

Rudolf Stollberger

List of Publications by Year in descending order

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88
papers

3,667
citations

218592

26
h-index

133188

59
g-index

90
all docs

90
docs citations

90
times ranked

4303
citing authors

#	ARTICLE	IF	CITATIONS
1	Automated vortical blood flow-based estimation of mean pulmonary arterial pressure from 4D flow MRI. <i>Magnetic Resonance Imaging</i> , 2022, 88, 132-141.	1.0	6
2	Periventricular magnetisation transfer abnormalities in early multiple sclerosis. <i>NeuroImage: Clinical</i> , 2022, 34, 103012.	1.4	5
3	Impact of the Choice of Native T 1 in Pixelwise Myocardial Blood Flow Quantification. <i>Journal of Magnetic Resonance Imaging</i> , 2021, 53, 755-765.	1.9	0
4	Adaptive slice-specific shimming for 2D spoiled gradient-echo sequences. <i>Magnetic Resonance in Medicine</i> , 2021, 85, 818-830.	1.9	1
5	Joint multi-field T ₁ quantification for fast field-cycling MRI. <i>Magnetic Resonance in Medicine</i> , 2021, 86, 2049-2063.	1.9	4
6	Non-linear fitting with joint spatial regularization in arterial spin labeling. <i>Medical Image Analysis</i> , 2021, 71, 102067.	7.0	5
7	Accuracy and performance analysis for Bloch and Bloch-McConnell simulation methods. <i>Journal of Magnetic Resonance</i> , 2021, 329, 107011.	1.2	6
8	Robust single-shot acquisition of high resolution whole brain ASL images by combining time-dependent 2D CAPIRINHA sampling with spatio-temporal TGV reconstruction. <i>NeuroImage</i> , 2020, 206, 116337.	2.1	26
9	T2 and T2* mapping in ex situ porcine myocardium: myocardial intravariability, temporal stability and the effects of complete coronary occlusion. <i>International Journal of Legal Medicine</i> , 2020, 134, 679-690.	1.2	1
10	The four-minute approach revisited: accelerating MRI-based multi-factorial age estimation. <i>International Journal of Legal Medicine</i> , 2020, 134, 1475-1485.	1.2	9
11	Time optimal control-based RF pulse design under gradient imperfections. <i>Magnetic Resonance in Medicine</i> , 2020, 83, 561-574.	1.9	13
12	Assessment and correction of macroscopic field variations in 2D spoiled gradient-echo sequences. <i>Magnetic Resonance in Medicine</i> , 2020, 84, 620-633.	1.9	2
13	Automated mitral valve vortex ring extraction from 4D-flow MRI. <i>Magnetic Resonance in Medicine</i> , 2020, 84, 3396-3408.	1.9	11
14	PyQMRI: An accelerated Python based Quantitative MRI toolbox. <i>Journal of Open Source Software</i> , 2020, 5, 2727.	2.0	7
15	A time domain signal equation for multi-echo spin-echo sequences with arbitrary excitation and refocusing angle and phase. <i>Journal of Magnetic Resonance</i> , 2019, 309, 106515.	1.2	2
16	Magnetic resonance elastography of the human brain using a multiphase DENSE acquisition. <i>Magnetic Resonance in Medicine</i> , 2019, 81, 3578-3587.	1.9	8
17	Rapid T ₁ quantification from high resolution 3D data with model-based reconstruction. <i>Magnetic Resonance in Medicine</i> , 2019, 81, 2072-2089.	1.9	30
18	Ultrafast 3D Bloch-Siegert B ₁ mapping using variational modeling. <i>Magnetic Resonance in Medicine</i> , 2019, 81, 881-892.	1.9	14

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19	Magnetic Resonance RF Pulse Design by Optimal Control With Physical Constraints. IEEE Transactions on Medical Imaging, 2018, 37, 461-472.	5.4	16
20	Reducing acquisition time for MRI-based forensic age estimation. Scientific Reports, 2018, 8, 2063.	1.6	14
21	Post-mortem MR angiography: quantitative investigation and intravascular retention of perfusates in ex situ porcine hearts. International Journal of Legal Medicine, 2018, 132, 579-587.	1.2	5
22	Reproducibility of relaxometry of human lumbar vertebrae at 3 Tesla using ^1H MR spectroscopy. Journal of Magnetic Resonance Imaging, 2018, 48, 153-159.	1.9	2
23	Simultaneous multislice refocusing via time optimal control. Magnetic Resonance in Medicine, 2018, 80, 1416-1428.	1.9	15
24	Healthy Lung Vessel Morphology Derived From Thoracic Computed Tomography. Frontiers in Physiology, 2018, 9, 346.	1.3	13
25	Spatio-temporal TGV denoising for ASL perfusion imaging. NeuroImage, 2017, 157, 81-96.	2.1	33
26	Assessment of pharmacokinetics for microvessel proliferation by DCE-MRI for early detection of physal bone bridge formation in an animal model. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2017, 30, 417-427.	1.1	2
27	Temperature dependence of viscosity, relaxation times (T_1 , T_2) and simulated contrast for potential perfusates in post-mortem MR angiography (PMMRA). International Journal of Legal Medicine, 2017, 131, 739-749.	1.2	9
28	Infimal convolution of total generalized variation functionals for dynamic MRI. Magnetic Resonance in Medicine, 2017, 78, 142-155.	1.9	47
29	The vertebral trabecular model revisited: magnetic field distribution in the vicinity of osseous disconnections. Physics in Medicine and Biology, 2016, 61, N618-N631.	1.6	0
30	Efficient high-resolution RF pulse design applied to simultaneous multi-slice excitation. Journal of Magnetic Resonance, 2016, 263, 33-44.	1.2	23
31	Time-related Changes of T_1 , T_2 , and T_2^* in ^1H MRI. http://www.elsevier.com/xml/xocs/dtd http://www.w3.org/2001/XMLSchema-instance http://www.w3.org/2001/XMLSchema http://www.w3.org/1998/Math/MathML http://www.elsevier.com/xml/ja/dtd http://www.elsevier.com/xml/common/table/dtd http://www.elsevier.com/xml/common/struct-bib/dtd http://www.elsevier.com	1.3	6
32	In vivo cardiovascular magnetic resonance of 2D vessel wall diffusion anisotropy in carotid arteries. Journal of Cardiovascular Magnetic Resonance, 2016, 18, 81.	1.6	13
33	Time-Dependent Changes in T_1 during Fracture Healing in Juvenile Rats: A Quantitative MR Approach. PLoS ONE, 2016, 11, e0164284.	1.1	8
34	Positive contrast of SPIO-labeled cells by off-resonant reconstruction of 3D radial half-echo bSSFP. NMR in Biomedicine, 2015, 28, 79-88.	1.6	13
35	Closed-form solution for T_2 mapping with nonideal refocusing of slice selective CPMG sequences. Magnetic Resonance in Medicine, 2015, 73, 818-827.	1.9	26
36	Iron mapping using the temperature dependency of the magnetic susceptibility. Magnetic Resonance in Medicine, 2015, 73, 1282-1288.	1.9	24

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37	A no-tune no-match wideband probe for nuclear quadrupole resonance spectroscopy in the VHF range. <i>Measurement Science and Technology</i> , 2014, 25, 125501.	1.4	4
38	Non-invasive determination of pulmonary hypertension with dynamic contrast-enhanced computed tomography: a pilot study. <i>European Radiology</i> , 2014, 24, 668-676.	2.3	25
39	Temperature-induced changes of magnetic resonance relaxation times in the human brain: A postmortem study. <i>Magnetic Resonance in Medicine</i> , 2014, 71, 1575-1580.	1.9	36
40	A Magnetically Drivable Nanovehicle for Curcumin with Antioxidant Capacity and MRI Relaxation Properties. <i>Chemistry - A European Journal</i> , 2014, 20, 11913-11920.	1.7	48
41	Quantification of Tortuosity and Fractal Dimension of the Lung Vessels in Pulmonary Hypertension Patients. <i>PLoS ONE</i> , 2014, 9, e87515.	1.1	83
42	Reconstruction of undersampled radial PatLoc imaging using total generalized variation. <i>Magnetic Resonance in Medicine</i> , 2013, 70, 40-52.	1.9	23
43	Determination of cardiac output with dynamic contrast-enhanced computed tomography. <i>International Journal of Cardiovascular Imaging</i> , 2013, 29, 1871-1878.	0.7	12
44	The Agile Library for Biomedical Image Reconstruction Using GPU Acceleration. <i>Computing in Science and Engineering</i> , 2013, 15, 34-44.	1.2	15
45	Surface design of core-shell superparamagnetic iron oxide nanoparticles drives record relaxivity values in functional MRI contrast agents. <i>Chemical Communications</i> , 2012, 48, 11398.	2.2	49
46	Laryngeal Electromyography: Electrode Guidance Based on 3-Dimensional Magnetic Resonance Tomography Images of the Larynx. <i>Journal of Voice</i> , 2012, 26, 110-116.	0.6	7
47	Ultrasmall superparamagnetic iron oxide (USPIO)-based liposomes as magnetic resonance imaging probes. <i>International Journal of Nanomedicine</i> , 2012, 7, 2349.	3.3	53
48	A fully automated trabecular bone structural analysis tool based on T2*-weighted magnetic resonance imaging. <i>Computerized Medical Imaging and Graphics</i> , 2012, 36, 85-94.	3.5	5
49	Parallel imaging with nonlinear reconstruction using variational penalties. <i>Magnetic Resonance in Medicine</i> , 2012, 67, 34-41.	1.9	81
50	Adapted random sampling patterns for accelerated MRI. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 2011, 24, 43-50.	1.1	103
51	Second order total generalized variation (TCV) for MRI. <i>Magnetic Resonance in Medicine</i> , 2011, 65, 480-491.	1.9	488
52	Automated macrovessel artifact correction in dynamic susceptibility contrast magnetic resonance imaging using independent component analysis. <i>Magnetic Resonance in Medicine</i> , 2011, 65, 848-857.	1.9	7
53	Loss of intestinal GATA4 prevents diet-induced obesity and promotes insulin sensitivity in mice. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , 2011, 300, E478-E488.	1.8	17
54	Fast reduction of undersampling artifacts in radial MR angiography with 3D total variation on graphics hardware. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 2010, 23, 103-114.	1.1	21

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55	In Vitro Angioplasty of Atherosclerotic Human Femoral Arteries: Analysis of the Geometrical Changes in the Individual Tissues Using MRI and Image Processing. <i>Annals of Biomedical Engineering</i> , 2010, 38, 1276-1287.	1.3	5
56	Deconvolution for DCE-MRI using an exponential approximation basis. <i>Medical Image Analysis</i> , 2009, 13, 80-90.	7.0	17
57	Revision of the theory of tracer transport and the convolution model of dynamic contrast enhanced magnetic resonance imaging. <i>Journal of Mathematical Biology</i> , 2007, 55, 389-411.	0.8	5
58	3-D reconstruction of tissue components for atherosclerotic human arteries using ex vivo high-resolution MRI. <i>IEEE Transactions on Medical Imaging</i> , 2006, 25, 345-357.	5.4	26
59	Improved Perfusion and Tracer Kinetic Imaging Using Parallel Imaging. <i>Topics in Magnetic Resonance Imaging</i> , 2004, 15, 245-255.	0.7	16
60	ASSESSMENT OF PLAQUE STABILITY BASED ON HIGH-RESOLUTION MAGNETIC RESONANCE IMAGING OF HUMAN ATHEROSCLEROTIC LESIONS AND COMPUTATIONAL MECHANICAL ANALYSIS. , 2004, , 101-115.		0
61	Segmentation of wall and plaque in in vitro vascular MR images. <i>International Journal of Cardiovascular Imaging</i> , 2003, 19, 419-428.	0.2	27
62	Automated unwrapping of MR phase images applied to BOLD MR-venography at 3 Tesla. <i>Journal of Magnetic Resonance Imaging</i> , 2003, 18, 175-180.	1.9	98
63	Value of a blood pool contrast agent in MR venography of the lower extremities and pelvis: Preliminary results in 12 patients. <i>Magnetic Resonance in Medicine</i> , 2003, 50, 993-1002.	1.9	23
64	3D Gd-enhanced MRA for establishing venous thrombo-embolic disease: one stop shop imaging of pulmonary arteries, vena cava, pelvic and both lower extremity veins in 30 min. <i>International Congress Series</i> , 2003, 1256, 3-5.	0.2	0
65	AUTOMATISCHE DETEKTION DER ARTERIELLEN INPUTFUNKTION IN DER DYNAMISCHEN KONTRASTMITTEL VERSTÄRKTEN MR PERFUSIONS BILDGEBUNG. <i>Biomedizinische Technik</i> , 2003, 48, 104-105.	0.9	0
66	Vascular MR segmentation: wall and plaque. , 2003, 5032, 1667.		0
67	Nonlinear anisotropic diffusion filtering for multiscale edge enhancement. <i>Inverse Problems</i> , 2002, 18, 175-190.	1.0	69
68	Diffusion-weighted imaging of the spinal cord: Interleaved echo-planar imaging is superior to fast spin-echo. <i>Journal of Magnetic Resonance Imaging</i> , 2002, 15, 364-373.	1.9	70
69	Diffusion tensor imaging using single-shot SENSE-EPI. <i>Magnetic Resonance in Medicine</i> , 2002, 48, 128-136.	1.9	267
70	Detection of fungal wood decay using Magnetic Resonance Imaging. <i>European Journal of Wood and Wood Products</i> , 2001, 59, 190-194.	1.3	31
71	Improved diffusion-weighted single-shot echo-planar imaging (EPI) in stroke using sensitivity encoding (SENSE). <i>Magnetic Resonance in Medicine</i> , 2001, 46, 548-554.	1.9	295
72	T1 maps from shifted spin echoes and stimulated echoes. <i>Magnetic Resonance in Medicine</i> , 2001, 46, 1242-1245.	1.9	8

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73	Assessing abdominal fatness with local bioimpedance analysis: basics and experimental findings. International Journal of Obesity, 2001, 25, 502-511.	1.6	70
74	Estimation of magnetization transfer rates from PACE experiments with pulsed RF saturation. Journal of Magnetic Resonance Imaging, 2000, 12, 749-756.	1.9	16
75	Magnetic resonance diffusion tensor imaging for characterizing diffuse and focal white matter abnormalities in multiple sclerosis. Magnetic Resonance in Medicine, 2000, 44, 583-591.	1.9	241
76	Diffusion-weighted Imaging with Navigated Interleaved Echo-planar Imaging and a Conventional Gradient System. Radiology, 1999, 211, 799-806.	3.6	94
77	T1 imaging using phase acquisition of composite echoes. Magnetic Resonance in Medicine, 1999, 41, 386-391.	1.9	8
78	Fast multislice T1 and T1sat imaging using a phase acquisition of composite echoes (PACE) technique. Magnetic Resonance in Medicine, 1999, 42, 1089-1097.	1.9	11
79	Invited. Temperature monitoring of interstitial thermal tissue coagulation using MR phase images. Journal of Magnetic Resonance Imaging, 1998, 8, 188-196.	1.9	88
80	Hochauflöste diffusionsgewichtete MRT mit Multishot EPI und Phasennavigation bei zerebralen Ischämien. Biomedizinische Technik, 1998, 43, 12-14.	0.9	1
81	<title>Assessing the differences of reactive hyperemic flow due to the contribution of forearm composition using automated tissue segmentation from MR scans and venous occlusion strain gauge plethysmograph</title>. , 1998, , .		0
82	<title>Assessment of dynamic magnetic resonance images using an independent workstation for determination, visualization, and quantitative analysis of pharmacokinetic and physiological parameters</title>. , 1998, , .		0
83	Spatial distribution of high-frequency electromagnetic energy in human head during MRI: numerical results and measurements. IEEE Transactions on Biomedical Engineering, 1996, 43, 88.	2.5	76
84	Imaging of the activeB1 fieldin vivo. Magnetic Resonance in Medicine, 1996, 35, 246-251.	1.9	321
85	Magnetic Resonance Imaging and Spectroscopy Findings After Focal Status Epilepticus. Epilepsia, 1995, 36, 946-949.	2.6	65
86	Analysis of Carrâ€Purcell Sequences with Nonideal Pulses. Journal of Magnetic Resonance Series B, 1995, 109, 301-309.	1.6	21
87	Muscle-specific overexpression of lipoprotein lipase causes a severe myopathy characterized by proliferation of mitochondria and peroxisomes in transgenic mice.. Journal of Clinical Investigation, 1995, 96, 976-986.	3.9	199
88	<title>Interstitial laser-assisted thermotherapy of central brain tumors under magnetic resonance control</title>. , 1994, 2327, 269.		1