Samuel Patz

List of Publications by Year
in descending order

84 papers	6,002 citations	136740 32 h-index	76769 74 g-index
87 all docs	87 docs citations	87 times ranked	6581 citing authors

#	Article	IF	Citations
1	Magnetic resonance elastography to study the effect of amyloid plaque accumulation in a mouse model. Journal of Neuroimaging, 2022, , .	1.0	2
2	MRI in the Assessment of Cardiopulmonary Interaction. , 2021, , 619-631.		1
3	REVIEW: MR elastography of brain tumors. NeuroImage: Clinical, 2020, 25, 102109.	1.4	65
4	Magnetic Resonance Elastography reveals effects of anti-angiogenic glioblastoma treatment on tumor stiffness and captures progression in an orthotopic mouse model. Cancer Imaging, 2020, 20, 35.	1.2	11
5	Imaging localized neuronal activity at fast time scales through biomechanics. Science Advances, 2019, 5, eaav3816.	4.7	32
6	Characterization of glioblastoma in an orthotopic mouse model with magnetic resonance elastography. NMR in Biomedicine, 2018, 31, e3840.	1.6	25
7	Cover image, Volume 31 Issue 10. NMR in Biomedicine, 2018, 31, e3825.	1.6	0
8	Relationship between Cough-Associated Changes in CSF Flow and Disease Severity in Chiari I Malformation: An Exploratory Study Using Real-Time MRI. American Journal of Neuroradiology, 2018, 39, 1267-1272.	1.2	11
9	Hyperpolarized 129Xenon MRI of the Lung. Medical Radiology, 2017, , 99-124.	0.0	0
10	Cough-Associated Changes in CSF Flow in Chiari I Malformation Evaluated by Real-Time MRI. American Journal of Neuroradiology, 2016, 37, 825-830.	1.2	17
11	Novel MR Imaging Applications for Pleural evaluation. Magnetic Resonance Imaging Clinics of North America, 2015, 23, 179-195.	0.6	15
12	Chapter 19. Xenon Septal Uptake. New Developments in NMR, 2015, , 336-364.	0.1	0
13	XeNA: An automated â€˜open-sourceâ€™ 129Xe hyperpolarizer for clinical use. Magnetic Resonance Imaging, 2014, 32, 541-550.	1.0	57
14	A portable singleâ€sided magnet system for remote NMR measurements of pulmonary function. NMR in Biomedicine, 2014, 27, 1479-1489.	1.6	14
15	Physiology-Based MR Imaging Assessment of CSF Flow at the Foramen Magnum with a Valsalva Maneuver. American Journal of Neuroradiology, 2013, 34, 1857-1862.	1.2	27
16	Singleâ€breath xenon polarization transfer contrast (SBâ€XTC): Implementation and initial results in healthy humans. Journal of Magnetic Resonance Imaging, 2013, 37, 457-470.	1.9	31
17	Near-unity nuclear polarization with an open-source ¹²⁹ Xe hyperpolarizer for NMR and MRI. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 14150-14155.	3.3	193
18	The Kety-Schmidt Technique for Quantitative Perfusion and Oxygen Metabolism Measurements in the MR Imaging Environment. American Journal of Neuroradiology, 2013, 34, E100-E102.	1.2	2

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19	Quantification of Age-Related and per Diopter Accommodative Changes of the Lens and Ciliary Muscle in the Emmetropic Human Eye. , 2013, 54, 1095.		88
20	Evidence of Adult Lung Growth in Humans. New England Journal of Medicine, 2012, 367, 1566-1567.	13.9	5
21	Evidence for Adult Lung Growth in Humans. New England Journal of Medicine, 2012, 367, 244-247.	13.9	237
22	The relationship between plasma amyloid-Î² peptides and the medial temporal lobe in the homebound elderly. International Journal of Geriatric Psychiatry, 2011, 26, 593-601.	1.3	11
23	Diffusion of hyperpolarized¹²⁹Xe in the lung: a simplified model of¹²⁹Xe septal uptake and experimental results. New Journal of Physics, 2011, 13, 015009.	1.2	78
24	Cough-Associated Headache in Patients with Chiari I Malformation: CSF Flow Analysis by Means of Cine Phase-Contrast MR Imaging. American Journal of Neuroradiology, 2011, 32, 739-742.	1.2	29
25	Inhalation heterogeneity from subresidual volumes in elite divers. Journal of Applied Physiology, 2010, 109, 1969-1973.	1.2	12
26	25-Hydroxyvitamin D, dementia, and cerebrovascular pathology in elders receiving home services. Neurology, 2010, 74, 18-26.	1.5	273
27	Quantitative Assessment of Bronchial Wall Attenuation With Thin-Section CT: An Indicator of Airflow Limitation in Chronic Obstructive Pulmonary Disease. American Journal of Roentgenology, 2010, 195, 363-369.	1.0	40
28	Quantitative CT Measurement of Cross-sectional Area of Small Pulmonary Vessel in COPD. Academic Radiology, 2010, 17, 93-99.	1.3	123
29	Exploring collagen self-assembly by NMR. Physical Chemistry Chemical Physics, 2010, 12, 14169.	1.3	4
30	Toward C13 hyperpolarized biomarkers produced by thermal mixing with hyperpolarized X129e. Journal of Chemical Physics, 2009, 131, 044508.	1.2	10
31	Diffusion Tensor Imaging, White Matter Lesions, the Corpus Callosum, and Gait in the Elderly. Stroke, 2009, 40, 3816-3820.	1.0	95
32	Science to Practice: How Do We Interpret the Transfer of Hyperpolarized¹²⁹Xe from Blood into Alveolar Gas?. Radiology, 2009, 252, 319-321.	3.6	2
33	Lung Motion and Volume Measurement by Dynamic 3D MRI Using a 128-Channel Receiver Coil. Academic Radiology, 2009, 16, 22-27.	1.3	34
34	Hyperpolarized Gas MR Imaging of the Lung: Current Status as a Research Tool. Journal of Thoracic Imaging, 2009, 24, 181-188.	0.8	32
35	MRI of Pulmonary Ventilation. Medical Radiology, 2009, , 35-90.	0.0	0
36	Human Pulmonary Imaging and Spectroscopy with Hyperpolarized 129Xe at 0.2T. Academic Radiology, 2008, 15, 713-727.	1.3	121

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37	Functional MR Imaging of the Lung. Magnetic Resonance Imaging Clinics of North America, 2008, 16, 275-289.	0.6	23
38	Large Production System for Hyperpolarized 129Xe for Human Lung Imaging Studies. Academic Radiology, 2008, 15, 683-692.	1.3	137
39	Posture-dependent Human 3He Lung Imaging in an Open-access MRI System. Academic Radiology, 2008, 15, 728-739.	1.3	17
40	Hyperpolarized 129Xe MRI: A viable functional lung imaging modality?. European Journal of Radiology, 2007, 64, 335-344.	1.2	130
41	Dr Bert et al replies. Academic Radiology, 2007, 14, 117-118.	1.3	0
42	T₁ and T₂ measurements of the fine structures of the in vivo and enucleated human eye. Journal of Magnetic Resonance Imaging, 2007, 26, 510-518.	1.9	32
43	High-Resolution MR Imaging of the Human Eye 2005. Academic Radiology, 2006, 13, 368-378.	1.3	33
44	Pilocarpine's effects on the blood-aqueous barrier of the human eye as assessed by high-resolution, contrast magnetic resonance imaging. Experimental Eye Research, 2006, 82, 458-464.	1.2	21
45	Demonstration of an Anterior Diffusional Pathway for Solutes in the Normal Human Eye with High Spatial Resolution Contrast-Enhanced Dynamic MR Imaging. , 2006, 47, 5153.		47
46	Orbitofrontal correlates of aggression and impulsivity in psychiatric patients. Psychiatry Research - Neuroimaging, 2006, 147, 213-220.	0.9	64
47	The Nutrition, Aging, and Memory in Elders (NAME) study: design and methods for a study of micronutrients and cognitive function in a homebound elderly population. International Journal of Geriatric Psychiatry, 2006, 21, 519-528.	1.3	66
48	Magnetic resonance imaging of the cervix during pregnancy: Effect of gestational age and prior vaginal birth. American Journal of Obstetrics and Gynecology, 2005, 193, 1554-1560.	0.7	22
49	Magnetic resonance imaging of the cervix during pregnancy: Effect of gestational age and prior vaginal birth. American Journal of Obstetrics and Gynecology, 2004, 191, S175.	0.7	0
50	Homocysteine and B vitamins relate to brain volume and white-matter changes in geriatric patients with psychiatric disorders. American Journal of Geriatric Psychiatry, 2004, 12, 631-8.	0.6	54
51	Measuring surface-area-to-volume ratios in soft porous materials using laser-polarized xenon interphase exchange nuclear magnetic resonance. Journal of Physics Condensed Matter, 2002, 14, L297-L304.	0.7	66
52	A position-sensitive neutron spectrometer/dosimeter based on pressurized superheated drop (bubble) detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2002, 476, 113-118.	0.7	10
53	Tortuosity measurement and the effects of finite pulse widths on xenon gas diffusion NMR studies of porous media. Magnetic Resonance Imaging, 2001, 19, 345-351.	1.0	58
54	Reduced xenon diffusion for quantitative lung study?the role of SF6. NMR in Biomedicine, 2000, 13, 229-233.	1.6	15

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55	Analytic reconstruction of magnetic resonance imaging signal obtained from a periodic encoding field. Medical Physics, 2000, 27, 2060-2064.	1.6	0
56	Reconstruction algorithm for novel ultrafast magnetic resonance imaging. International Journal of Imaging Systems and Technology, 1999, 10, 209-215.	2.7	5
57	Probing Porous Media with Gas Diffusion NMR. Physical Review Letters, 1999, 83, 3324-3327.	2.9	187
58	Pulsed-Field-Gradient Measurements of Time-Dependent Gas Diffusion. Journal of Magnetic Resonance, 1998, 135, 478-486.	1.2	79
59	Line scan diffusion imaging: characterization in healthy subjects and stroke patients.. American Journal of Roentgenology, 1998, 171, 85-93.	1.0	133
60	Skeletal muscle chemoreflex and pHi in exercise ventilatory control. Journal of Applied Physiology, 1998, 84, 676-682.	1.2	33
61	5572132 MRI probe for external imaging. Magnetic Resonance Imaging, 1997, 15, XVII.	1.0	0
62	Line scan diffusion imaging. Magnetic Resonance in Medicine, 1996, 36, 509-519.	1.9	241
63	Simultaneous calculation of flow and diffusion sensitivity in steady-state free precession imaging. Magnetic Resonance in Medicine, 1995, 34, 567-579.	1.9	34
64	The rician distribution of noisy mri data. Magnetic Resonance in Medicine, 1995, 34, 910-914.	1.9	2,061
65	NMR diffusion simulation based on conditional random walk. IEEE Transactions on Medical Imaging, 1995, 14, 636-642.	5.4	19
66	Chemical shift imaging of particle filtration in sandstone cores. Magnetic Resonance Imaging, 1994, 12, 313-315.	1.0	2
67	Prototype Miniature Endoluminal MR Imaging Catheter. Journal of Vascular and Interventional Radiology, 1993, 4, 419-427.	0.2	68
68	Application of single species chemical shift imaging to sandstone cores. Magnetic Resonance Imaging, 1991, 9, 797-802.	1.0	2
69	Analytical solution and verification of diffusion effect in SSFP. Magnetic Resonance in Medicine, 1991, 19, 240-246.	1.9	29
70	Application of missing pulse steady state free precession to the study of renal microcirculation. Magnetic Resonance in Medicine, 1991, 20, 66-77.	1.9	10
71	Missing pulse steady-state free precession. Magnetic Resonance in Medicine, 1989, 10, 194-209.	1.9	32
72	Spin-lock techniques and CPMG imaging sequences: A critical appraisal of T1p contrast at 0.15 T. Magnetic Resonance Imaging, 1989, 7, 437-444.	1.0	19

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73	MRI of pulsatile CSF motion within arachnoid cysts. Magnetic Resonance Imaging, 1988, 6, 575-584.	1.0	31
74	Clinical experience with rapid 2DFT SSFP imaging at low field strength. Magnetic Resonance Imaging, 1988, 6, 397-403.	1.0	9
75	Some factors that influence the steady state in steady-state free precession. Magnetic Resonance Imaging, 1988, 6, 405-413.	1.0	67
76	Magnetic Resonance Imaging of Immiscible-Fluid Displacement in Porous Media. Physical Review Letters, 1988, 61, 1489-1492.	2.9	51
77	Fast Imaging of CSF Flow/Motion Patterns Using Steady-State Free Precession (SSFP). Investigative Radiology, 1987, 22, 761-771.	3.5	26
78	Rapid Fourier imaging using steady-state free precession. Magnetic Resonance in Medicine, 1987, 4, 9-23.	1.9	91
79	The application of steady-state free precession to the study of very slow fluid flow. Magnetic Resonance in Medicine, 1986, 3, 140-145.	1.9	71
80	Basic physics of nuclear magnetic resonance. CardioVascular and Interventional Radiology, 1986, 8, 225-237.	0.9	2
81	Mapping of normal and abnormal cerebrospinal fluid flow/motion patterns using steady state free precession imaging. Acta Radiologica Supplementum, 1986, 369, 302-4.	0.5	1
82	The placing of many large superconducting magnets in a limited space. Magnetic Resonance in Medicine, 1985, 2, 262-274.	1.9	1
83	High field NMR studies of static ordering and spin energy coupling in MnF2. Journal of Applied Physics, 1981, 52, 1938-1940.	1.1	4
84	Towards Posture-Dependent Human Pulmonary Oxygen Mapping Using Hyperpolarized Helium and an Open-Access MRI System. , 0, , 117-127.		0