René M Botnar

List of Publications by Year in descending order

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369 papers 14,151 citations

25014 57 h-index 30058 103 g-index

378 all docs

378 docs citations

times ranked

378

10291 citing authors

#	Article	IF	CITATIONS
1	Coronary Magnetic Resonance Angiography for the Detection of Coronary Stenoses. New England Journal of Medicine, 2001, 345, 1863-1869.	13.9	1,281
2	Double-oblique free-breathing high resolution three-dimensional coronary magnetic resonance angiography. Journal of the American College of Cardiology, 1999, 34, 524-531.	1.2	327
3	Detection of Pulmonary Vein and Left Atrial Scar after Catheter Ablation with Three-dimensional Navigator-gated Delayed Enhancement MR Imaging: Initial Experience $<$ sup $>$ 1 $<$ sup $>$. Radiology, 2007, 243, 690-695.	3.6	320
4	Three-Dimensional Black-Blood Cardiac Magnetic Resonance Coronary Vessel Wall Imaging Detects Positive Arterial Remodeling in Patients With Nonsignificant Coronary Artery Disease. Circulation, 2002, 106, 296-299.	1.6	292
5	In Vivo Molecular Imaging of Acute and Subacute Thrombosis Using a Fibrin-Binding Magnetic Resonance Imaging Contrast Agent. Circulation, 2004, 109, 2023-2029.	1.6	266
6	Bisphosphonate-Anchored PEGylation and Radiolabeling of Superparamagnetic Iron Oxide: Long-Circulating Nanoparticles for <i>in Vivo</i> Multimodal (T1 MRI-SPECT) Imaging. ACS Nano, 2013, 7, 500-512.	7.3	253
7	?Soap-Bubble? visualization and quantitative analysis of 3D coronary magnetic resonance angiograms. Magnetic Resonance in Medicine, 2002, 48, 658-666.	1.9	239
8	Submillimeter Three-dimensional Coronary MR Angiography with Real-time Navigator Correction: Comparison of Navigator Locations. Radiology, 1999, 212, 579-587.	3.6	236
9	Preliminary report on in vivo coronary MRA at 3 Tesla in humans. Magnetic Resonance in Medicine, 2002, 48, 425-429.	1.9	221
10	In Vivo Magnetic Resonance Imaging of Coronary Thrombosis Using a Fibrin-Binding Molecular Magnetic Resonance Contrast Agent. Circulation, 2004, 110, 1463-1466.	1.6	215
11	Coronary Magnetic Resonance Angiography in Adolescents and Young Adults With Kawasaki Disease. Circulation, 2002, 105, 908-911.	1.6	212
12	Age and Sex Distribution of Subclinical Aortic Atherosclerosis. Arteriosclerosis, Thrombosis, and Vascular Biology, 2002, 22, 849-854.	1.1	191
13	Cardiovascular magnetic resonance phase contrast imaging. Journal of Cardiovascular Magnetic Resonance, 2015, 17, 71.	1.6	184
14	MR imaging of thrombi using EP-2104R, a fibrin-specific contrast agent: initial results in patients. European Radiology, 2008, 18, 1995-2005.	2.3	176
15	Molecular Magnetic Resonance Imaging of Atrial Clots in a Swine Model. Circulation, 2005, 112, 396-399.	1.6	169
16	Magnetic Conjugated Polymer Nanoparticles as Bimodal Imaging Agents. Journal of the American Chemical Society, 2010, 132, 9833-9842.	6.6	164
17	Assessment of atherosclerotic plaque burden with an elastin-specific magnetic resonance contrast agent. Nature Medicine, 2011, 17, 383-388.	15.2	161
18	Contrast agent-enhanced, free-breathing, three-dimensional coronary magnetic resonance angiography. Journal of Magnetic Resonance Imaging, 1999, 10, 790-799.	1.9	156

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19	Hemodynamics in the carotid artery bifurcation:. Journal of Biomechanics, 2000, 33, 137-144.	0.9	151
20	Molecular Magnetic Resonance Imaging of Coronary Thrombosis and Pulmonary Emboli With a Novel Fibrin-Targeted Contrast Agent. Circulation, 2005, 111 , $1377-1382$.	1.6	146
21	3D coronary vessel wall imaging utilizing a local inversion technique with spiral image acquisition. Magnetic Resonance in Medicine, 2001, 46, 848-854.	1.9	136
22	Wholeâ€heart coronary MR angiography with 2D selfâ€navigated image reconstruction. Magnetic Resonance in Medicine, 2012, 67, 437-445.	1.9	135
23	CINENet: deep learning-based 3D cardiac CINE MRI reconstruction with multi-coil complex-valued 4D spatio-temporal convolutions. Scientific Reports, 2020, 10, 13710.	1.6	122
24	Impact of bulk cardiac motion on right coronary MR angiography and vessel wall imaging. Journal of Magnetic Resonance Imaging, 2001, 14, 383-390.	1.9	121
25	Highly efficient respiratory motion compensated freeâ€breathing coronary mra using goldenâ€step Cartesian acquisition. Journal of Magnetic Resonance Imaging, 2015, 41, 738-746.	1.9	121
26	Dual cardiac–respiratory gated PET: implementation and results from a feasibility study. European Journal of Nuclear Medicine and Molecular Imaging, 2007, 34, 1447-1454.	3.3	119
27	Inherently self-calibrating non-cartesian parallel imaging. Magnetic Resonance in Medicine, 2005, 54, 1-8.	1.9	116
28	Noninvasive Magnetic Resonance Imaging Evaluation of Endothelial Permeability in Murine Atherosclerosis Using an Albumin-Binding Contrast Agent. Circulation, 2012, 126, 707-719.	1.6	112
29	Subclinical Coronary and Aortic Atherosclerosis Detected by Magnetic Resonance Imaging in Type 1 Diabetes With and Without Diabetic Nephropathy. Circulation, 2007, 115, 228-235.	1.6	111
30	Serial Contrast-Enhanced Cardiac Magnetic Resonance Imaging Demonstrates Regression of Hyperenhancement Within the Coronary Artery Wall in Patients After Acute Myocardial Infarction. JACC: Cardiovascular Imaging, 2009, 2, 580-588.	2.3	111
31	Combined Reporter Gene PET and Iron Oxide MRI for Monitoring Survival and Localization of Transplanted Cells in the Rat Heart. Journal of Nuclear Medicine, 2009, 50, 1088-1094.	2.8	110
32	Delayed-Enhancement Cardiovascular Magnetic Resonance Coronary Artery Wall Imaging. Journal of the American College of Cardiology, 2007, 50, 441-447.	1.2	108
33	Selective coronary artery plaque visualization and differentiation by contrast-enhanced inversion prepared MRI. European Heart Journal, 2006, 27, 1732-1736.	1.0	102
34	A Digital Preclinical PET/MRI Insert and Initial Results. IEEE Transactions on Medical Imaging, 2015, 34, 2258-2270.	5 . 4	97
35	Role of miR-195 in Aortic Aneurysmal Disease. Circulation Research, 2014, 115, 857-866.	2.0	93
36	High-frequency speckle tracking echocardiography in the assessment of left ventricular function and remodeling after murine myocardial infarction. American Journal of Physiology - Heart and Circulatory Physiology, 2014, 306, H1371-H1383.	1.5	90

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37	Molecular imaging of cardiac remodelling after myocardial infarction. Basic Research in Cardiology, 2018, 113, 10.	2.5	88
38	Comparison of aortic elasticity determined by cardiovascular magnetic resonance imaging in obese versus lean adults. American Journal of Cardiology, 2003, 91, 195-199.	0.7	86
39	Highly efficient nonrigid motionâ€corrected 3D wholeâ€heart coronary vessel wall imaging. Magnetic Resonance in Medicine, 2017, 77, 1894-1908.	1.9	85
40	From Compressed-Sensing to Artificial Intelligence-Based Cardiac MRI Reconstruction. Frontiers in Cardiovascular Medicine, 2020, 7, 17.	1.1	85
41	Navigator-Gated Free-Breathing Three-Dimensional Balanced Fast Field Echo (TrueFISP) Coronary Magnetic Resonance Angiography. Investigative Radiology, 2002, 37, 637-642.	3.5	84
42	Detection of Coronary Artery Anomalies in Infants and Young Children with Congenital Heart Disease by Using MR Imaging. Radiology, 2011, 259, 240-247.	3.6	81
43	Free-breathing 3D Steady-State Free Precession Coronary MR Angiography with Radial k-Space Sampling: Comparison with Cartesian k-Space Sampling and Cartesian Gradient-Echo Coronary MR Angiography—Pilot Study. Radiology, 2004, 231, 581-586.	3.6	80
44	Highâ€dimensionality undersampled patchâ€based reconstruction (HDâ€PROST) for accelerated multiâ€contrast MRI. Magnetic Resonance in Medicine, 2019, 81, 3705-3719.	1.9	79
45	Free-Breathing Black-Blood Coronary MR Angiography: Initial Results. Radiology, 2001, 219, 278-283.	3.6	75
46	Differential Impact of Age, Sex, and Hypertension on Aortic Atherosclerosis. Arteriosclerosis, Thrombosis, and Vascular Biology, 2008, 28, 155-159.	1.1	75
47	Magnetic Resonance T $\langle \text{sub} \rangle 1 \langle \text{sub} \rangle$ Relaxation Time of Venous Thrombus Is Determined by Iron Processing and Predicts Susceptibility to Lysis. Circulation, 2013, 128, 729-736.	1.6	74
48	Three-dimensional high-resolution fast spin-echo coronary magnetic resonance angiography. Magnetic Resonance in Medicine, 2001, 45, 206-211.	1.9	73
49	Fiveâ€minute wholeâ€heart coronary MRA with subâ€millimeter isotropic resolution, 100% respiratory scan efficiency, and 3Dâ€PROST reconstruction. Magnetic Resonance in Medicine, 2019, 81, 102-115.	1.9	73
50	Direct comparison of 3D spiral vs. Cartesian gradient-echo coronary magnetic resonance angiography. Magnetic Resonance in Medicine, 2001, 46, 789-794.	1.9	70
51	Coronary magnetic resonance angiography and vessel wall imaging in children with Kawasaki disease. Pediatric Radiology, 2007, 37, 666-673.	1.1	68
52	MRI of Coronary Wall Remodeling in a Swine Model of Coronary Injury Using an Elastin-Binding Contrast Agent. Circulation: Cardiovascular Imaging, 2011, 4, 147-155.	1.3	68
53	Molecular Imaging of Early $\hat{l}\pm<$ sub>v $\hat{l}^2<$ sub>3 Integrin Expression Predicts Long-Term Left-Ventricle Remodeling After Myocardial Infarction in Rats. Journal of Nuclear Medicine, 2012, 53, 318-323.	2.8	64
54	Free-breathing 3D coronary MRA: The impact of ?Isotropic? image resolution. Journal of Magnetic Resonance Imaging, 2000, 11, 389-393.	1.9	62

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55	Renal Arteries: Navigator-gated Balanced Fast Field-Echo Projection MR Angiography with Aortic Spin Labeling: Initial Experience. Radiology, 2002, 225, 589-596.	3.6	61
56	A New ¹⁸ F-Labeled Myocardial PET Tracer: Myocardial Uptake After Permanent and Transient Coronary Occlusion in Rats. Journal of Nuclear Medicine, 2008, 49, 1715-1722.	2.8	60
57	Molecular Magnetic Resonance Imaging of Myocardial Perfusion With EP-3600, a Collagen-Specific Contrast Agent. Circulation, 2009, 119, 1768-1775.	1.6	58
58	Scan Reproducibility of Magnetic Resonance Imaging Assessment of Aortic Atherosclerosis Burden. Journal of Cardiovascular Magnetic Resonance, 2001, 3, 331-338.	1.6	58
59	Coronary MR Angiography: Comparison of Quantitative and Qualitative Data from Four Techniques. American Journal of Roentgenology, 2004, 182, 515-521.	1.0	57
60	Elastin imaging enables noninvasive staging and treatment monitoring of kidney fibrosis. Science Translational Medicine, 2019, 11, .	5.8	56
61	Molecular Magnetic Resonance Imaging of Pulmonary Emboli with a Fibrin-specific Contrast Agent. American Journal of Respiratory and Critical Care Medicine, 2005, 172, 494-500.	2.5	55
62	Magnetic resonance imaging of myocardial injury and ventricular torsion after marathon running. Clinical Science, 2011, 120, 143-152.	1.8	55
63	Fibrin-Targeted Magnetic Resonance Imaging Allows In Vivo Quantification of Thrombus Fibrin Content and Identifies Thrombi Amenable for Thrombolysis. Arteriosclerosis, Thrombosis, and Vascular Biology, 2014, 34, 1193-1198.	1.1	54
64	Initial Experiences with In Vivo Right Coronary Artery Human MR Vessel Wall Imaging at 3 Tesla. Journal of Cardiovascular Magnetic Resonance, 2003, 5, 589-594.	1.6	53
65	A fast 3D approach for coronary MRA. Journal of Magnetic Resonance Imaging, 1999, 10, 821-825.	1.9	52
66	Dark-blood late gadolinium enhancement without additional magnetization preparation. Journal of Cardiovascular Magnetic Resonance, 2016, 19, 64.	1.6	52
67	Molecular MR Imaging of Human Thrombi in a Swine Model of Pulmonary Embolism Using a Fibrin-Specific Contrast Agent. Investigative Radiology, 2007, 42, 586-595.	3.5	51
68	Late gadolinium enhancement of acute myocardial infarction in mice at 7T: Cineâ€FLASH versus inversion recovery. Journal of Magnetic Resonance Imaging, 2010, 32, 878-886.	1.9	50
69	Multiâ€parametric liver tissue characterization using MR fingerprinting: Simultaneous T ₁ , T ₂ , T ₂ *, and fat fraction mapping. Magnetic Resonance in Medicine, 2020, 84, 2625-2635.	1.9	50
70	Impact of navigator timing on free-breathing submillimeter 3D coronary magnetic resonance angiography. Magnetic Resonance in Medicine, 2002, 47, 196-201.	1.9	49
71	Selective three-dimensional visualization of the coronary arterial lumen using arterial spin tagging. Magnetic Resonance in Medicine, 2002, 47, 322-329.	1.9	48
72	Firstâ€pass contrastâ€enhanced myocardial perfusion MRI in mice on a 3â€T clinical MR scanner. Magnetic Resonance in Medicine, 2010, 64, 1592-1598.	1.9	48

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73	Gd-containing conjugated polymer nanoparticles: bimodal nanoparticles for fluorescence and MRI imaging. Nanoscale, 2014, 6, 8376-8386.	2.8	48
74	Water–fat Dixon cardiac magnetic resonance fingerprinting. Magnetic Resonance in Medicine, 2020, 83, 2107-2123.	1.9	48
75	Plow quantitation with echo-planar phase-contrast velocity mapping: In vitro and in vivo evaluation. Journal of Magnetic Resonance Imaging, 1995, 5, 656-662.	1.9	47
76	Temperature quantification using the proton frequency shift technique: In vitro and in vivo validation in an open 0.5 tesla interventional MR scanner during RF ablation. Journal of Magnetic Resonance Imaging, 2001, 13, 437-444.	1.9	47
77	Coronary magnetic resonance imaging: visualization of the vessel lumen and the vessel wall and molecular imaging of arteriothrombosis. European Radiology, 2006, 16, 1-14.	2.3	47
78	Protein kinase G oxidation is a major cause of injury during sepsis. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 9909-9913.	3.3	47
79	Prospective respiratory motion correction for coronary MR angiography using a 2D image navigator. Magnetic Resonance in Medicine, 2013, 69, 486-494.	1.9	46
80	Coronary Vessel Wall Contrast Enhancement Imaging as a Potential DirectÂMarker of Coronary Involvement. JACC: Cardiovascular Imaging, 2014, 7, 762-770.	2.3	46
81	Sparsity and locally low rank regularization for MR fingerprinting. Magnetic Resonance in Medicine, 2019, 81, 3530-3543.	1.9	46
82	Noninvasive Assessment of Atherosclerotic Plaque Progression in ApoE ^{â^'/â^'} Mice Using Susceptibility Gradient Mapping. Circulation: Cardiovascular Imaging, 2011, 4, 295-303.	1.3	45
83	The impact of spatial resolution and respiratory motion on MR imaging of atherosclerotic plaque. Journal of Magnetic Resonance Imaging, 2003, 17, 538-544.	1.9	44
84	In Vivo Magnetization Transfer and Diffusion-Weighted Magnetic Resonance Imaging Detects Thrombus Composition in a Mouse Model of Deep Vein Thrombosis. Circulation: Cardiovascular Imaging, 2013, 6, 433-440.	1.3	44
85	In Vivo Assessment of Aortic Aneurysm Wall Integrity Using Elastin-Specific Molecular Magnetic Resonance Imaging. Circulation: Cardiovascular Imaging, 2014, 7, 679-689.	1.3	43
86	3D myocardial $\langle i\rangle T\langle i\rangle \langle sub\rangle 1\langle sub\rangle$ mapping using saturation recovery. Journal of Magnetic Resonance Imaging, 2017, 46, 218-227.	1.9	43
87	Clinical value of dark-blood late gadolinium enhancement cardiovascular magnetic resonance without additional magnetization preparation. Journal of Cardiovascular Magnetic Resonance, 2019, 21, 44.	1.6	43
88	Monitoring of Radio Frequency Tissue Ablation in an Interventional Magnetic Resonance Environment. Investigative Radiology, 1997, 32, 671-678.	3 . 5	43
89	MR Imaging of the Arterial Vessel Wall: Molecular Imaging from Bench to Bedside. Radiology, 2013, 269, 34-51.	3.6	42
90	Wholeâ€Heart Coronary <scp>MRA</scp> with 3D Affine Motion Correction Using 3D Imageâ€Based Navigation. Magnetic Resonance in Medicine, 2014, 71, 173-181.	1.9	42

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91	Motionâ€corrected simultaneous cardiac positron emission tomography and coronary MR angiography with high acquisition efficiency. Magnetic Resonance in Medicine, 2018, 79, 339-350.	1.9	42
92	Assessment of Myocardial Infarction and Postinfarction Scar Remodeling With an Elastin-Specific Magnetic Resonance Agent. Circulation: Cardiovascular Imaging, 2014, 7, 321-329.	1.3	41
93	In vivo assessment of intraplaque and endothelial fibrin in ApoEâ^'/â^' mice by molecular MRI. Atherosclerosis, 2012, 222, 43-49.	0.4	40
94	Correction for heart rate variability improves coronary magnetic resonance angiography. Journal of Magnetic Resonance Imaging, 2005, 22, 577-582.	1.9	39
95	Aspirinâ€induced histone acetylation in endothelial cells enhances synthesis of the secreted isoform of netrinâ€1 thus inhibiting monocyte vascular infiltration. British Journal of Pharmacology, 2015, 172, 3548-3564.	2.7	39
96	Congenital Heart Disease: Cardiovascular MR Imaging by Using an Intravascular Blood Pool Contrast Agent. Radiology, 2011, 260, 680-688.	3.6	38
97	Elastin-based molecular MRI of liver fibrosis. Hepatology, 2013, 58, 1517-1518.	3.6	38
98	100% Efficient threeâ€dimensional coronary MR angiography with twoâ€dimensional beatâ€ŧoâ€beat translational and binâ€ŧoâ€bin affine motion correction. Magnetic Resonance in Medicine, 2015, 74, 756-764.	1.9	38
99	Breathhold Three-Dimensional Coronary Magnetic Resonance Angiography Using Real-Time Navigator Technology. Journal of Cardiovascular Magnetic Resonance, 1999, 1, 233-238.	1.6	37
100	Coronary MR angiography. Magnetic Resonance Imaging Clinics of North America, 2003, 11, 81-99.	0.6	37
101	Characterization of carotid artery plaques with USPIO-enhanced MRI: assessment of inflammation and vascularity as in vivo imaging biomarkers for plaque vulnerability. International Journal of Cardiovascular Imaging, 2011, 27, 901-912.	0.7	37
102	Multimodality Imaging of Subclinical Aortic Atherosclerosis. Hypertension, 2013, 61, 609-614.	1.3	37
103	Rigid motionâ€corrected magnetic resonance fingerprinting. Magnetic Resonance in Medicine, 2019, 81, 947-961.	1.9	37
104	3D freeâ€breathing cardiac magnetic resonance fingerprinting. NMR in Biomedicine, 2020, 33, e4370.	1.6	37
105	3D whole-heart isotropic sub-millimeter resolution coronary magnetic resonance angiography with non-rigid motion-compensated PROST. Journal of Cardiovascular Magnetic Resonance, 2020, 22, 24.	1.6	37
106	Coronary Magnetic Resonance Angiography for Assessment of the Stent Lumen: A Phantom Study. Journal of Cardiovascular Magnetic Resonance, 2002, 4, 359-367.	1.6	36
107	Freeâ \in running 3D whole heart myocardial T 1 mapping with isotropic spatial resolution. Magnetic Resonance in Medicine, 2019, 82, 1331-1342.	1.9	36
108	Cardiac MRI to investigate myocardial scar and coronary venous anatomy using a slow infusion of dimeglumine gadobenate in patients undergoing assessment for cardiac resynchronization therapy. Journal of Magnetic Resonance Imaging, 2011, 33, 87-95.	1.9	35

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109	Three-Dimensional Imaging of the Aortic Vessel Wall Using an Elastin-Specific Magnetic Resonance Contrast Agent. Investigative Radiology, 2012, 47, 438-444.	3.5	35
110	Blackâ€Blood Contrast in Cardiovascular MRI. Journal of Magnetic Resonance Imaging, 2022, 55, 61-80.	1.9	35
111	Quantitative Assessment of Left Ventricular Function with Interactive Real-Time Spiral and Radial MR Imaging. Radiology, 2003, 227, 870-876.	3.6	34
112	Navigator-Gated Coronary Magnetic Resonance Angiography Using Steady-State-Free-Precession. Investigative Radiology, 2003, 38, 263-268.	3.5	34
113	Advanced Respiratory Motion Compensation for Coronary MR Angiography. Sensors, 2013, 13, 6882-6899.	2.1	34
114	Detection and Grading of Coronary Allograft Vasculopathy in Children With Contrast-Enhanced Magnetic Resonance Imaging of the Coronary Vessel Wall. Circulation: Cardiovascular Imaging, 2013, 6, 91-98.	1.3	34
115	Assessment of Myocardial Remodeling Using an Elastin/Tropoelastin Specific Agent with High Field Magnetic Resonance Imaging (MRI). Journal of the American Heart Association, 2015, 4, e001851.	1.6	34
116	Characterization of Coronary Atherosclerosis by Magnetic Resonance Imaging. Circulation, 2013, 128, 1244-1255.	1.6	33
117	Simultaneous bright―and blackâ€blood wholeâ€heart MRI for noncontrast enhanced coronary lumen and thrombus visualization. Magnetic Resonance in Medicine, 2018, 79, 1460-1472.	1.9	33
118	Non-Rigid Respiratory Motion Estimation of Whole-Heart Coronary MR Images Using Unsupervised Deep Learning. IEEE Transactions on Medical Imaging, 2021, 40, 444-454.	5.4	33
119	Motion artifact reduction and vessel enhancement for free-breathing navigator-gated coronary MRA using 3Dk-space reordering. Magnetic Resonance in Medicine, 2001, 45, 645-652.	1.9	32
120	MR coronary vessel wall imaging: Comparison between radial and spiral k-space sampling. Journal of Magnetic Resonance Imaging, 2006, 23, 757-762.	1.9	32
121	Three-dimensional Dual-Phase Whole-Heart MR Imaging: Clinical Implications for Congenital Heart Disease. Radiology, 2012, 263, 547-554.	3.6	32
122	3D whole-heart phase sensitive inversion recovery CMR for simultaneous black-blood late gadolinium enhancement and bright-blood coronary CMR angiography. Journal of Cardiovascular Magnetic Resonance, 2016, 19, 94.	1.6	32
123	Concurrent Molecular Magnetic Resonance Imaging of Inflammatory Activity and Extracellular Matrix Degradation for the Prediction of Aneurysm Rupture. Circulation: Cardiovascular Imaging, 2019, 12, e008707.	1.3	32
124	A multi-scale variational neural network for accelerating motion-compensated whole-heart 3D coronary MR angiography. Magnetic Resonance Imaging, 2020, 70, 155-167.	1.0	32
125	Deepâ€learning based superâ€resolution for 3D isotropic coronary MR angiography in less than a minute. Magnetic Resonance in Medicine, 2021, 86, 2837-2852.	1.9	32
126	Congenital Heart Disease in Children: Coronary MR Angiography during Systole and Diastole with Dual Cardiac Phase Whole-Heart Imaging. Radiology, 2011, 260, 232-240.	3.6	31

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127	Flowâ€independent 3D wholeâ€heart vessel wall imaging using an interleaved T2â€preparation acquisition. Magnetic Resonance in Medicine, 2013, 69, 150-157.	1.9	31
128	Noninvasive MRI Monitoring of the Effect of Interventions on Endothelial Permeability in Murine Atherosclerosis Using an Albuminâ€Binding Contrast Agent. Journal of the American Heart Association, 2013, 2, e000402.	1.6	31
129	Initial experiences with in vivo intravascular coronary vessel wall imaging. Journal of Magnetic Resonance Imaging, 2003, 17, 615-619.	1.9	30
130	A new framework for interleaved scanning in cardiovascular MR: Application to imageâ€based respiratory motion correction in coronary MR angiography. Magnetic Resonance in Medicine, 2015, 73, 692-696.	1.9	30
131	â€~Image-navigated 3-dimensional late gadolinium enhancement cardiovascular magnetic resonance imaging: feasibility and initial clinical resultsâ€~. Journal of Cardiovascular Magnetic Resonance, 2016, 19, 97.	1.6	30
132	Simultaneous Assessment of Cardiac Inflammation and Extracellular Matrix Remodeling After Myocardial Infarction. Circulation: Cardiovascular Imaging, $2018,11,.$	1.3	30
133	Superiority of prone position in free-breathing 3D coronary MRA in patients with coronary disease. Journal of Magnetic Resonance Imaging, 2001, 13, 185-191.	1.9	29
134	Characterizing radial undersampling artifacts for cardiac applications. Magnetic Resonance in Medicine, 2006, 55, 396-403.	1.9	29
135	Vascular Remodeling and Plaque Vulnerability in a Rabbit Model of Atherosclerosis: Comparison of Delayed-Enhancement MR Imaging with an Elastin-specific Contrast Agent and Unenhanced Black-Blood MR Imaging. Radiology, 2014, 271, 390-399.	3.6	29
136	Coronary MR angiography at 3T: fat suppression versus water-fat separation. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2016, 29, 733-738.	1.1	29
137	Free-running simultaneous myocardial $T1/T2$ mapping and cine imaging with 3D whole-heart coverage and isotropic spatial resolution. Magnetic Resonance Imaging, 2019, 63, 159-169.	1.0	29
138	Comparison of 3D Segmented Gradient-Echo and Steady-State Free Precession Coronary MRI Sequences in Patients with Coronary Artery Disease. American Journal of Roentgenology, 2005, 185, 103-109.	1.0	28
139	The emerging role of cardiovascular magnetic resonance in the evaluation of Kawasaki disease. International Journal of Cardiovascular Imaging, 2013, 29, 1787-1798.	0.7	28
140	Molecular imaging of the extracellular matrix in the context of atherosclerosis. Advanced Drug Delivery Reviews, 2017, 113, 49-60.	6.6	28
141	Clinical comparison of sub-mm high-resolution non-contrast coronary CMR angiography against coronary CT angiography in patients with low-intermediate risk of coronary artery disease: a single center trial. Journal of Cardiovascular Magnetic Resonance, 2021, 23, 57.	1.6	28
142	The impact of navigator timing parameters and navigator spatial resolution on 3D coronary magnetic resonance angiography. Journal of Magnetic Resonance Imaging, 2001, 14, 311-318.	1.9	27
143	Constitutive glycogen synthase kinase-3α \hat{l}^2 activity protects against chronic \hat{l}^2 -adrenergic remodelling of the heart. Cardiovascular Research, 2010, 87, 494-503.	1.8	27
144	A Self-Normalization Reconstruction Technique for PET Scans Using the Positron Emission Data. IEEE Transactions on Medical Imaging, 2012, 31, 2234-2240.	5.4	27

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145	Optimized respiratoryâ€resolved motionâ€compensated 3 <scp>D C</scp> artesian coronary <scp>MR</scp> angiography. Magnetic Resonance in Medicine, 2018, 80, 2618-2629.	1.9	27
146	Motion-corrected whole-heart PET-MR for the simultaneous visualisation of coronary artery integrity and myocardial viability: an initial clinical validation. European Journal of Nuclear Medicine and Molecular Imaging, 2018, 45, 1975-1986.	3.3	27
147	<scp>T1</scp> , <scp>T2,</scp> and Fat Fraction Cardiac MR Fingerprinting: Preliminary Clinical Evaluation. Journal of Magnetic Resonance Imaging, 2021, 53, 1253-1265.	1.9	27
148	Sandwich Immunoassay for Soluble Glycoprotein VI in Patients with Symptomatic Coronary Artery Disease. Clinical Chemistry, 2011, 57, 898-904.	1.5	26
149	Single breath-hold assessment of cardiac function using an accelerated 3D single breath-hold acquisition technique - comparison of an intravascular and extravascular contrast agent. Journal of Cardiovascular Magnetic Resonance, 2012, 14, 58.	1.6	26
150	Molecular MRI of Atherosclerosis. Molecules, 2013, 18, 14042-14069.	1.7	26
151	Molecular imaging of myocardial infarction. Basic Research in Cardiology, 2014, 109, 397.	2.5	26
152	Coronary Imaging With Cardiovascular Magnetic Resonance: Current State of the Art. Progress in Cardiovascular Diseases, 2011, 54, 240-252.	1.6	25
153	Tropoelastin. Circulation: Cardiovascular Imaging, 2018, 11, .	1.3	25
154	Coronary Magnetic Resonance Angiography. JACC: Cardiovascular Imaging, 2020, 13, 2653-2672.	2.3	25
155	Molecular Imaging of Abdominal Aortic Aneurysms. Trends in Molecular Medicine, 2017, 23, 150-164.	3.5	24
156	Motion-corrected 3D whole-heart water-fat high-resolution late gadolinium enhancement cardiovascular magnetic resonance imaging. Journal of Cardiovascular Magnetic Resonance, 2020, 22, 53.	1.6	24
157	Dark-blood late gadolinium enhancement cardiovascular magnetic resonance for improved detection of subendocardial scar: a review of current techniques. Journal of Cardiovascular Magnetic Resonance, 2021, 23, 96.	1.6	24
158	Visualization of Coronary Wall Atherosclerosis in Asymptomatic Subjects and Patients with Coronary Artery Disease Using Magnetic Resonance Imaging. PLoS ONE, 2010, 5, e12998.	1.1	23
159	Dual Inversion-Recovery MR Imaging Sequence for Reduced Blood Signal on Late Gadolinium-enhanced Images of Myocardial Scar. Radiology, 2012, 264, 242-249.	3.6	23
160	3D wholeâ€heart isotropicâ€resolution motionâ€compensated joint T ₁ /T ₂ mapping and water/fat imaging. Magnetic Resonance in Medicine, 2020, 84, 3009-3026.	1.9	23
161	Respiratory motion-compensated high-resolution 3D whole-heart T1ϕmapping. Journal of Cardiovascular Magnetic Resonance, 2020, 22, 12.	1.6	23
162	Low-Cost MR-Compatible Moving Heart Phantom. Journal of Cardiovascular Magnetic Resonance, 2000, 2, 181-187.	1.6	22

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163	Comparison of fat suppression strategies in 3D spiral coronary magnetic resonance angiography. Journal of Magnetic Resonance Imaging, 2002, 15, 462-466.	1.9	22
164	Detection of coronary plaques using MR coronary vessel wall imaging: validation of findings with intravascular ultrasound. European Radiology, 2013, 23, 115-124.	2.3	22
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