Anthony B. Costa

List of Publications by Year
in descending order

57 papers	3,407 citations	257101 24 h-index	197535 49 g-index
60 all docs	60 docs citations	60 times ranked	4859 citing authors

#	Article	IF	Citations
1	Variable generalization performance of a deep learning model to detect pneumonia in chest radiographs: A cross-sectional study. PLoS Medicine, 2018, 15, e1002683.	3.9	771
2	Automated deep-neural-network surveillance of cranial images for acute neurologic events. Nature Medicine, 2018, 24, 1337-1341.	15.2	308
3	Federated learning for predicting clinical outcomes in patients with COVID-19. Nature Medicine, 2021, 27, 1735-1743.	15.2	300
4	Simulated splashes: Elucidating the mechanism of desorption electrospray ionization mass spectrometry. Chemical Physics Letters, 2008, 464, 1-8.	1.2	183
5	Cholesterol Sulfate Imaging in Human Prostate Cancer Tissue by Desorption Electrospray Ionization Mass Spectrometry. Analytical Chemistry, 2010, 82, 3430-3434.	3.2	170
6	Multivariate statistical differentiation of renal cell carcinomas based on lipidomic analysis by ambient ionization imaging mass spectrometry. Analytical and Bioanalytical Chemistry, 2010, 398, 2969-2978.	1.9	137
7	Simulation of atmospheric transport and dropletâ€“thin film collisions in desorption electrospray ionization. Chemical Communications, 2007, , 3915.	2.2	131
8	Lipid Profiles of Canine Invasive Transitional Cell Carcinoma of the Urinary Bladder and Adjacent Normal Tissue by Desorption Electrospray Ionization Imaging Mass Spectrometry. Analytical Chemistry, 2009, 81, 8758-8764.	3.2	119
9	Natural Languageâ€“based Machine Learning Models for the Annotation of Clinical Radiology Reports. Radiology, 2018, 287, 570-580.	3.6	114
10	New ionization methods and miniature mass spectrometers for biomedicine: DESI imaging for cancer diagnostics and paper spray ionization for therapeutic drug monitoring. Faraday Discussions, 2011, 149, 247-267.	1.6	110
11	An attention based deep learning model of clinical events in the intensive care unit. PLoS ONE, 2019, 14, e0211057.	1.1	108
12	Federated Learning of Electronic Health Records to Improve Mortality Prediction in Hospitalized Patients With COVID-19: Machine Learning Approach. JMIR Medical Informatics, 2021, 9, e24207.	1.3	108
13	Multivariate Statistical Identification of Human Bladder Carcinomas Using Ambient Ionization Imaging Mass Spectrometry. Chemistry - A European Journal, 2011, 17, 2897-2902.	1.7	99
14	Rapid direct lipid profiling of bacteria using desorption electrospray ionization mass spectrometry. International Journal of Mass Spectrometry, 2011, 301, 37-44.	0.7	92
15	Emerging Blockchain Technology Solutions for Modern Healthcare Infrastructure. Journal of Scientific Innovation in Medicine, 2019, 2, .	0.1	61
16	Navigation-Linked Heads-Up Display in Intracranial Surgery: Early Experience. Operative Neurosurgery, 2018, 15, 184-193.	0.4	59
17	Data quality in tissue analysis using desorption electrospray ionization. Analytical and Bioanalytical Chemistry, 2011, 401, 1949-1961.	1.9	52
18	Combining Initial Radiographs and Clinical Variables Improves Deep Learning Prognostication in Patients with COVID-19 from the Emergency Department. Radiology: Artificial Intelligence, 2021, 3, e200098.	3.0	47

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19	Direct detection of fatty acid ethyl esters using low temperature plasma (LTP) ambient ionization mass spectrometry for rapid bacterial differentiation. Analyst, The, 2011, 136, 3091.	1.7	37
20	Circular arrays of polymer-based miniature rectilinear ion traps. Analyst, The, 2009, 134, 1338.	1.7	28
21	Relationship between dynamical entropy and energy dissipation far from thermodynamic equilibrium. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 16339-16343.	3.3	28
22	United States regulatory approval of medical devices and software applications enhanced by artificial intelligence. Health Policy and Technology, 2019, 8, 192-197.	1.3	26
23	Use of Mixed Reality Visualization in Endoscopic Endonasal Skull Base Surgery. Operative Neurosurgery, 2020, 19, 43-52.	0.4	26
24	Operator experience determines performance in a simulated computer-based brain tumor resection task. International Journal of Computer Assisted Radiology and Surgery, 2015, 10, 1853-1862.	1.7	25
25	Neurosurgical Skills Assessment: Measuring Technical Proficiency in Neurosurgery Residents Through Intraoperative Video Evaluations. World Neurosurgery, 2016, 89, 1-8.	0.7	25
26	Predicting adult neuroscience intensive care unit admission from emergency department triage using a retrospective, tabular-free text machine learning approach. Scientific Reports, 2021, 11, 1381.	1.6	20
27	A technical comparison of thrombectomy vacuum aspiration systems. Journal of NeuroInterventional Surgery, 2020, 12, 72-76.	2.0	16
28	Combination of Active Transfer Learning and Natural Language Processing to Improve Liver Volumetry Using Surrogate Metrics with Deep Learning. Radiology: Artificial Intelligence, 2019, 1, e180019.	3.0	15
29	Beacon: Exploring the Deployment and Application of Intel Xeon Phi Coprocessors for Scientific Computing. Computing in Science and Engineering, 2015, 17, 1-1.	1.2	14
30	Peritumoral Edema Relative to Meningioma Size Predicts Functional Outcomes after Resection in Older Patients. Operative Neurosurgery, 2019, 16, 281-291.	0.4	14
31	A Virtual-Reality, 360-Degree Fly-Through of an Arteriovenous Malformation Resection: 2-Dimensional Operative Video. Operative Neurosurgery, 2020, 18, E11-E11.	0.4	14
32	Stereoscopic virtual reality does not improve knowledge acquisition of congenital heart disease. International Journal of Cardiovascular Imaging, 2021, 37, 2283-2290.	0.7	14
33	Therapeutic hypothermia for intracerebral hemorrhage: Systematic review and meta-analysis of the experimental and clinical literature. International Journal of Stroke, 2022, 17, 506-516.	2.9	13
34	Big omics data experience. , 2015, 2015, .		9
35	Origin of chiral selectivity in gas-phase serine tetramers. Physical Chemistry Chemical Physics, 2011, 13, 877-885.	1.3	8
36	Robotic surgical rehearsal on patient-specific 3D-printed skull models for stereoelectroencephalography (SEEG). International Journal of Computer Assisted Radiology and Surgery, 2019, 14, 139-145.	1.7	8

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37	Scalable, effective, and rapid decontamination of SARS-CoV-2 contaminated N95 respirators using germicidal ultraviolet C (UVC) irradiation device. Scientific Reports, 2021, 11, 19970.	1.6	8
38	Detecting insertion, substitution, and deletion errors in radiology reports using neural sequence-to-sequence models. Annals of Translational Medicine, 2019, 7, 233-233.	0.7	7
39	Stimulating the Facial Nerve to Treat Ischemic Stroke: A Systematic Review. Frontiers in Neurology, 2021, 12, 753182.	1.1	7
40	Differential Subsampling with Cartesian Ordering for Ultrafast Highâ€Resolution MRA in the Assessment of Intracranial Aneurysms. Journal of Neuroimaging, 2020, 30, 40-44.	1.0	6
41	Deep anomaly detection of seizures with paired stereoelectroencephalography and video recordings. Scientific Reports, 2021, 11, 7482.	1.6	6
42	Quantitative Computed Tomography Ventriculography for Assessment and Monitoring of Hydrocephalus: A Pilot Study and Description of Method in Subarachnoid Hemorrhage. World Neurosurgery, 2017, 104, 136-141.	0.7	5
43	Mitral valve repair based on physical characterization of coaptation forces. Journal of Thoracic and Cardiovascular Surgery, 2020, 159, e181-e183.	0.4	5
44	Extending the length and time scales of Gramâ€“Schmidt Lyapunov vector computations. Journal of Computational Physics, 2013, 246, 113-122.	1.9	4
45	Cerebral Radiation Necrosis: An Analysis of Clinical and Quantitative Imaging and Volumetric Features. World Neurosurgery, 2018, 111, e485-e494.	0.7	3
46	Body Mass Index Correlates with Skin to Spinal Canal Distance: A Large Retrospective Singleâ€Center Study. Journal of Neuroimaging, 2020, 30, 896-900.	1.0	3
47	Extensivity and additivity of the Kolmogorov-Sinai entropy for simple fluids. Physical Review E, 2017, 95, 022102.	0.8	2
48	335â€ƒA Modular, Multimodality Integrative Pipeline for Neurosurgery Simulation and Visualization. Neurosurgery, 2016, 63, 198.	0.6	1
49	2527 Mount Sinai health hackathon: Harnessing the power of collaboration to advance experiential team science education. Journal of Clinical and Translational Science, 2018, 2, 58-58.	0.3	1
50	Patient-Specific Cranial Nerve Identification Using a Discrete Deformable Contour Model for Skull Base Neurosurgery Planning and Simulation. Lecture Notes in Computer Science, 2016, , 36-44.	1.0	1
51	FEASIBILITY OF RAPIDLY CREATING HIGH RESOLUTION VIRTUAL THREE-DIMENSIONAL MODELS OF ANOMALOUS AORTIC ORIGIN OF CORONARY ARTERIES. Journal of the American College of Cardiology, 2017, 69, 645.	1.2	0
52	Artificial intelligence as applied to clinical neurological conditions. , 2021, , 395-413.		0
53	The THRIVE COVID-19 Fellowship: Creating a Forum for Collaborative Team Science and Innovation Development. ISMMS Journal of Science and Medicine, 2021, 1, .	0.1	0
54	A Comparative Study of Industry and Open-Source Efforts for 3D Visualization, Pre- and Intraoperative Planning, and 3D Printing of Skull Base Tumors: A Case Report. Journal of Neurological Surgery, Part B: Skull Base, 2017, 78, S1-S156.	0.4	0

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55	The Novel Use of 3D Reconstruction and Immersive Neuronavigation for Resection of Skull Base Lesions in Endoscopic Endonasal Skull Base Surgery. Journal of Neurological Surgery, Part B: Skull Base, 2017, 78, S1-S156.	0.4	0
56	Outils innovants pour guider la rÃ©paration mitraleÂ: mÃ©thodes et perspectives. Bulletin De L'Academie Nationale De Medecine, 2020, 204, 500-507.	0.0	0
57	Population scale latent space cohort matching for the improved use and exploration of observational trial data. Mathematical Biosciences and Engineering, 2022, 19, 6795-6813.	1.0	0