
Journal of Big Data	1,180	1,290	110	9%
Journal of Inequalities and Applications	1,180	1,290	110	9%
Advances in Difference Equations	1,180	1,290	110	9%
Journal of Internet Services and Applications	885	960	75	8%

Table 7: 2019 -2020 price changes amount and percentage by journal title				
Journal of the Brazilian Computer Society	885	960	75	8%
The Journal of Mathematical Neuroscience	1,290	1,390	100	8%
Chemical and Biological Technologies in Agriculture	1,570	1,690	120	8%
International Journal of Quality Innovation	800	860	60	8%
Injury Epidemiology	1,465	1,570	105	7%
Crime Science	990	1,060	70	7%
Critical Ultrasound Journal	1,870	1,990	120	6%
Intensive Care Medicine Experimental	1,870	1,990	120	6%
Environmental Sciences Europe	2,040	2,170	130	6%
Environmental Systems Research	1,690	1,790	100	6%
Cognitive Research	1,220	1,290	70	6%
Journal of Patient-Reported Outcomes	1,220	1,290	70	6%
Annals of Intensive Care	2,170	2,290	120	6%
EJNMMI Research	2,170	2,290	120	6%
AMB Express	1,790	1,870	80	4%
Sports Medicine - Open	1,790	1,870	80	4%
Botanical Studies	1,690	1,745	55	3%
Genus	960	990	30	3%
Rice	1,990	2,040	50	3%
Open Geospatial Data, Software and Standards	840	860	20	2%
Maxillofacial Plastic and Reconstructive Surgery	1,450	1,480	30	2%
Agricultural and Food Economics	1,000	1,020	20	2%

Table 7: 2019 -2020 price changes amount and percenta	ge by journal t	itle		
Al Perspectives	1,155	1,155	0	0%
Carbon Balance and Management	1,060	1,060	0	0%
International Journal of Bipolar Disorders	1,790	1,790	0	0%
Molecular and Cellular Pediatrics	1,750	1,750	0	0%
Fire Ecology	1,745	1,745	0	0%
European Journal of Hybrid Imaging	1,570	1,570	0	0%
Journal of Ophthalmic Inflammation and Infection	1,450	1,450	0	0%
EJNMMI Physics	1,425	1,425	0	0%
Progress in Earth and Planetary Science	1,300	1,300	0	0%
EPJ Quantum Technology	1,290	1,290	0	0%
EURASIP Journal on Advances in Signal Processing	1,290	1,290	0	0%
EURASIP Journal on Audio, Speech, and Music	1,290	1,290	0	0%
Processing				
EURASIP Journal on Image and Video Processing	1,290	1,290	0	0%
EURASIP Journal on Wireless Communications and	1,290	1,290	0	0%
Networking				
AAPS Open	1,290	1,290	0	0%
Surgical Case Reports	1,250	1,250	0	0%
JA Clinical Reports	1,250	1,250	0	0%
EJNMMI Radiopharmacy and Chemistry	1,230	1,230	0	0%
European Transport Research Review	1,200	1,200	0	0%
Applied Adhesion Science	1,180	1,180	0	0%

Table 7: 2019 -2020 price changes amount and percentag	ge by journal t	itle		
Fashion and Textiles	1,155	1,155	0	0%
International Journal of Concrete Structures and	1,155	1,155	0	0%
Materials				
International Journal of Mechanical and Materials	1,155	1,155	0	0%
Engineering				
Geothermal Energy	1,155	1,155	0	0%
Energy Informatics	1,100	1,100	0	0%
EPJ Data Science	1,100	1,100	0	0%
Visualization in Engineering	1,100	1,100	0	0%
CVIR Endovascular	1,060	1,060	0	0%
Applied Network Science	1,050	1,050	0	0%
Computational Astrophysics and Cosmology	1,000	1,000	0	0%
EPJ Techniques and Instrumentation	1,000	1,000	0	0%
European Journal of Futures Research	1,000	1,000	0	0%
Advanced Modeling and Simulation in Engineering	1,000	1,000	0	0%
Sciences				
Fixed Point Theory and Applications	990	990	0	0%
Human-Centric Computing and Information Sciences	960	960	0	0%
Asian-Pacific Journal of Second and Foreign Language	960	960	0	0%
Education				
Comparative Migration Studies	960	960	0	0%
Journal of Innovation and Entrepreneurship	885	885	0	0%

Table 7: 2019 -2020 price changes amount and percentage	ge by journal t	itle		
Journal of Statistical Distributions and Applications	885	885	0	0%
Language Testing in Asia	885	885	0	0%
Journal of Cloud Computing: Advances, Systems and	860	860	0	0%
Applications				
Psicologia: Reflexão e Crítica	840	840	0	0%
Smart Water	800	800	0	0%
Geoscience Letters	800	800	0	0%
EURASIP Journal on Information Security	760	760	0	0%
Mechanics of Advanced Materials and Modern	690	690	0	0%
Processes				
Journal of Shipping and Trade	650	650	0	0%
Renewables: Wind, Water, and Solar	800	790	-10	-1%
Materials Theory	1,020	990	-30	-3%
Journal of Mathematics in Industry	1,100	1,060	-40	-4%
Advanced Structural and Chemical Imaging	1,100	1,060	-40	-4%
Evidence-Based Endodontics	1,390	1,290	-100	-7%
Computational Social Networks	930	860	-70	-8%
Pastoralism	1,290	1,180	-110	-9%
Autoimmunity Highlights	1,690	1,480	-210	-12%
City, Territory and Architecture	800	690	-110	-14%
Brain Informatics	960	800	-160	-17%
Functional Composite Materials	1,155	860	-295	-26%

Table 7: 2019 -2020 price changes amount and percentage by journal title					
Gynecological Surgery	1,745	1,290	-455	-26%	
International Journal of Corporate Social Responsibility	1,000	690	-310	-31%	
Journal of Wood Science	2,480	1,250	-1,230	-50%	

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