David E Sosnovik

List of Publications by Year
in descending order

60 papers	2,877 citations	257429 24 h-index	175241 52 g-index
64 all docs	64 docs citations	64 times ranked	4079 citing authors

#	Article	IF	Citations
1	Cardiac macrophages promote diastolic dysfunction. Journal of Experimental Medicine, 2018, 215, 423-440.	8.5	314
2	Emerging concepts in molecular MRI. Current Opinion in Biotechnology, 2007, 18, 4-10.	6.6	218
3	Magnetic nanoparticles for MR imaging: agents, techniques and cardiovascular applications. Basic Research in Cardiology, 2008, 103, 122-130.	5.9	208
4	Fluorescence Tomography and Magnetic Resonance Imaging of Myocardial Macrophage Infiltration in Infarcted Myocardium In Vivo. Circulation, 2007, 115, 1384-1391.	1.6	185
5	In vivo diffusion tensor MRI of the human heart: Reproducibility of breathâ€hold and navigatorâ€based approaches. Magnetic Resonance in Medicine, 2013, 70, 454-465.	3.0	145
6	A 128-channel receive-only cardiac coil for highly accelerated cardiac MRI at 3 Tesla. Magnetic Resonance in Medicine, 2008, 59, 1431-1439.	3.0	142
7	Diffusion MR tractography of the heart. Journal of Cardiovascular Magnetic Resonance, 2009, 11, 47.	3.3	136
8	Molecular Magnetic Resonance Imaging in Cardiovascular Medicine. Circulation, 2007, 115, 2076-2086.	1.6	135
9	Cellular Imaging of Inflammation in Atherosclerosis Using Magnetofluorescent Nanomaterials. Molecular Imaging, 2006, 5, 7290.2006.00009.	1.4	124
10	Hypoxia treatment reverses neurodegenerative disease in a mouse model of Leigh syndrome. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E4241-E4250.	7.1	117
11	Diffusion Spectrum MRI Tractography Reveals the Presence of a Complex Network of Residual Myofibers in Infarcted Myocardium. Circulation: Cardiovascular Imaging, 2009, 2, 206-212.	2.6	103
12	Molecular MRI of Cardiomyocyte Apoptosis With Simultaneous Delayed-Enhancement MRI Distinguishes Apoptotic and Necrotic Myocytes In Vivo. Circulation: Cardiovascular Imaging, 2009, 2, 460-467.	2.6	92
13	Reproducibility of in-vivo diffusion tensor cardiovascular magnetic resonance in hypertrophic cardiomyopathy. Journal of Cardiovascular Magnetic Resonance, 2012, 14, 86.	3.3	78
14	Diffusion MRI in the heart. NMR in Biomedicine, 2017, 30, e3426.	2.8	77
15	Dual-Phase Cardiac Diffusion Tensor Imaging with Strain Correction. PLoS ONE, 2014, 9, e107159.	2.5	72
16	Fiber architecture in remodeled myocardium revealed with a quantitative diffusion CMR tractography framework and histological validation. Journal of Cardiovascular Magnetic Resonance, 2012, 14, 70.	3.3	71
17	Microstructural Impact of Ischemia and Bone Marrowâ€“Derived Cell Therapy Revealed With Diffusion Tensor Magnetic Resonance Imaging Tractography of the Heart In Vivo. Circulation, 2014, 129, 1731-1741.	1.6	65
18	Functional brown adipose tissue limits cardiomyocyte injury and adverse remodeling in catecholamine-induced cardiomyopathy. Journal of Molecular and Cellular Cardiology, 2015, 84, 202-211.	1.9	56

#	Article	IF	Citations
19	Molecular MRI Detects Low Levels of Cardiomyocyte Apoptosis in a Transgenic Model of Chronic Heart Failure. Circulation: Cardiovascular Imaging, 2009, 2, 468-475.	2.6	50
20	Myocardial Scar Delineation Using Diffusion Tensor Magnetic Resonance Tractography. Journal of the American Heart Association, 2018, 7, .	3.7	39
21	Diffusion Tractography of the Entire Left Ventricle by Using Free-breathing Accelerated Simultaneous Multisection Imaging. Radiology, 2017, 282, 850-856.	7.3	35
22	Magnetic resonance and fluorescence based molecular imaging technologies. , 2005, 62, 83-115.		33
23	Highly potent visnagin derivatives inhibit Cyp1 and prevent doxorubicin cardiotoxicity. JCI Insight, 2018, 3, .	5.0	31
24	Heatâ€induced Radiolabeling of Nanoparticles for Monocyte Tracking by PET. Angewandte Chemie - International Edition, 2015, 54, 13002-13006.	13.8	29
25	Native T₁ reference values for nonischemic cardiomyopathies and populations with increased cardiovascular risk: A systematic review and metaâ€analysis. Journal of Magnetic Resonance Imaging, 2018, 47, 891-912.	3.4	28
26	Molecular Imaging in Cardiovascular Magnetic Resonance Imaging. Topics in Magnetic Resonance Imaging, 2008, 19, 59-68.	1.2	24
27	Cardiac MRI in mice at 9.4 Tesla with a transmitâ€receive surface coil and a cardiacâ€tailored intensityâ€correction algorithm. Journal of Magnetic Resonance Imaging, 2007, 26, 279-287.	3.4	21
28	Theranostic Nucleic Acid Binding Nanoprobe Exerts Anti-inflammatory and Cytoprotective Effects in Ischemic Injury. Theranostics, 2017, 7, 814-825.	10.0	21
29	Evaluation of antitumor activity and cardiac toxicity of a bone-targeted ph-sensitive liposomal formulation in a bone metastasis tumor model in mice. Nanomedicine: Nanotechnology, Biology, and Medicine, 2017, 13, 1693-1701.	3.3	19
30	Targeted imaging of myocardial damage. Nature Clinical Practice Cardiovascular Medicine, 2008, 5, S63-S70.	3.3	18
31	A Novel Transgenic Mouse Model of Cardiac Hypertrophy and Atrial Fibrillation. Journal of Atrial Fibrillation, 2012, 4, 415.	0.5	17
32	Freeâ€breathing diffusion tensor MRI of the whole left ventricle using secondâ€order motion compensation and multitasking respiratory motion correction. Magnetic Resonance in Medicine, 2021, 85, 2634-2648.	3.0	16
33	Blood Oxygen Levelâ€“Dependent MRI of the Myocardium with Multiecho Gradient-Echo Spin-Echo Imaging. Radiology, 2020, 294, 538-545.	7.3	14
34	Functional and anatomical characterization of brown adipose tissue in heart failure with blood oxygen level dependent magnetic resonance. NMR in Biomedicine, 2016, 29, 978-984.	2.8	12
35	Alteration in ventricular pressure stimulates cardiac repair and remodeling. Journal of Molecular and Cellular Cardiology, 2019, 133, 174-187.	1.9	12
36	Detection and Characterization of Thrombosis in Humans Using Fibrin-Targeted Positron Emission Tomography and Magnetic Resonance. JACC: Cardiovascular Imaging, 2022, 15, 504-515.	5.3	12

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37	In Vivo Nanoparticle Assessment of Pathological Endothelium Predicts the Development of Inflow Stenosis in Murine Arteriovenous Fistula. Arteriosclerosis, Thrombosis, and Vascular Biology, 2015, 35, 189-196.	2.4	10
38	Accelerated in Vivo Cardiac Diffusion-Tensor MRI Using Residual Deep Learningâ€“based Denoising in Participants with Obesity. Radiology: Cardiothoracic Imaging, 2021, 3, e200580.	2.5	10
39	Molecular MRI of the Cardiovascular System in the Post-NSF Era. Current Cardiovascular Imaging Reports, 2013, 6, 61-68.	0.6	8
40	Motionâ€Induced Signal Loss in In Vivo Cardiac Diffusionâ€Weighted Imaging. Journal of Magnetic Resonance Imaging, 2020, 51, 319-320.	3.4	7
41	Fluorescence microscopy tensor imaging representations for large-scale dataset analysis. Scientific Reports, 2020, 10, 5632.	3.3	7
42	Optimized 64â€channel array configurations for accelerated simultaneous multislice acquisitions in 3T cardiac MRI. Magnetic Resonance in Medicine, 2021, 86, 2276-2289.	3.0	7
43	Molecular imaging of myocardial injury: A magnetofluorescent approach. Current Cardiovascular Imaging Reports, 2009, 2, 33-39.	0.6	6
44	Biomedical Imaging in Experimental Models of Cardiovascular Disease. Circulation Research, 2022, 130, 1851-1868.	4.5	6
45	Multiplexed Optical Imaging of Energy Substrates Reveals That Left Ventricular Hypertrophy Is Associated With Brown Adipose Tissue Activation. Circulation: Cardiovascular Imaging, 2018, 11, e007007.	2.6	5
46	Magnetic Resonance-Based Characterization of Myocardial Architecture. Heart Failure Clinics, 2021, 17, 85-101.	2.1	5
47	Non-invasive imaging of plaque vulnerability: an important tool for the assessment of agents to stabilise atherosclerotic plaques. Expert Opinion on Investigational Drugs, 2002, 11, 693-704.	4.1	4
48	Will Molecular MR Imaging Play a Role in Identification and Treatment of Patients with Vulnerable Atherosclerotic Plaques?. Radiology, 2009, 251, 309-310.	7.3	4
49	Imaging the Microstructure of the Human Fetal Heart. Circulation: Cardiovascular Imaging, 2018, 11, e008298.	2.6	4
50	Manifoldâ€based respiratory phase estimation enables motion and distortion correction of freeâ€breathing cardiac diffusion tensor MRI. Magnetic Resonance in Medicine, 2022, 87, 474-487.	3.0	3
51	Balancing Speed and Accuracy in Cardiac Magnetic Resonance Function Post-Processing: Comparing 2 Levels of Automation in 3 Vendors to Manual Assessment. Diagnostics, 2021, 11, 1758.	2.6	3
52	Seeing What We Buildâ€”The Need for New Imaging Techniques in Myocardial Regeneration. Journal of the American Heart Association, 2015, 4, .	3.7	2
53	PET/MR Imaging of Atherosclerosis. JACC: Cardiovascular Imaging, 2018, 11, 302-304.	5.3	2
54	A novel tracer for in vivo optical imaging of fatty acid metabolism in the heart and brown adipose tissue. Scientific Reports, 2020, 10, 11209.	3.3	2

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55	Advances in cardiac PET/MR imaging: Facilitating cutting-edge structural and biological phenotyping of the cardiovascular system. Journal of Nuclear Cardiology, 2021, 28, 2026-2029.	2.1	2
56	Validation of cardiac diffusion tensor imaging sequences: A multicentre testâ€“retest phantom study. NMR in Biomedicine, 2022, 35, e4685.	2.8	2
57	Measurement of radial artery contrast intensity to assess cardiac microbubble behavior. Journal of the American Society of Echocardiography, 2003, 16, 1267-1273.	2.8	1
58	Science to Practice: How Will Myocardial Inflammation Be Imaged with MR Imaging?. Radiology, 2012, 264, 309-311.	7.3	1
59	Noninvasive Tissue Characterization of Post-Infarction Myocardium. JACC: Cardiovascular Imaging, 2018, 11, 1257-1259.	5.3	1
60	Multiparametric Molecular Imaging of Atherosclerosis. Circulation: Cardiovascular Imaging, 2020, 13, e010494.	2.6	0