Anthony B. Costa

List of Publications by Citations

56 papers	2,216 citations	21 h-index	47 g-index
60 ext. papers	2,862 ext. citations	5.8 avg, IF	5.05 L-index

#	Paper	IF	Citations
56	Variable generalization performance of a deep learning model to detect pneumonia in chest radiographs: A cross-sectional study. *PLoS Medicine*, **2018**, 15, e1002683	11.6	390
55	Automated deep-neural-network surveillance of cranial images for acute neurologic events. *Nature Medicine*, **2018**, 24, 1337-1341	50.5	200
54	Simulated splashes: Elucidating the mechanism of desorption electrospray ionization mass spectrometry. *Chemical Physics Letters*, **2008**, 464, 1-8	2.5	167
53	Cholesterol sulfate imaging in human prostate cancer tissue by desorption electrospray ionization mass spectrometry. *Analytical Chemistry*, **2010**, 82, 3430-4	7.8	149
52	Simulation of atmospheric transport and droplet-thin film collisions in desorption electrospray ionization. *Chemical Communications*, **2007**, 3915-7	5.8	124
51	Multivariate statistical differentiation of renal cell carcinomas based on lipidomic analysis by ambient ionization imaging mass spectrometry. *Analytical and Bioanalytical Chemistry*, **2010**, 398, 2969-78	4.4	122
50	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, 8758-64	7.8	108
49	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, 247-67; discussion 333-56	3.6	104
48	Multivariate statistical identification of human bladder carcinomas using ambient ionization imaging mass spectrometry. *Chemistry - A European Journal*, **2011**, 17, 2897-902	4.8	94
47	Rapid direct lipid profiling of bacteria using desorption electrospray ionization mass spectrometry. *International Journal of Mass Spectrometry*, **2011**, 301, 37-44	1.9	82
46	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	0.4	78
45	Natural Language-based Machine Learning Models for the Annotation of Clinical Radiology Reports. *Radiology*, **2018**, 287, 570-580	20.5	77
44	An attention based deep learning model of clinical events in the intensive care unit. *PLoS ONE*, **2019**, 14, e0211057	3.7	56
43	Data quality in tissue analysis using desorption electrospray ionization. *Analytical and Bioanalytical Chemistry*, **2011**, 401, 1949-61	4.4	44
42	Federated learning for predicting clinical outcomes in patients with COVID-19. *Nature Medicine*, **2021**, 27, 1735-1743	50.5	41
41	Navigation-Linked Heads-Up Display in Intracranial Surgery: Early Experience. *Operative Neurosurgery*, **2018**, 15, 184-193	1.6	39
40	Direct detection of fatty acid ethyl esters using low temperature plasma (LTP) ambient ionization mass spectrometry for rapid bacterial differentiation. *Analyst, The*, **2011**, 136, 3091-7	5	35

39	Emerging Blockchain Technology Solutions for Modern Healthcare Infrastructure. *Journal of Scientific Innovation in Medicine*, **2019**, 2,	1.8	29
38	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	3.6	29
37	Circular arrays of polymer-based miniature rectilinear ion traps. *Analyst, The*, **2009**, 134, 1338-47	5	25
36	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, 16339-43	11.5	24
35	Operator experience determines performance in a simulated computer-based brain tumor resection task. *International Journal of Computer Assisted Radiology and Surgery*, **2015**, 10, 1853-62	3.9	21
34	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	8.7	21
33	Neurosurgical Skills Assessment: Measuring Technical Proficiency in Neurosurgery Residents Through Intraoperative Video Evaluations. *World Neurosurgery*, **2016**, 89, 1-8	2.1	20
32	Use of Mixed Reality Visualization in Endoscopic Endonasal Skull Base Surgery. *Operative Neurosurgery*, **2020**, 19, 43-52	1.6	12
31	United States regulatory approval of medical devices and software applications enhanced by artificial intelligence. *Health Policy and Technology*, **2019**, 8, 192-197	4.8	11
30	Beacon: Exploring the Deployment and Application of Intel Xeon Phi Coprocessors for Scientific Computing. *Computing in Science and Engineering*, **2015**, 17, 1-1	1.5	11
29	Federated Learning of Electronic Health Records Improves Mortality Prediction in Patients Hospitalized with COVID-19 **2020**,		9
28	A technical comparison of thrombectomy vacuum aspiration systems. *Journal of NeuroInterventional Surgery*, **2020**, 12, 72-76	7.8	9
27	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	8.7	8
26	Origin of chiral selectivity in gas-phase serine tetramers. *Physical Chemistry Chemical Physics*, **2011**, 13, 877-85	3.6	8
25	Big Omics Data Experience **2015**, 2015,		8
24	Peritumoral Edema Relative to Meningioma Size Predicts Functional Outcomes after Resection in Older Patients. *Operative Neurosurgery*, **2019**, 16, 281-291	1.6	6
23	A Virtual-Reality, 360-Degree Fly-Through of an Arteriovenous Malformation Resection: 2-Dimensional Operative Video. *Operative Neurosurgery*, **2020**, 18, E11	1.6	6
22	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	4.9	6

No.	Title	IF	Cites
21	Federated Learning used for predicting outcomes in SARS-COV-2 patients **2021**,		6
20	Extending the length and time scales of Gram‑Schmidt Lyapunov vector computations. *Journal of Computational Physics*, **2013**, 246, 113-122	4.1	4
19	Scalable, effective, and rapid decontamination of SARS-CoV-2 contaminated N95 respirators using germicidal ultraviolet C (UVC) irradiation device. *Scientific Reports*, **2021**, 11, 19970	4.9	4
18	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	3.9	4
17	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	2.1	3
16	Cerebral Radiation Necrosis: An Analysis of Clinical and Quantitative Imaging and Volumetric Features. *World Neurosurgery*, **2018**, 111, e485-e494	2.1	3
15	Mitral valve repair based on physical characterization of coaptation forces. *Journal of Thoracic and Cardiovascular Surgery*, **2020**, 159, e181-e183	1.5	3
14	Stereoscopic virtual reality does not improve knowledge acquisition of congenital heart disease. *International Journal of Cardiovascular Imaging*, **2021**, 37, 2283-2290	2.5	3
13	Extensivity and additivity of the Kolmogorov-Sinai entropy for simple fluids. *Physical Review E*, **2017**, 95, 022102	2.4	2
12	Detecting insertion, substitution, and deletion errors in radiology reports using neural sequence-to-sequence models. *Annals of Translational Medicine*, **2019**, 7, 233	3.2	2
11	Deep anomaly detection of seizures with paired stereoelectroencephalography and video recordings. *Scientific Reports*, **2021**, 11, 7482	4.9	2
10	Therapeutic hypothermia for intracerebral hemorrhage: Systematic review and meta-analysis of the experimental and clinical literature. *International Journal of Stroke*, **2021**, 17474930211044870	6.3	2
9	Stimulating the Facial Nerve to Treat Ischemic Stroke: A Systematic Review. *Frontiers in Neurology*, **2021**, 12, 753182	4.1	1
8	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	0.9	1
7	Body Mass Index Correlates with Skin to Spinal Canal Distance: A Large Retrospective Single-Center Study. *Journal of Neuroimaging*, **2020**, 30, 896-900	2.8	1
6	Differential Subsampling with Cartesian Ordering for Ultrafast High-Resolution MRA in the Assessment of Intracranial Aneurysms. *Journal of Neuroimaging*, **2020**, 30, 40-44	2.8	0
5	Outils innovants pour guider la réparation mitrale : méthodes et perspectives. *Bulletin De L'Academie Nationale De Medecine*, **2020**, 204, 500-507	0.1	
4	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	1.5	

LIST OF PUBLICATIONS

3	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	1.5
2	Artificial intelligence as applied to clinical neurological conditions **2021**, 395-413	5
1	Population scale latent space cohort matching for the improved use and exploration of observational trial data. *Mathematical Biosciences and Engineering*, **2022**, 19, 6795-6813	2.1