

# SÃ©bastien Roujol

## List of Publications by Year in descending order

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72  
papers

2,234  
citations

257357

24  
h-index

233338

45  
g-index

73  
all docs

73  
docs citations

73  
times ranked

2756  
citing authors

#	ARTICLE	IF	CITATIONS
1	Accuracy, Precision, and Reproducibility of Four T1 Mapping Sequences: A Head-to-Head Comparison of MOLLI, ShMOLLI, SASHA, and SAPHIRE. <i>Radiology</i> , 2014, 272, 683-689.	3.6	255
2	Real-time MR-thermometry and dosimetry for interventional guidance on abdominal organs. <i>Magnetic Resonance in Medicine</i> , 2010, 63, 1080-1087.	1.9	180
3	High-Resolution Mapping of Ventricular Scar. <i>Circulation: Arrhythmia and Electrophysiology</i> , 2016, 9, .	2.1	122
4	Real-time 3D target tracking in MRI guided focused ultrasound ablations in moving tissues. <i>Magnetic Resonance in Medicine</i> , 2010, 64, 1704-1712.	1.9	111
5	Diffuse myocardial fibrosis in patients with mitral valve prolapse and ventricular arrhythmia. <i>Heart</i> , 2017, 103, 204-209.	1.2	109
6	A method for MRI guidance of intercostal high intensity focused ultrasound ablation in the liver. <i>Medical Physics</i> , 2010, 37, 2533-2540.	1.6	107
7	A swine model of infarct-related reentrant ventricular tachycardia: Electroanatomic, magnetic resonance, and histopathological characterization. <i>Heart Rhythm</i> , 2016, 13, 262-273.	0.3	95
8	Free-breathing multislice native myocardial T <sub>1</sub> mapping using the slice-interleaved T <sub>1</sub> (STONE) sequence. <i>Magnetic Resonance in Medicine</i> , 2015, 74, 115-124.	1.9	83
9	Adaptive registration of varying contrast-weighted images for improved tissue characterization (ARCTIC): Application to T <sub>1</sub> mapping. <i>Magnetic Resonance in Medicine</i> , 2015, 73, 1469-1482.	1.9	63
10	Improved quantitative myocardial T <sub>2</sub> mapping: Impact of the fitting model. <i>Magnetic Resonance in Medicine</i> , 2015, 74, 93-105.	1.9	57
11	Joint myocardial T <sub>1</sub> and T <sub>2</sub> mapping using a combination of saturation recovery and T <sub>2</sub> preparation. <i>Magnetic Resonance in Medicine</i> , 2016, 76, 888-896.	1.9	57
12	Measurement of Glomerular Filtration Rate With Magnetic Resonance Imaging: Principles, Limitations, and Expectations. <i>Seminars in Nuclear Medicine</i> , 2008, 38, 47-55.	2.5	52
13	Motion correction in MR thermometry of abdominal organs: A comparison of the referenceless vs. the multibaseline approach. <i>Magnetic Resonance in Medicine</i> , 2010, 64, 1373-1381.	1.9	49
14	The reproducibility of late gadolinium enhancement cardiovascular magnetic resonance imaging of post-ablation atrial scar: a cross-over study. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2018, 20, 21.	1.6	46
15	Improvement of MRI functional measurement with automatic movement correction in native and transplanted kidneys. <i>Journal of Magnetic Resonance Imaging</i> , 2008, 28, 970-978.	1.9	41
16	Robust Adaptive Extended Kalman Filtering for Real Time MR-Thermometry Guided HIFU Interventions. <i>IEEE Transactions on Medical Imaging</i> , 2012, 31, 533-542.	5.4	40
17	Free-breathing post-contrast three-dimensional T <sub>1</sub> mapping: Volumetric assessment of myocardial T <sub>1</sub> values. <i>Magnetic Resonance in Medicine</i> , 2015, 73, 214-222.	1.9	35
18	Simultaneous multi slice (SMS) balanced steady state free precession first-pass myocardial perfusion cardiovascular magnetic resonance with iterative reconstruction at 1.5T. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2018, 20, 84.	1.6	33

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19	Feasibility of fast MRâ€thermometry during cardiac radiofrequency ablation. <i>NMR in Biomedicine</i> , 2012, 25, 556-562.	1.6	31
20	On the selection of sampling points for myocardial T<sub>1</sub> mapping. <i>Magnetic Resonance in Medicine</i> , 2015, 73, 1741-1753.	1.9	31
21	Factors Promoting Conduction Slowing as Substrates for Block and Reentry in Infarcted Hearts. <i>Biophysical Journal</i> , 2019, 117, 2361-2374.	0.2	31
22	Invasive cardiovascular magnetic resonance (iCMR) for diagnostic right and left heart catheterization using an MR-conditional guidewire and passive visualization in congenital heart disease. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2020, 22, 20.	1.6	28
23	Online realâ€time reconstruction of adaptive TSENSE with commodity CPU/GPU hardware. <i>Magnetic Resonance in Medicine</i> , 2009, 62, 1658-1664.	1.9	27
24	Freeâ€breathing combined threeâ€dimensional phase sensitive late gadolinium enhancement and T<sub>1</sub> mapping for myocardial tissue characterization. <i>Magnetic Resonance in Medicine</i> , 2015, 74, 1032-1041.	1.9	27
25	Epicardial electroanatomical mapping, radiofrequency ablation, and lesion imaging in the porcine left ventricle under real-time magnetic resonance imaging guidanceâ€an in vivo feasibility study. <i>Europace</i> , 2018, 20, f254-f262.	0.7	25
26	Threeâ€dimensional heart locator for wholeâ€heart coronary magnetic resonance angiography. <i>Magnetic Resonance in Medicine</i> , 2014, 71, 2118-2126.	1.9	23
27	Improved passive catheter tracking with positive contrast for CMR-guided cardiac catheterization using partial saturation (pSAT). <i>Journal of Cardiovascular Magnetic Resonance</i> , 2016, 19, 60.	1.6	22
28	Advances in Real-Time MRIâ€Guided Electrophysiology. <i>Current Cardiovascular Imaging Reports</i> , 2019, 12, 6.	0.4	22
29	Extended Kalman Filtering for Continuous Volumetric MR-Temperature Imaging. <i>IEEE Transactions on Medical Imaging</i> , 2013, 32, 711-718.	5.4	21
30	Impact of motion correction on reproducibility and spatial variability of quantitative myocardial T2 mapping. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2015, 17, 46.	1.6	21
31	Native Myocardial T1 as a Biomarker of Cardiac Structure in Non-Ischemic Cardiomyopathy. <i>American Journal of Cardiology</i> , 2016, 117, 282-288.	0.7	21
32	Characterization of Respiratory and Cardiac Motion from Electro-Anatomical Mapping Data for Improved Fusion of MRI to Left Ventricular Electrograms. <i>PLoS ONE</i> , 2013, 8, e78852.	1.1	21
33	Accelerated cardiac MR stress perfusion with radial sampling after physical exercise with an MRâ€compatible supine bicycle ergometer. <i>Magnetic Resonance in Medicine</i> , 2015, 74, 384-395.	1.9	20
34	Nonâ€contrast enhanced simultaneous 3D wholeâ€heart brightâ€blood pulmonary veins visualization and blackâ€blood quantification of atrial wall thickness. <i>Magnetic Resonance in Medicine</i> , 2019, 81, 1066-1079.	1.9	20
35	Automatic Nonrigid Calibration of Image Registration for Real Time MR-Guided HIFU Ablations of Mobile Organs. <i>IEEE Transactions on Medical Imaging</i> , 2011, 30, 1737-1745.	5.4	18
36	Freeâ€Breathing 3D Cardiac MRI Using Iterative Imageâ€Based Respiratory Motion Correction. <i>Magnetic Resonance in Medicine</i> , 2013, 70, 1005-1015.	1.9	17

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37	Free-breathing slice-interleaved myocardial T <sub>2</sub> mapping with slice-selective T <sub>2</sub> magnetization preparation. <i>Magnetic Resonance in Medicine</i> , 2016, 76, 555-565.	1.9	16
38	MRI for Guided Right and Left Heart Cardiac Catheterization: A Prospective Study in Congenital Heart Disease. <i>Journal of Magnetic Resonance Imaging</i> , 2021, 53, 1446-1457.	1.9	16
39	Improved Multimodality Data Fusion of Late Gadolinium Enhancement MRI to Left Ventricular Voltage Maps in Ventricular Tachycardia Ablation. <i>IEEE Transactions on Biomedical Engineering</i> , 2013, 60, 1308-1317.	2.5	15
40	Accelerated free breathing ECG triggered contrast enhanced pulmonary vein magnetic resonance angiography using compressed sensing. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2014, 16, 91.	1.6	15
41	Optimal Technique for Measurement of Linear Left Ventricular Dimensions. <i>Journal of the American Society of Echocardiography</i> , 2019, 32, 476-483.e1.	1.2	15
42	Combined simultaneous multislice bSSFP and compressed sensing for first-pass myocardial perfusion at 1.5 T with high spatial resolution and coverage. <i>Magnetic Resonance in Medicine</i> , 2020, 84, 3103-3116.	1.9	15
43	Robust Real-Time-Constrained Estimation of Respiratory Motion for Interventional MRI on Mobile Organs. <i>IEEE Transactions on Information Technology in Biomedicine</i> , 2012, 16, 365-374.	3.6	14
44	3D late gadolinium enhancement in a single prolonged breath-hold using supplemental oxygenation and hyperventilation. <i>Magnetic Resonance in Medicine</i> , 2014, 72, 850-857.	1.9	14
45	Free-breathing cardiac MR stress perfusion with real-time slice tracking. <i>Magnetic Resonance in Medicine</i> , 2014, 72, 689-698.	1.9	14
46	Towards optimized MR thermometry of the human heart at 3T. <i>NMR in Biomedicine</i> , 2012, 25, 35-43.	1.6	12
47	Left ventricular native T1 time and the risk of atrial fibrillation recurrence after pulmonary vein isolation in patients with paroxysmal atrial fibrillation. <i>International Journal of Cardiology</i> , 2016, 203, 848-854.	0.8	11
48	Relationship between native papillary muscle T1 time and severity of functional mitral regurgitation in patients with non-ischemic dilated cardiomyopathy. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2016, 18, 79.	1.6	11
49	Comparison of spoiled gradient echo and steady-state free-precession imaging for native myocardial T <sub>1</sub> mapping using the slice-interleaved T <sub>1</sub> mapping (STONE) sequence. <i>NMR in Biomedicine</i> , 2016, 29, 1486-1496.	1.6	10
50	Improved co-registration of ex-vivo and in-vivo cardiovascular magnetic resonance images using heart-specific flexible 3D printed acrylic scaffold combined with non-rigid registration. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2019, 21, 62.	1.6	10
51	Simultaneous <sup>13</sup> N-Ammonia and gadolinium first-pass myocardial perfusion with quantitative hybrid PET-MR imaging: a phantom and clinical feasibility study. <i>European Journal of Hybrid Imaging</i> , 2019, 3, 15.	0.6	10
52	Accelerated whole-heart MR angiography using a variable-density poisson-disc undersampling pattern and compressed sensing reconstruction. <i>Magnetic Resonance in Medicine</i> , 2018, 79, 761-769.	1.9	9
53	Evaluation of a real-time magnetic resonance imaging-guided electrophysiology system for structural and electrophysiological ventricular tachycardia substrate assessment. <i>Europace</i> , 2019, 21, 1432-1441.	0.7	9
54	Whole Heart Coronary Imaging with Flexible Acquisition Window and Trigger Delay. <i>PLoS ONE</i> , 2015, 10, e0112020.	1.1	7

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55	Fast myocardial T <sub>1</sub> mapping using shortened inversion recovery based schemes. Journal of Magnetic Resonance Imaging, 2019, 50, 641-654.	1.9	7
56	Development and Testing of an Ultrasound-Compatible Cardiac Phantom for Interventional Procedure Simulation Using Direct Three-Dimensional Printing. 3D Printing and Additive Manufacturing, 2020, 7, 269-278.	1.4	7
57	FASt single-breathhold 2D multislice myocardial T <sub>1</sub> mapping (FAST1) at 1.5T for full left ventricular coverage in three breathholds. Journal of Magnetic Resonance Imaging, 2020, 51, 492-504.	1.9	6
58	A fast navigator (fastNAV) for prospective respiratory motion correction in first-pass myocardial perfusion imaging. Magnetic Resonance in Medicine, 2021, 85, 2661-2671.	1.9	6
59	Simultaneous multislice steady-state free precession myocardial perfusion with full left ventricular coverage and high resolution at 1.5 T. Magnetic Resonance in Medicine, 2022, 88, 663-675.	1.9	5
60	Contrast-free high-resolution 3D magnetization transfer imaging for simultaneous myocardial scar and cardiac vein visualization. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2020, 33, 627-640.	1.1	4
61	Accuracy and reproducibility of four T <sub>1</sub> mapping sequences: a head-to-head comparison of MOLLI, ShMOLLI, SASHA, and SAPPHIRE. Journal of Cardiovascular Magnetic Resonance, 2014, 16, O26.	1.6	3
62	Autocalibrated cardiac tissue phase mapping with multiband imaging and k <sub>t</sub> acceleration. Magnetic Resonance in Medicine, 2020, 84, 2429-2441.	1.9	3
63	All-systolic first-pass myocardial rest perfusion at a long saturation time using simultaneous multi-slice imaging and compressed sensing acceleration. Magnetic Resonance in Medicine, 2021, 86, 663-676.	1.9	3
64	Towards cardiac and respiratory motion characterization from electrophysiology data for improved real time MR-integration. Journal of Cardiovascular Magnetic Resonance, 2013, 15, P68.	1.6	2
65	Inter-costal Liver Ablation Under Real Time MR-Thermometry With Partial Activation Of A HIFU Phased Array Transducer. AIP Conference Proceedings, 2010, , .	0.3	1
66	Motion Correction Techniques for MR-Guided HIFU Ablation of Abdominal Organs. , 2014, , 355-376.		1
67	Software platform for flexible automated reconstruction of CMR data in a clinically feasible workflow. Journal of Cardiovascular Magnetic Resonance, 2014, 16, W9.	1.6	1
68	Quantitative magnetization transfer imaging for non-contrast enhanced detection of myocardial fibrosis. Magnetic Resonance in Medicine, 2021, 85, 2069-2083.	1.9	1
69	Editorial for "Impact of Wideband Late Gadolinium Enhancement Cardiac Magnetic Resonance Imaging on Device-Related Artifacts in Different Implantable Cardioverter-Defibrillator Types". Journal of Magnetic Resonance Imaging, 2021, 54, 1266-1267.	1.9	0
70	Quantification of balanced SSFP myocardial perfusion imaging at 1.5 T: Impact of the reference image. Magnetic Resonance in Medicine, 2022, 87, 702-717.	1.9	0
71	Specialized Mapping Methods in the Heart. Advances in Magnetic Resonance Technology and Applications, 2020, 1, 91-121.	0.0	0
72	Simultaneous multi-slice steady-state free precession myocardial perfusion with iterative reconstruction and integrated motion compensation. European Journal of Radiology, 2022, 151, 110286.	1.2	0