Albert Hsiao

List of Publications by Year
in descending order

64 papers	1,715 citations	331670 21 h-index	302126 39 g-index
66 all docs	66 docs citations	66 times ranked	2470 citing authors

#	Article	IF	Citations
1	COPDGeneÂ® 2019: Redefining the Diagnosis of Chronic Obstructive Pulmonary Disease. Chronic Obstructive Pulmonary Diseases (Miami, Fla), 2019, 6, 384-399.	0.7	112
2	Congenital heart disease assessment with 4D flow MRI. Journal of Magnetic Resonance Imaging, 2015, 42, 870-886.	3.4	103
3	Rapid Pediatric Cardiac Assessment of Flow and Ventricular Volume With Compressed Sensing Parallel Imaging Volumetric Cine Phase-Contrast MRI. American Journal of Roentgenology, 2012, 198, W250-W259.	2.2	92
4	VAMPIRE microarray suite: a web-based platform for the interpretation of gene expression data. Nucleic Acids Research, 2005, 33, W627-W632.	14.5	86
5	Venous and arterial flow quantification are equally accurate and precise with parallel imaging compressed sensing 4D phase contrast MRI. Journal of Magnetic Resonance Imaging, 2013, 37, 1419-1426.	3.4	82
6	Evaluation of Valvular Insufficiency and Shunts with Parallel-imaging Compressed-sensing 4D Phase-contrast MR Imaging with Stereoscopic 3D Velocity-fusion Volume-rendered Visualization. Radiology, 2012, 265, 87-95.	7.3	78
7	Automated CT and MRI Liver Segmentation and Biometry Using a Generalized Convolutional Neural Network. Radiology: Artificial Intelligence, 2019, 1, 180022.	5.8	78
8	Deep Learning Single-Frame and Multiframe Super-Resolution for Cardiac MRI. Radiology, 2020, 295, 552-561.	7.3	74
9	Selective modulation of promoter recruitment and transcriptional activity of PPARÎ³. Biochemical and Biophysical Research Communications, 2007, 364, 515-521.	2.1	67
10	Machine Learning and Deep Neural Networks in Thoracic and Cardiovascular Imaging. Journal of Thoracic Imaging, 2019, 34, 192-201.	1.5	67
11	Deep Learning Localization of Pneumonia. Journal of Thoracic Imaging, 2020, 35, W87-W89.	1.5	67
12	4D flow MRI quantification of mitral and tricuspid regurgitation: Reproducibility and consistency relative to conventional MRI. Journal of Magnetic Resonance Imaging, 2018, 48, 1147-1158.	3.4	64
13	Ferumoxytol as an off-label contrast agent in body 3T MR angiography: a pilot study in children. Pediatric Radiology, 2015, 45, 831-839.	2.0	53
14	Improved cardiovascular flow quantification with time-resolved volumetric phase-contrast MRI. Pediatric Radiology, 2011, 41, 711-720.	2.0	48
15	Inlet and outlet valve flow and regurgitant volume may be directly and reliably quantified with accelerated, volumetric phaseâ€contrast MRI. Journal of Magnetic Resonance Imaging, 2015, 41, 376-385.	3.4	48
16	Robust 4D flow denoising using divergenceâ€free wavelet transform. Magnetic Resonance in Medicine, 2015, 73, 828-842.	3.0	46
17	Thrombin receptor and RhoA mediate cell proliferation through integrins and cysteineâ€rich protein 61. FASEB Journal, 2008, 22, 4011-4021.	0.5	43
18	Deep Learningâ€"based Prescription of Cardiac MRI Planes. Radiology: Artificial Intelligence, 2019, 1, e180069.	5.8	40

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19	Evaluation of atrial septal defects with 4D flow MRIâ€"multilevel and inter-reader reproducibility for quantification of shunt severity. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2019, 32, 269-279.	2.0	34
20	Cloud-processed 4D CMR flow imaging for pulmonary flow quantification. European Journal of Radiology, 2016, 85, 1849-1856.	2.6	32
21	Qualitative grading of aortic regurgitation: a pilot study comparing CMR 4D flow and echocardiography. International Journal of Cardiovascular Imaging, 2016, 32, 301-307.	1.5	28
22	Role of Pulse Pressure and Geometry of Primary Entry Tear in Acute Type B Dissection Propagation. Annals of Biomedical Engineering, 2017, 45, 592-603.	2.5	23
23	Artificial intelligence and machine learning in aortic disease. Current Opinion in Cardiology, 2021, 36, 695-703.	1.8	23
24	Automated CT Staging of Chronic Obstructive Pulmonary Disease Severity for Predicting Disease Progression and Mortality with a Deep Learning Convolutional Neural Network. Radiology: Cardiothoracic Imaging, 2021, 3, e200477.	2.5	22
25	Improved quantification and mapping of anomalous pulmonary venous flow with fourâ€dimensional phaseâ€contrast MRI and interactive streamline rendering. Journal of Magnetic Resonance Imaging, 2015, 42, 1765-1776.	3.4	19
26	Augmenting Interpretation of Chest Radiographs With Deep Learning Probability Maps. Journal of Thoracic Imaging, 2020, 35, 285-293.	1.5	19
27	Deployment of artificial intelligence for radiographic diagnosis of COVIDâ€19 pneumonia in the emergency department. Journal of the American College of Emergency Physicians Open, 2020, 1, 1459-1464.	0.7	19
28	Automated selection of myocardial inversion time with a convolutional neural network: Spatial temporal ensemble myocardium inversion network (STEMIâ€NET). Magnetic Resonance in Medicine, 2019, 81, 3283-3291.	3.0	17
29	Clinical performance of a free-breathing spatiotemporally accelerated 3-D time-resolved contrast-enhanced pediatric abdominal MR angiography. Pediatric Radiology, 2015, 45, 1635-1643.	2.0	13
30	Clinical Performance and Role of Expert Supervision of Deep Learning for Cardiac Ventricular Volumetry: A Validation Study. Radiology: Artificial Intelligence, 2020, 2, e190064.	5.8	13
31	Early Hemodynamic Response Assessment of Stereotactic Radiosurgery for a Cerebral Arteriovenous Malformation Using 4D Flow MRI. American Journal of Neuroradiology, 2018, 39, 678-681.	2.4	12
32	Fully automated convolutional neural network-based affine algorithm improves liver registration and lesion co-localization on hepatobiliary phase T1-weighted MR images. European Radiology Experimental, 2019, 3, 43.	3.4	12
33	4D Flow Vorticity Visualization Predicts Regions of Quantitative Flow Inconsistency for Optimal Blood Flow Measurement. Radiology: Cardiothoracic Imaging, 2020, 2, e190054.	2.5	12
34	Quantification of the Hemodynamic Changes of Cirrhosis with Freeâ€Breathing Selfâ€Navigated <scp>MRI</scp>. Journal of Magnetic Resonance Imaging, 2021, 53, 1410-1421.	3.4	12
35	Hemodynamic Assessment of Structural Heart Disease Using 4D Flow MRI: How We Do It. American Journal of Roentgenology, 2021, 217, 1322-1332.	2.2	12
36	Volumetric segmentationâ€free method for rapid visualization of vascular wall shear stress using 4D flow MRI. Magnetic Resonance in Medicine, 2018, 80, 748-755.	3.0	11

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37	4D Flow MRI Quantification of Congenital Shunts: Comparison to Invasive Catheterization. Radiology: Cardiothoracic Imaging, 2021, 3, e200446.	2.5	10
38	Deep Learning Automated Background Phase Error Correction for Abdominopelvic 4D Flow MRI. Radiology, 2022, 302, 584-592.	7.3	9
39	Assessment of Regional Variability in COVID-19 Outcomes Among Patients With Cancer in the United States. JAMA Network Open, 2022, 5, e2142046.	5.9	9
40	Improving the Fontan: Pre-surgical planning using four dimensional (4D) flow, bio-mechanical modeling and three dimensional (3D) printing. Progress in Pediatric Cardiology, 2016, 43, 57-60.	0.4	8
41	Fontan Revision: Presurgical Planning Using Four-Dimensional (4D) Flow and Three-Dimensional (3D) Printing. World Journal for Pediatric & Congenital Heart Surgery, 2019, 10, 245-249.	0.8	7
42	Optimizing the diagnosis and assessment of chronic thromboembolic pulmonary hypertension with advancing imaging modalities. Pulmonary Circulation, 2021, 11, 1-12.	1.7	7
43	Automated segmentation of multiparametric magnetic resonance images for cerebral AVM radiosurgery planning: a deep learning approach. Scientific Reports, 2022, 12, 786.	3.3	7
44	Automating Scoliosis Measurements in Radiographic Studies with Machine Learning: Comparing Artificial Intelligence and Clinical Reports. Journal of Digital Imaging, 2022, 35, 524-533.	2.9	7
45	May-Thurner syndrome in patients with postural orthostatic tachycardia syndrome and Ehlers-Danlos syndrome: a case series. European Heart Journal - Case Reports, 2022, 6, .	0.6	7
46	Pelvic Blood Flow Predicts Fibroid Volume and Embolic Required for Uterine Fibroid Embolization: A Pilot Study With 4D Flow MR Angiography. American Journal of Roentgenology, 2018, 210, 189-200.	2.2	6
47	Convolutional neural network-automated hepatobiliary phase adequacy evaluation may optimize examination time. European Journal of Radiology, 2020, 124, 108837.	2.6	6
48	Image Annotation by Eye Tracking: Accuracy and Precision of Centerlines of Obstructed Small-Bowel Segments Placed Using Eye Trackers. Journal of Digital Imaging, 2019, 32, 855-864.	2.9	5
49	Quantification of hemodynamics of cerebral arteriovenous malformations after stereotactic radiosurgery using <scp>4D</scp> flow <scp>magnetic resonance imaging</scp>. Journal of Magnetic Resonance Imaging, 2021, 53, 1841-1850.	3.4	5
50	Computationally Efficient Cardiac Views Projection Using 3D Convolutional Neural Networks. Lecture Notes in Computer Science, 2017, , 109-116.	1.3	5
51	Radiologist-supervised Transfer Learning. Journal of Thoracic Imaging, 2022, 37, 90-99.	1.5	5
52	CNN-based Deformable Registration Facilitates Fast and Accurate Air Trapping Measurements at Inspiratory and Expiratory CT. Radiology: Artificial Intelligence, 2022, 4, e210211.	5.8	5
53	Automated Deep Learning Analysis for Quality Improvement of CT Pulmonary Angiography. Radiology: Artificial Intelligence, 2022, 4, e210162.	5.8	5
54	Prevalence of Venovenous Shunting and High-Output State Quantified with 4D Flow MRI in Patients with Fontan Circulation. Radiology: Cardiothoracic Imaging, 2021, 3, e210161.	2.5	5

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55	Bivariate microarray analysis: statistical interpretation of two-channel functional genomics data. Systems and Synthetic Biology, 2008, 2, 95-104.	1.0	3
56	Reader Perceptions and Impact of AI on CT Assessment of Air Trapping. Radiology: Artificial Intelligence, 2022, 4, e210160.	5.8	3
57	Multimodality Imaging of Pulmonary Hypertension. Advances in Pulmonary Hypertension, 2019, 18, 115-125.	0.1	2
58	Mitral Valve Prolapseâ€"The Role of Cardiac Imaging Modalities. Structural Heart, 2022, , 100024.	0.6	2
59	Anomalous Systemic Arterial Supply to Normal Basal Segments of the Lung. Radiology: Cardiothoracic Imaging, 2022, 4, .	2.5	2
60	Molecular Imaging of the Transplanted Heart: A Mechanistic Approach to Graft Survival. Current Cardiovascular Imaging Reports, 2017, 10, 1.	0.6	1
61	4D Flow Cardiac Magnetic Resonance Uncovers the Cause of Bioprosthetic Pulmonary Valve Dysfunction. JACC: Case Reports, 2019, 1, 485-486.	0.6	1
62	Left Circumflex Coronary Arteryâ€"toâ€"Coronary Sinus Fistula with Coronary Sinus Ostial Atresia and a Persistent Left Superior Vena Cava in an Adult Patient. Radiology: Cardiothoracic Imaging, 2022, 4, .	2.5	1
63	Beyond the AJR: Potential of Deep Learning Image Classification for Chest Radiography. American Journal of Roentgenology, 0, , .	2.2	0
64	Deep Learning Radiographic Assessment of Pulmonary Edema: Optimizing Clinical Performance, Training With Serum Biomarkers. IEEE Access, 2022, 10, 48577-48588.	4.2	0