

# Leon Axel

## List of Publications by Year in descending order

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106  
papers

7,208  
citations

100601

38  
h-index

64407

83  
g-index

110  
all docs

110  
docs citations

110  
times ranked

8911  
citing authors

#	ARTICLE	IF	CITATIONS
1	Analysis of three-chamber view conventional and tagged cine MRI in patients with suspected hypertrophic cardiomyopathy. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 2020, 33, 613-626.	1.1	0
2	The discrete Fourier transform for golden angle linogram sampling. <i>Inverse Problems</i> , 2019, 35, 125004.	1.0	1
3	Clinical Cardiac Magnetic Resonance Imaging Techniques. <i>Contemporary Cardiology</i> , 2019, , 17-50.	0.0	2
4	Analysis of Three-Chamber View Tagged Cine MRI in Patients with Suspected Hypertrophic Cardiomyopathy. <i>Lecture Notes in Computer Science</i> , 2019, , 425-432.	1.0	0
5	Two-dimensional XD-GRASP provides better image quality than conventional 2D cardiac cine MRI for patients who cannot suspend respiration. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 2018, 31, 49-59.	1.1	2
6	Magnetic resonance imaging of myocardial strain: A review of current approaches. <i>Journal of Magnetic Resonance Imaging</i> , 2017, 46, 1263-1280.	1.9	49
7	Recent Advances in Cardiovascular Magnetic Resonance. <i>Circulation: Cardiovascular Imaging</i> , 2017, 10, .	1.3	111
8	Use of self-gated radial cardiovascular magnetic resonance to detect and classify arrhythmias (atrial) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 2017, 18, 83.	1.6	12
9	Multi-cycle Reconstruction of Cardiac MRI for the Analysis of Inter-ventricular Septum Motion During Free Breathing. <i>Lecture Notes in Computer Science</i> , 2017, 10263, 63-72.	1.0	1
10	Summary, Conclusions, and Future Directions of Heart Mechanics with MRI. , 2017, , 679-707.		0
11	Quantitative Perfusion Analysis of First-Pass Contrast Enhancement Kinetics: Application to MRI of Myocardial Perfusion in Coronary Artery Disease. <i>PLoS ONE</i> , 2016, 11, e0162067.	1.1	7
12	Accelerated MRI for the assessment of cardiac function. <i>British Journal of Radiology</i> , 2016, 89, 20150655.	1.0	33
13	The Mitral Valve in Obstructive Hypertrophic Cardiomyopathy. <i>Journal of the American College of Cardiology</i> , 2016, 67, 1846-1858.	1.2	191
14	XDâ€œGRASP: Goldenâ€œangle radial MRI with reconstruction of extra motionâ€œstate dimensions using compressed sensing. <i>Magnetic Resonance in Medicine</i> , 2016, 75, 775-788.	1.9	452
15	Stress Cardiac <scp>MRI</scp> in Women With Myocardial Infarction and Nonobstructive Coronary Artery Disease. <i>Clinical Cardiology</i> , 2016, 39, 596-602.	0.7	34
16	Analysis of cardiac interventricular septum motion in different respiratory states. , 2016, , .		1
17	Real time dynamic MRI by exploiting spatial and temporal sparsity. <i>Magnetic Resonance Imaging</i> , 2016, 34, 473-482.	1.0	23
18	Calibrationless Parallel Dynamic MRI with Joint Temporal Sparsity. <i>Lecture Notes in Computer Science</i> , 2016, , 95-102.	1.0	1

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19	Clearance systems in the brain—implications for Alzheimer disease. <i>Nature Reviews Neurology</i> , 2015, 11, 457-470.	4.9	1,127
20	Meshless deformable models for 3D cardiac motion and strain analysis from tagged MRI. <i>Magnetic Resonance Imaging</i> , 2015, 33, 146-160.	1.0	10
21	Golden-angle radial sparse parallel MRI: Combination of compressed sensing, parallel imaging, and golden-angle radial sampling for fast and flexible dynamic volumetric MRI. <i>Magnetic Resonance in Medicine</i> , 2014, 72, 707-717.	1.9	527
22	Compressed sensing with synchronized cardio-respiratory sparsity for free-breathing cine MRI: initial comparative study on patients with arrhythmias. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2014, 16, 017.	1.6	8
23	Deformable models with sparsity constraints for cardiac motion analysis. <i>Medical Image Analysis</i> , 2014, 18, 927-937.	7.0	34
24	Towards a five-minute comprehensive cardiac MR examination using highly accelerated parallel imaging with a 32-element coil array: Feasibility and initial comparative evaluation. <i>Journal of Magnetic Resonance Imaging</i> , 2013, 38, 180-188.	1.9	18
25	Arrhythmia insensitive rapid cardiac $T_1$ mapping pulse sequence. <i>Magnetic Resonance in Medicine</i> , 2013, 70, 1274-1282.	1.9	56
26	Response to Letters Regarding Article, “Mechanisms of Myocardial Infarction in Women Without Angiographically Obstructive Coronary Artery Disease.” <i>Circulation</i> , 2012, 126, .	1.6	0
27	Computational Biomechanics for Medicine. , 2011, 2011, 143-155.		2
28	Rapid cardiac T1 mapping within two heartbeats. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2011, 13, .	1.6	3
29	Combination of compressed sensing and parallel imaging with respiratory motion correction for highly-accelerated cardiac perfusion MRI. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2011, 13, .	1.6	15
30	Integrated quantitative first-pass cardiac perfusion MRI protocol. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2011, 13, .	1.6	0
31	Quantitative contrast-enhanced first-pass cardiac perfusion MRI at 3 tesla with accurate arterial input function and myocardial wall enhancement. <i>Journal of Magnetic Resonance Imaging</i> , 2011, 34, 676-684.	1.9	15
32	Mechanisms of Myocardial Infarction in Women Without Angiographically Obstructive Coronary Artery Disease. <i>Circulation</i> , 2011, 124, 1414-1425.	1.6	380
33	Incompressible Biventricular Model Construction and Heart Segmentation of 4D Tagged MRI. , 2011, , 143-155.		1
34	Image-guided radio-frequency gain calibration for high-field MRI. <i>NMR in Biomedicine</i> , 2010, 23, 368-374.	1.6	15
35	Rapid $B_1$ mapping using a preconditioning RF pulse with TurboFLASH readout. <i>Magnetic Resonance in Medicine</i> , 2010, 64, 439-446.	1.9	199
36	Combination of compressed sensing and parallel imaging for highly accelerated first-pass cardiac perfusion MRI. <i>Magnetic Resonance in Medicine</i> , 2010, 64, 767-776.	1.9	456

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37	Numerical and in vivo validation of fast cine displacement-encoded with stimulated echoes (DENSE) MRI for quantification of regional cardiac function. <i>Magnetic Resonance in Medicine</i> , 2009, 62, 682-690.	1.9	29
38	Utility of cardiac MRI in detecting diastolic dysfunction: comparison with Doppler echocardiography and tissue Doppler imaging. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2009, 11, .	1.6	2
39	Late gadolinium enhancement and T2 MR imaging features of cardiac sarcoidosis involving the left and right ventricle. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2009, 11, .	1.6	0
40	Dependence of arterial input function on position in the left ventricle and time in the cardiac cycle. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2009, 11, .	1.6	0
41	Quantitative assessment of intramyocardial function using Cine DENSE MRI: a validation study. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2009, 11, P177.	1.6	0
42	Myocardial first-pass perfusion cardiovascular magnetic resonance: history, theory, and current state of the art. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2008, 10, 18.	1.6	185
43	Comparison of the effectiveness of saturation pulses in the heart at 3T. <i>Magnetic Resonance in Medicine</i> , 2008, 59, 209-215.	1.9	31
44	Semiautomated Segmentation of Myocardial Contours for Fast Strain Analysis in Cine Displacement-Encoded MRI. <i>IEEE Transactions on Medical Imaging</i> , 2008, 27, 1084-1094.	5.4	65
45	Clinical Cardiac MRI Techniques. , 2008, , 33-77.		1
46	Theory-Based Signal Calibration with Single-Point T1 Measurements for First-Pass Quantitative Perfusion MRI Studies. <i>Academic Radiology</i> , 2006, 13, 686-693.	1.3	70
47	Advances in MRI tagging techniques for determining regional myocardial strain. <i>Current Cardiology Reports</i> , 2006, 8, 53-58.	1.3	29
48	Multislice, dual-imaging sequence for increasing the dynamic range of the contrast-enhanced blood signal and CNR of myocardial enhancement at 3T. <i>Journal of Magnetic Resonance Imaging</i> , 2006, 23, 81-86.	1.9	55
49	In-vivo motion analysis of bi-ventricular hearts from tagged MR images. , 2005, 5746, 184.		0
50	Computational Modeling and Simulation of Heart Ventricular Mechanics from Tagged MRI. <i>Lecture Notes in Computer Science</i> , 2005, , 369-383.	1.0	2
51	B0 and B1-insensitive uniform T1-weighting for quantitative, first-pass myocardial perfusion magnetic resonance imaging. <i>Magnetic Resonance in Medicine</i> , 2005, 54, 1423-1429.	1.9	38
52	Tagged magnetic resonance imaging of the heart: a survey. <i>Medical Image Analysis</i> , 2005, 9, 376-393.	7.0	107
53	Three-dimensional systolic kinematics of the right ventricle. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2005, 289, H1826-H1833.	1.5	75
54	Volumetric heart modeling and analysis. <i>Communications of the ACM</i> , 2005, 48, 43-48.	3.3	15

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55	Computational modeling and simulation of heart ventricular mechanics with tagged MRI. , 2005, , .		4
56	Quantification of the curvature and shape of the interventricular septum. Magnetic Resonance in Medicine, 2004, 52, 154-163.	1.9	22
57	Increasing the signal-to-noise ratio in DENSE MRI by combining displacement-encoded echoes. Magnetic Resonance in Medicine, 2004, 52, 188-192.	1.9	37
58	Cerebral Perfusion CT Techniques. Radiology, 2004, 233, 935-935.	3.6	2
59	In vivo strain and stress estimation of the heart left and right ventricles from MRI images. Medical Image Analysis, 2003, 7, 435-444.	7.0	82
60	Interaction between noise suppression and inhomogeneity correction in MRI. , 2003, 5032, .		22
61	Left Ventricle Composite Material Model for Stress-Strain Analysis. Lecture Notes in Computer Science, 2003, , 218-229.	1.0	6
62	Tagged MRI-Based Studies of Cardiac Function. Lecture Notes in Computer Science, 2003, , 1-7.	1.0	1
63	Biomechanical Dynamics of the Heart with MRI. Annual Review of Biomedical Engineering, 2002, 4, 321-347.	5.7	51
64	Automated Segmentation of the Left and Right Ventricles in 4D Cardiac SPAMM Images. Lecture Notes in Computer Science, 2002, 2488, 620-633.	1.0	28
65	In-vivo Strain and Stress Estimation of the Left Ventricle from MRI Images. Lecture Notes in Computer Science, 2002, , 706-713.	1.0	7
66	Ultrafast three-dimensional contrast-enhanced magnetic resonance angiography and imaging in the diagnosis of partial anomalous pulmonary venous drainage. Journal of the American College of Cardiology, 2001, 37, 1120-1128.	1.2	81
67	Validation of in vivo myocardial strain measurement by magnetic resonance tagging with sonomicrometry. Journal of the American College of Cardiology, 2001, 38, 555-561.	1.2	101
68	Dynamic Cardiomyoplasty Decreases Myocardial Workload as Assessed by Tissue Tagged MRI. ASAIO Journal, 2000, 46, 556-562.	0.9	4
69	Cardiac-respiratory gating method for magnetic resonance imaging of the heart. Magnetic Resonance in Medicine, 2000, 43, 314-318.	1.9	18
70	Three-dimensional motion reconstruction and analysis of the right ventricle using tagged MRI. Medical Image Analysis, 2000, 4, 335-355.	7.0	501
71	Assessment of Synchronized Direct Mechanical Ventricular Actuation in a Canine Model of Left Ventricular Dysfunction. ASAIO Journal, 2000, 46, 756-760.	0.9	6
72	Focal Hypertrophic Cardiomyopathy Simulating a Mass. American Journal of Roentgenology, 2000, 174, 242-244.	1.0	30

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73	Cascaded MRI-SPAMM for LV motion analysis during a whole cardiac cycle. International Journal of Medical Informatics, 1999, 55, 117-126.	1.6	17
74	Effect of dobutamine on regional left ventricular function measured by tagged magnetic resonance imaging in normal subjects. American Journal of Cardiology, 1999, 83, 412-417.	0.7	51
75	Recognition of infarct localization by specific changes in intramural myocardial mechanics. American Heart Journal, 1999, 138, 1038-1045.	1.2	27
76	Right ventricular regional function using MR tagging: Normals versus chronic pulmonary hypertension. Magnetic Resonance in Medicine, 1998, 39, 116-123.	1.9	71
77	Integrated MRI assessment of regional function and perfusion in canine myocardial infarction. Magnetic Resonance in Medicine, 1998, 40, 311-326.	1.9	31
78	Scimitar Syndrome. Circulation, 1998, 98, 1583-1584.	1.6	12
79	Determination of Global Function and Regional Mechanics of Dynamic Cardiomyoplasty Using Magnetic Resonance Imaging. ASAIO Journal, 1998, 44, M491-M495.	0.9	8
80	Characterization of and correction for artifacts in linogram MRI. Magnetic Resonance in Medicine, 1997, 37, 275-284.	1.9	8
81	Global cardiac function using fast breath-hold MRI: Validation of new acquisition and analysis techniques. Magnetic Resonance in Medicine, 1997, 37, 683-692.	1.9	86
82	A dual approach to linogram imaging for MRI. Magnetic Resonance in Medicine, 1997, 38, 337-341.	1.9	6
83	Myocardial function in infarcted and remote regions early after infarction in man: Assessment by magnetic resonance tagging and strain analysis. Magnetic Resonance in Medicine, 1997, 38, 803-810.	1.9	88
84	Angiotensin-converting enzyme inhibition limits dysfunction in adjacent noninfarcted regions during left ventricular remodeling. Journal of the American College of Cardiology, 1996, 27, 211-217.	1.2	43
85	Myocardial perfusion and function in dogs with moderate coronary stenosis. Magnetic Resonance in Medicine, 1996, 35, 771-780.	1.9	91
86	Analysis of left ventricular wall motion based on volumetric deformable models and MRI-SPAMM. Medical Image Analysis, 1996, 1, 53-71.	7.0	189
87	Correction of motion artifacts in linogram and projection reconstruction MRI using geometry and consistency constraints. Medical Physics, 1996, 23, 251-262.	1.6	26
88	An improved quadrature or phased-array coil for MR cardiac imaging. Magnetic Resonance in Medicine, 1995, 34, 186-193.	1.9	62
89	Efficient Method for Selecting Cardiac Magnetic Resonance Image Locations. Investigative Radiology, 1992, 27, 91-92.	3.5	18
90	Evaluation of Aortic Regurgitation by Cardiac Cine Magnetic Resonance Imaging: Planar Analysis and Comparison to Doppler Echocardiography. Cardiology, 1991, 78, 340-347.	0.6	35

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91	Evaluation of mitral regurgitation by cine magnetic resonance imaging. American Journal of Cardiology, 1990, 66, 621-625.	0.7	56
92	Magnetic resonance imaging of blood flow. Magnetic Resonance in Medicine, 1990, 14, 171-171.	1.9	1
93	Hydrogen ultrathin phase-encoded spectroscopy (HUPSPEC). Magnetic Resonance in Medicine, 1990, 14, 507-521.	1.9	0
94	Correction of phase wrapping in magnetic resonance imaging. Medical Physics, 1989, 16, 284-287.	1.6	39
95	Magnetic resonance angiography by selective inversion recovery using a compact gradient echo sequence. Magnetic Resonance in Medicine, 1988, 8, 96-103.	1.9	79
96	Correlation of Cine MR Imaging with Two-Dimensional Pulsed Doppler Echocardiography in Valvular Insufficiency. Journal of Computer Assisted Tomography, 1987, 11, 627-632.	0.5	58
97	A computer simulation of nuclear magnetic resonance imaging. Magnetic Resonance in Medicine, 1986, 3, 363-376.	1.9	35
98	A time-of-flight method of measuring flow velocity by magnetic resonance imaging. Magnetic Resonance Imaging, 1986, 4, 199-205.	1.0	56
99	Chemical-Shift Magnetic Resonance Imaging of Two-Line Spectra by Gradient Reversal. Magnetic Resonance in Medicine, 1985, 2, 428-436.	1.9	15
100	Vascular Occlusions Detected by Magnetic Resonance Imaging. Magnetic Resonance in Medicine, 1985, 2, 540-554.	1.9	5
101	Ectopic embryo detection using real-time sonography. Journal of Clinical Ultrasound, 1985, 13, 545-554.	0.4	5
102	Noise performance of surface coils for magnetic resonance imaging at 1.5 T. Medical Physics, 1985, 12, 604-607.	1.6	99
103	Potential problems with selective pulses in NMR imaging systems. Medical Physics, 1984, 11, 772-777.	1.6	51
104	Surface Coil Magnetic Resonance Imaging. Journal of Computer Assisted Tomography, 1984, 8, 381-384.	0.5	82
105	Tissue Mean Transit Time from Dynamic Computed Tomography by a Simple Deconvolution Technique. Investigative Radiology, 1983, 18, 94-99.	3.5	217
106	Visualization and Analysis of Multidimensional Cardiovascular Magnetic Resonance Imaging: Challenges and Opportunities. Frontiers in Cardiovascular Medicine, 0, 9, .	1.1	2