

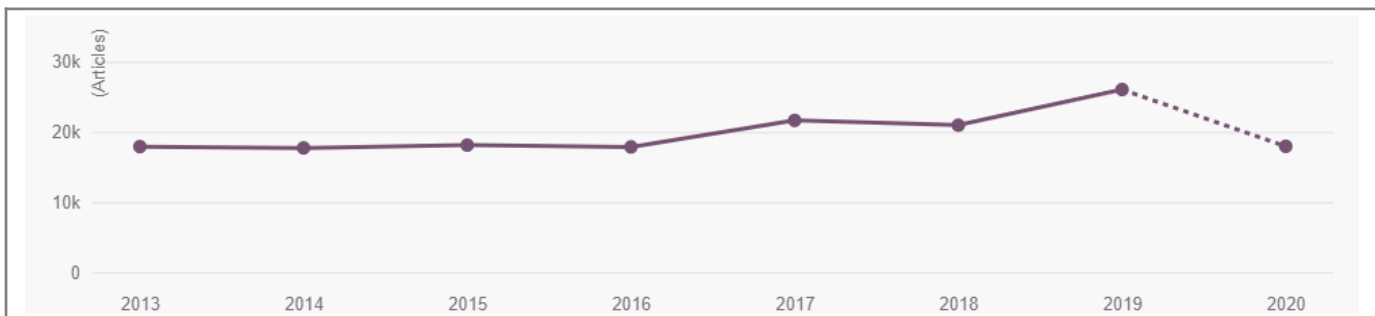
A8760 - Medical and biomedical uses of fields, radiations, and radioactivity; health physics

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Report generated from year 2013 to 2020

<p>Articles published</p> <p>158227 articles published with this Subject classification between 2013 - 2020</p>
<p>Articles published % change</p> <p>Between 2013 - 2019 article output increased 45.40%</p>
<p>Times cited</p> <p>Articles published with this Subject classification between 2013 - 2020 have been cited 290572 times, with an average of 1.84 citations per article</p>

Subject classification over time



#	Year	Articles	% Change	Times cited	Avg times cited
1	2013	17911	n/a	64439	3.60
2	2014	17722	-1.06%	61841	3.49
3	2015	18124	2.27%	52559	2.90
4	2016	17869	-1.41%	43560	2.44
5	2017	21641	21.11%	38643	1.79
6	2018	20966	-3.12%	19879	0.95
7	2019	26042	24.21%	7851	0.30
8	2020	17952	n/a	1800	0.10

Co-occurring concepts

#	Controlled terms	Articles
1	medical image processing	80615
2	biomedical optical imaging	34210
3	biomedical MRI	31463
4	cancer	29132
5	diseases	25795
6	cellular biophysics	21969
7	image segmentation	21813
8	tumours	21459
9	computerised tomography	21327
10	brain	18303
11	biological tissues	17220
12	biomedical ultrasonics	16551
13	image reconstruction	15878
14	feature extraction	15059
15	phantoms	14646
16	image classification	14395
17	learning (artificial intelligence)	13282
18	neurophysiology	12983
19	nanomedicine	12975
20	radiation therapy	12940

Total terms : 5930

#	Subject classifications	Articles
1	A8700 - Biophysics, medical physics, and biomedical engineering	158227
2	A8000 - Cross-disciplinary physics and related areas of science and technology	158227
3	B7000 - Instrumentation and special applications	151888
4	B7500 - Medical physics and biomedical engineering	151273
5	A8770 - Biomedical engineering	147977
6	B7510 - Biomedical measurement and imaging	136577
7	A8770E - Patient diagnostic methods and instrumentation	129102
8	C7000 - Computer applications	91360
9	C7300 - Natural sciences computing	91238
10	C7330 - Biology and medical computing	91222
11	B6000 - Communications	89886
12	B6100 - Information and communication theory	88611
13	C5000 - Computer hardware	88471
14	C5200 - Logic design and digital techniques	88281
15	C5260 - Digital signal processing	88121
16	B6135 - Optical, image and video signal processing	83098
17	C5260B - Computer vision and image processing techniques	82702
18	A8760F - Optical and laser radiation (medical uses)	55125
19	B7510J - Optical and laser radiation (biomedical imaging/measurement)	46687
20	A0000 - General	39035

Total codes : 2294

Top organisations

#	Organisations	Articles
1	Johns Hopkins University Baltimore, USA academic	1698
2	Shanghai Jiao Tong University Shanghai, China academic	1514
3	Stanford University Stanford, USA academic	1502
4	Harvard University Cambridge, USA academic	1420
5	University College London London, UK academic	1381
6	Tsinghua University Beijing, China academic	1269
7	Imperial College London London, UK academic	1128
8	University of Pennsylvania Philadelphia, USA academic	1117
9	Duke University Durham, USA academic	1113
10	University of Michigan Ann Arbor, USA academic	1107

#	Organisations	Articles
11	University of Toronto Toronto, Canada academic	1074
12	Hermann von Helmholtz-Gemeinschaft Deutscher Forschungszentren Bonn, Germany academic	1029
13	University of California Los Angeles Los Angeles, USA academic	915
14	King's College London London, UK academic	900
15	Technische Universität München München, Germany academic	891
16	Massachusetts General Hospital Boston, USA academic	879
17	Washington University in Saint Louis Saint Louis, USA academic	860
18	University of Washington Seattle, USA academic	846
19	Zhejiang University Hangzhou, China academic	846
20	University of Sydney Sydney, Australia academic	818

Total organisations : 9942

Journals

#	Journal	Articles
1	Proceedings of SPIE - Progress in Biomedical Optics and Imaging	11621
2	Proceedings of SPIE	5763
3	Physics in Medicine & Biology	3931
4	arXiv	3425
5	Magnetic Resonance in Medicine	2944
6	Journal of Biomedical Optics	2369
7	Medical Physics	2328
8	Journal of Physics: Conference Series	2070
9	IEEE Transactions on Medical Imaging	1773
10	Medical Physics	1545
11	IEEE Access	1337
12	Journal of Materials Chemistry B	1162
13	IEEE Transactions on Biomedical Engineering	1120
14	AIP Conference Proceedings	1084
15	Biomaterials	1078
16	Radiation Protection Dosimetry	1071
17	Journal of Biophotonics	1044
18	Biosensors and Bioelectronics	963
19	Nanoscale	873
20	Journal of Radioanalytical and Nuclear Chemistry	840

Total journals : 2449

Conferences

#	Conference	Articles
1	2017 IEEE International Ultrasonics Symposium (IUS)	938
2	2015 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC). Proceedings	599
3	2013 35th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)	579
4	2014 36th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)	557
5	2019 41st Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)	519
6	2016 38th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)	485
7	2020 42nd Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC)	451
8	2013 IEEE Nuclear Science Symposium and Medical Imaging Conference (2013 NSS/MIC)	398
9	2017 39th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)	397
10	2019 IEEE International Ultrasonics Symposium (IUS). Proceedings	397
11	2018 40th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)	381
12	2020 IEEE International Ultrasonics Symposium (IUS)	354
13	2020 IEEE 17th International Symposium on Biomedical Imaging (ISBI)	347
14	2015 IEEE 12th International Symposium on Biomedical Imaging (ISBI)	342
15	2014 IEEE International Ultrasonics Symposium (IUS)	325
16	2013 IEEE 10th International Symposium on Biomedical Imaging: From Nano to Macro (ISBI 2013)	316
17	2018 IEEE International Ultrasonics Symposium (IUS)	307
18	2019 IEEE 16th International Symposium on Biomedical Imaging (ISBI 2019)	304
19	2014 IEEE 11th International Symposium on Biomedical Imaging (ISBI 2014)	303
20	2016 IEEE 13th International Symposium on Biomedical Imaging (ISBI). Proceedings	296

Total conferences : 6947

Related controlled terms

#	Controlled terms	Articles
1	medical image processing	80615
2	cancer	29132
3	phantoms	14646
4	radiation therapy	12940
5	biomedical imaging	1701
6	blood flow measurement	1570
7	blood pressure measurement	1009
8	biomedical telemetry	746

Total terms : 8

Related Subject classifications

#	Parent
1	A8700 - Biophysics, medical physics, and biomedical engineering

Total codes : 1

#	Siblings	Articles
1	A8765 - Aerospace biophysics and medical physics (effects of accelerations, weightlessness and environment)	0
2	A8734 - Audition	0
3	A8728 - Bioelectricity	0
4	A8750 - Biological effects of radiations	0
5	A8740 - Biomagnetism	0
6	A8745 - Biomechanics, biorheology, biological fluid dynamics	0
7	A8770 - Biomedical engineering	0
8	A8780 - Biophysical instrumentation and techniques	0
9	A8730 - Biophysics of neurophysiological processes	0
10	A8716 - Biothermics	0
11	A8725 - Cellular biophysics	0
12	A8710 - General, theoretical, and mathematical biophysics	0
13	A8738 - Mechano- and chemio-ceptions	0
14	A8720 - Membrane biophysics	0
15	A8715 - Molecular biophysics	0
16	A8783 - Nanotechnology applications in biomedicine	0
17	A8790 - Other topics in biophysics, medical physics, and biomedical engineering	0
18	A8732 - Physiological optics, vision	0
19	A8736 - Speech and biocommunications	0

Total codes : 19

#	Children	Articles
1	A8760B - Sonic and ultrasonic radiation (medical uses)	
2	A8760D - Electric and magnetic fields (medical uses)	
3	A8760F - Optical and laser radiation (medical uses)	
4	A8760G - Microwaves and other electromagnetic waves (medical uses)	
5	A8760I - Medical magnetic resonance imaging and spectroscopy	
6	A8760J - X-rays and particle beams (medical uses)	
7	A8760K - Nuclear medicine, emission tomography	
8	A8760L - Preparation of radioactive materials for medical and biomedical uses	
9	A8760M - Radiation dosimetry in medical physics	
10	A8760P - Radiation protection in medical physics	
11	A8760R - Radioactive pollution and natural radioactivity: health aspects	

Total codes : 11