Davide Piccini

List of Publications by Year
in descending order

55 papers	1,506 citations	393982 19 h-index	329751 37 g-index
56 all docs	56 docs citations	56 times ranked	1330 citing authors

#	Article	IF	Citations
1	Spiral phyllotaxis: The natural way to construct a 3D radial trajectory in MRI. Magnetic Resonance in Medicine, 2011, 66, 1049-1056.	1.9	122
2	Respiratory selfâ€navigation for wholeâ€heart brightâ€blood coronary MRI: Methods for robust isolation and automatic segmentation of the blood pool. Magnetic Resonance in Medicine, 2012, 68, 571-579.	1.9	117
3	Compressed Sensing Singleâ€“Breath-Hold CMR for Fast Quantification of LVÂFunction,ÂVolumes, and Mass. JACC: Cardiovascular Imaging, 2014, 7, 882-892.	2.3	116
4	5D wholeâ€heart sparse MRI. Magnetic Resonance in Medicine, 2018, 79, 826-838.	1.9	112
5	Respiratory Self-navigated Postcontrast Whole-Heart Coronary MR Angiography: Initial Experience in Patients. Radiology, 2014, 270, 378-386.	3.6	96
6	Freeâ€running 4D wholeâ€heart selfâ€navigated golden angle MRI: Initial results. Magnetic Resonance in Medicine, 2015, 74, 1306-1316.	1.9	91
7	Four-dimensional respiratory motion-resolved whole heart coronary MR angiography. Magnetic Resonance in Medicine, 2017, 77, 1473-1484.	1.9	74
8	An automated approach to fully selfâ€gated freeâ€running cardiac and respiratory motionâ€resolved 5D wholeâ€heart MRI. Magnetic Resonance in Medicine, 2019, 82, 2118-2132.	1.9	57
9	Selfâ€navigated isotropic threeâ€dimensional cardiac T₂ mapping. Magnetic Resonance in Medicine, 2015, 73, 1549-1554.	1.9	51
10	Single centre experience of the application of self navigated 3D whole heart cardiovascular magnetic resonance for the assessment of cardiac anatomy in congenital heart disease. Journal of Cardiovascular Magnetic Resonance, 2015, 17, 55.	1.6	42
11	Reduction of respiratory motion artifacts for free-breathing whole-heart coronary MRA by weighted iterative reconstruction. Magnetic Resonance in Medicine, 2015, 73, 1885-1895.	1.9	39
12	Simultaneous Evaluation of Lung Anatomy and Ventilation Using 4D Respiratoryâ€Motionâ€Resolved Ultrashort Echo Time Sparse MRI. Journal of Magnetic Resonance Imaging, 2019, 49, 411-422.	1.9	35
13	A non-contrast self-navigated 3-dimensional MR technique for aortic root and vascular access route assessment in the context of transcatheter aortic valve replacement: proof of concept. European Radiology, 2016, 26, 951-958.	2.3	31
14	5D Flow MRI: A Fully Self-gated, Free-running Framework for Cardiac and Respiratory Motionâ€“resolved 3D Hemodynamics. Radiology: Cardiothoracic Imaging, 2020, 2, e200219.	0.9	30
15	High-resolution 3D whole-heart coronary MRA: a study on the combination of data acquisition in multiple breath-holds and 1D residual respiratory motion compensation. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2014, 27, 435-443.	1.1	28
16	A double echo ultra short echo time (UTE) acquisition for respiratory motionâ€suppressed high resolution imaging of the lung. Magnetic Resonance in Medicine, 2018, 79, 2297-2305.	1.9	28
17	An iterative approach to respiratory selfâ€navigated wholeâ€heart coronary MRA significantly improves image quality in a preliminary patient study. Magnetic Resonance in Medicine, 2016, 75, 1594-1604.	1.9	25
18	Improved border sharpness of post-infarct scar by a novel self-navigated free-breathing high-resolution 3D whole-heart inversion recovery magnetic resonance approach. International Journal of Cardiovascular Imaging, 2016, 32, 1735-1744.	0.7	22

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19	Nonenhanced arterial spin labeled carotid MR angiography using threeâ€dimensional radial balanced steadyâ€state free precession imaging. Journal of Magnetic Resonance Imaging, 2015, 41, 1150-1156.	1.9	21
20	Diagnostic Accuracy of Noncontrast Self-navigated Free-breathing MR Angiography versus CT Angiography: A Prospective Study in Pediatric Patients with Suspected Anomalous Coronary Arteries. Academic Radiology, 2019, 26, 1309-1317.	1.3	20
21	Arterial spin labeled carotid MR angiography: A phantom study examining the impact of technical and hemodynamic factors. Magnetic Resonance in Medicine, 2016, 75, 295-301.	1.9	19
22	Chemical shift encoding (CSE) for sensitive fluorineâ€19 MRI of perfluorocarbons with complex spectra. Magnetic Resonance in Medicine, 2018, 79, 2724-2730.	1.9	19
23	Is there an optimal respiratory reference position for selfâ€navigated wholeâ€heart coronary MR angiography?. Journal of Magnetic Resonance Imaging, 2016, 43, 426-433.	1.9	18
24	Technical Feasibility of a Combined Noncontrast Magnetic Resonance Protocol for Preoperative Transcatheter Aortic Valve Replacement Evaluation. Journal of Thoracic Imaging, 2018, 33, 60-67.	0.8	18
25	Natively fatâ€suppressed 5D wholeâ€heart MRI with a radial freeâ€running fastâ€interrupted steadyâ€state (FISS) sequence at 1.5T and 3T. Magnetic Resonance in Medicine, 2020, 83, 45-55.	1.9	18
26	Deep Learning to Automate Reference-Free Image Quality Assessment of Whole-Heart MR Images. Radiology: Artificial Intelligence, 2020, 2, e190123.	3.0	18
27	3D Dixon water-fat LGE imaging with image navigator and compressed sensing in cardiac MRI. European Radiology, 2021, 31, 3951-3961.	2.3	17
28	Self-Navigation with Compressed Sensing for 2D Translational Motion Correction in Free-Breathing Coronary MRI: A Feasibility Study. PLoS ONE, 2014, 9, e105523.	1.1	17
29	Coronary artery assessment using self-navigated free-breathing radial whole-heart magnetic resonance angiography in patients with congenital heart disease. European Radiology, 2018, 28, 1267-1275.	2.3	15
30	Noncontrast free-breathing respiratory self-navigated coronary artery cardiovascular magnetic resonance angiography at 3â€‰T using lipid insensitive binomial off-resonant excitation (LIBRE). Journal of Cardiovascular Magnetic Resonance, 2019, 21, 38.	1.6	15
31	Freeâ€running 5D coronary MR angiography at 1.5T using LIBRE water excitation pulses. Magnetic Resonance in Medicine, 2020, 84, 1470-1485.	1.9	15
32	Motion compensated whole-heart coronary cardiovascular magnetic resonance angiography using focused navigation (fNAV). Journal of Cardiovascular Magnetic Resonance, 2021, 23, 33.	1.6	15
33	Using 5D flow MRI to decode the effects of rhythm on left atrial 3D flow dynamics in patients with atrial fibrillation. Magnetic Resonance in Medicine, 2021, 85, 3125-3139.	1.9	14
34	Three-Dimensional Self-Navigated T2 Mapping for the Detection of Acute Cellular Rejection After Orthotopic Heart Transplantation. Transplantation Direct, 2017, 3, e149.	0.8	12
35	Cardiovascular morphometry with high-resolution 3D magnetic resonance: First application to left ventricle diastolic dysfunction. Medical Engineering and Physics, 2017, 47, 64-71.	0.8	12
36	Self-navigated 3D whole-heart MRA for non-enhanced surveillance of thoracic aortic dilation: A comparison to CTA. Magnetic Resonance Imaging, 2021, 76, 123-130.	1.0	11

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37	A quantitative comparison between a navigated Cartesian and a selfâ€navigated radial protocol from clinical studies for freeâ€breathing 3D wholeâ€heart bSSFP coronary MRA. Magnetic Resonance in Medicine, 2020, 84, 157-169.	1.9	10
38	Free-running cardiac and respiratory motion-resolved 5D whole-heart coronary cardiovascular magnetic resonance angiography in pediatric cardiac patients using ferumoxytol. Journal of Cardiovascular Magnetic Resonance, 2022, 24, 39.	1.6	10
39	Correcting versus resolving respiratory motion in free-breathing whole-heart MRA: a comparison in patients with thoracic aortic disease. European Radiology Experimental, 2019, 3, 29.	1.7	9
40	Measurement accuracy of prototype non-contrast, compressed sensing-based, respiratory motion-resolved whole heart cardiovascular magnetic resonance angiography for the assessment of thoracic aortic dilatation: comparison with computed tomography angiography. Journal of Cardiovascular Magnetic Resonance, 2021, 23, 7.	1.6	7
41	Self-navigated versus navigator-gated 3D MRI sequence for non-enhanced aortic root measurement in transcatheter aortic valve implantation. European Journal of Radiology, 2021, 137, 109573.	1.2	7
42	2D cine vs. 3D self-navigated free-breathing high-resolution whole heart cardiovascular magnetic resonance for aortic root measurements in congenital heart disease. Journal of Cardiovascular Magnetic Resonance, 2021, 23, 65.	1.6	7
43	MR Volumetry of Lung Nodules: A Pilot Study. Frontiers in Medicine, 2019, 6, 18.	1.2	6
44	A blackâ€blood ultraâ€short echo time (UTE) sequence for 3D isotropic resolution imaging of the lungs. Magnetic Resonance in Medicine, 2019, 81, 3808-3818.	1.9	6
45	Similarityâ€driven multiâ€dimensional binning algorithm (SIMBA) for freeâ€running motionâ€suppressed wholeâ€heart MRA. Magnetic Resonance in Medicine, 2021, 86, 213-229.	1.9	6
46	New parametric 3D snake for medical segmentation of structures with cylindrical topology. , 2015, , .		5
47	Distributed Memory-Efficient Physics-Guided Deep Learning Reconstruction for Large-Scale 3d Non-Cartesian MRI. , 2022, , .		4
48	Improved respiratory selfâ€navigation for 3D radial acquisitions through the use of a pencilâ€beam 2Dâ€T‹sub›2‹/sub›â€prep for freeâ€breathing, wholeâ€heart coronary MRA. Magnetic Resonance in Medicine, 2018, 79, 1293-1303.	1.9	3
49	Radial self-navigated native magnetic resonance angiography in comparison to navigator-gated contrast-enhanced MRA of the entire thoracic aorta in an aortic patient collective. Journal of Cardiovascular Magnetic Resonance, 2021, 23, 94.	1.6	3
50	Respiratory Motion-Registered Isotropic Whole-Heart T2 Mapping in Patients With Acute Non-ischemic Myocardial Injury. Frontiers in Cardiovascular Medicine, 2021, 8, 712383.	1.1	3
51	Dynamic self-navigated 3D whole-heart radial coronary MRA with retrospective acquisition window selection. Journal of Cardiovascular Magnetic Resonance, 2014, 16, O18.	1.6	2
52	Noncontrast Hybrid Arterial Spin-Labeled Imaging of the Intracranial Arteries. Journal of Computer Assisted Tomography, 2017, 41, 854-860.	0.5	2
53	Respiratory optimized data selection for more resilient self-navigated whole-heart coronary MR angiography. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2017, 30, 215-225.	1.1	2
54	Self-navigated free-breathing isotropic 3D whole heart MRI for the characterization of complex cardiac anatomy in patients with congenital heart malformations. Journal of Cardiovascular Magnetic Resonance, 2013, 15, P12.	1.6	1

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55	Volumetric coronary endothelial function assessment: a feasibility study exploiting stackâ€ofâ€stars 3D cine MRI and imageâ€based respiratory selfâ€gating. NMR in Biomedicine, 2021, 34, e4589.	1.6	0