# RenÃ© M. Botnar

List of Publications by Year
in descending order

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| 335 | 13,891 | 23567 | 30922 |
| --- | --- | --- | --- |
| papers | citations | 58 h-index | 102 g-index |

| 342 | 342 | 342 | 9298 |
| --- | --- | --- | --- |
| all docs | docs citations | times ranked | 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. | 27.0 | 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. | 2.8 | 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. | 7.3 | 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 | ?Soap-Bubble? visualization and quantitative analysis of 3D coronary magnetic resonance angiograms. Magnetic Resonance in Medicine, 2002, 48, 658-666. | 3.0 | 239 |
| 7 | Submillimeter Three-dimensional Coronary MR Angiography with Real-time Navigator Correction: Comparison of Navigator Locations. Radiology, 1999, 212, 579-587. | 7.3 | 236 |
| 8 | Preliminary report on in vivo coronary MRA at 3 Tesla in humans. Magnetic Resonance in Medicine, 2002, 48, 425-429. | 3.0 | 221 |
| 9 | 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 |
| 10 | Coronary Magnetic Resonance Angiography in Adolescents and Young Adults With Kawasaki Disease. Circulation, 2002, 105, 908-911. | 1.6 | 212 |
| 11 | Age and Sex Distribution of Subclinical Aortic Atherosclerosis. Arteriosclerosis, Thrombosis, and Vascular Biology, 2002, 22, 849-854. | 2.4 | 191 |
| 12 | Cardiovascular magnetic resonance phase contrast imaging. Journal of Cardiovascular Magnetic Resonance, 2015, 17, 71. | 3.3 | 184 |
| 13 | MR imaging of thrombi using EP-2104R, a fibrin-specific contrast agent: initial results in patients. European Radiology, 2008, 18, 1995-2005. | 4.5 | 176 |
| 14 | Molecular Magnetic Resonance Imaging of Atrial Clots in a Swine Model. Circulation, 2005, 112, 396-399. | 1.6 | 169 |
| 15 | Magnetic Conjugated Polymer Nanoparticles as Bimodal Imaging Agents. Journal of the American Chemical Society, 2010, 132, 9833-9842. | 13.7 | 164 |
| 16 | Assessment of atherosclerotic plaque burden with an elastin-specific magnetic resonance contrast agent. Nature Medicine, 2011, 17, 383-388. | 30.7 | 161 |
| 17 | Contrast agent-enhanced, free-breathing, three-dimensional coronary magnetic resonance angiography. Journal of Magnetic Resonance Imaging, 1999, 10, 790-799. | 3.4 | 156 |
| 18 | Hemodynamics in the carotid artery bifurcation:. Journal of Biomechanics, 2000, 33, 137-144. | 2.1 | 151 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | 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 |
| 20 | 3D coronary vessel wall imaging utilizing a local inversion technique with spiral image acquisition. Magnetic Resonance in Medicine, 2001, 46, 848-854. | 3.0 | 136 |
| 21 | Wholeâ€heart coronary MR angiography with 2D selfâ€navigated image reconstruction. Magnetic Resonance in Medicine, 2012, 67, 437-445. | 3.0 | 135 |
| 22 | CINENet: deep learning-based 3D cardiac CINE MRI reconstruction with multi-coil complex-valued 4D spatio-temporal convolutions. Scientific Reports, 2020, 10, 13710. | 3.3 | 122 |
| 23 | Impact of bulk cardiac motion on right coronary MR angiography and vessel wall imaging. Journal of Magnetic Resonance Imaging, 2001, 14, 383-390. | 3.4 | 121 |
| 24 | Highly efficient respiratory motion compensated freeâ€breathing coronary mra using goldenâ€step Cartesian acquisition. Journal of Magnetic Resonance Imaging, 2015, 41, 738-746. | 3.4 | 121 |
| 25 | Dual cardiacâ€“respiratory gated PET: implementation and results from a feasibility study. European Journal of Nuclear Medicine and Molecular Imaging, 2007, 34, 1447-1454. | 6.4 | 119 |
| 26 | Inherently self-calibrating non-cartesian parallel imaging. Magnetic Resonance in Medicine, 2005, 54, 1-8. | 3.0 | 116 |
| 27 | 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 |
| 28 | 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 |
| 29 | 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. | 5.3 | 111 |
| 30 | 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. | 5.0 | 110 |
| 31 | Delayed-Enhancement Cardiovascular Magnetic Resonance Coronary Artery Wall Imaging. Journal of the American College of Cardiology, 2007, 50, 441-447. | 2.8 | 108 |
| 32 | Selective coronary artery plaque visualization and differentiation by contrast-enhanced inversion prepared MRI. European Heart Journal, 2006, 27, 1732-1736. | 2.2 | 102 |
| 33 | A Digital Preclinical PET/MRI Insert and Initial Results. IEEE Transactions on Medical Imaging, 2015, 34, 2258-2270. | 8.9 | 97 |
| 34 | Role of miR-195 in Aortic Aneurysmal Disease. Circulation Research, 2014, 115, 857-866. | 4.5 | 93 |
| 35 | Automatic vessel segmentation using active contours in cine phase contrast flow measurements. Journal of Magnetic Resonance Imaging, 1999, 10, 41-51. | 3.4 | 90 |
| 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. | 3.2 | 90 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Molecular imaging of cardiac remodelling after myocardial infarction. Basic Research in Cardiology, 2018, 113, 10. | 5.9 | 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. | 1.6 | 86 |
| 39 | Highly efficient nonrigid motionâ€corrected 3D wholeâ€heart coronary vessel wall imaging. Magnetic Resonance in Medicine, 2017, 77, 1894-1908. | 3.0 | 85 |
| 40 | From Compressed-Sensing to Artificial Intelligence-Based Cardiac MRI Reconstruction. Frontiers in Cardiovascular Medicine, 2020, 7, 17. | 2.4 | 85 |
| 41 | Navigator-Gated Free-Breathing Three-Dimensional Balanced Fast Field Echo (TrueFISP) Coronary Magnetic Resonance Angiography. Investigative Radiology, 2002, 37, 637-642. | 6.2 | 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. | 7.3 | 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 Angiographyâ€"Pilot Study. Radiology, 2004, 231, 581-586. | 7.3 | 80 |
| 44 | In Vivo Magnetic Resonance Imaging of Experimental Thrombosis in a Rabbit Model. Arteriosclerosis, Thrombosis, and Vascular Biology, 2001, 21, 1556-1560. | 2.4 | 79 |
| 45 | Highâ€dimensionality undersampled patchâ€based reconstruction (HDâ€PROST) for accelerated multiâ€contrast MRI. Magnetic Resonance in Medicine, 2019, 81, 3705-3719. | 3.0 | 79 |
| 46 | Free-Breathing Black-Blood Coronary MR Angiography: Initial Results. Radiology, 2001, 219, 278-283. | 7.3 | 75 |
| 47 | Differential Impact of Age, Sex, and Hypertension on Aortic Atherosclerosis. Arteriosclerosis, Thrombosis, and Vascular Biology, 2008, 28, 155-159. | 2.4 | 75 |
| 48 | Magnetic Resonance T <sub>1</sub> Relaxation Time of Venous Thrombus Is Determined by Iron Processing and Predicts Susceptibility to Lysis. Circulation, 2013, 128, 729-736. | 1.6 | 74 |
| 49 | Three-dimensional high-resolution fast spin-echo coronary magnetic resonance angiography. Magnetic Resonance in Medicine, 2001, 45, 206-211. | 3.0 | 73 |
| 50 | 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. | 3.0 | 73 |
| 51 | Automatic CNN-based detection of cardiac MR motion artefacts using k-space data augmentation and curriculum learning. Medical Image Analysis, 2019, 55, 136-147. | 11.6 | 71 |
| 52 | Direct comparison of 3D spiral vs. Cartesian gradient-echo coronary magnetic resonance angiography. Magnetic Resonance in Medicine, 2001, 46, 789-794. | 3.0 | 70 |
| 53 | Coronary magnetic resonance angiography and vessel wall imaging in children with Kawasaki disease. Pediatric Radiology, 2007, 37, 666-673. | 2.0 | 68 |
| 54 | 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. | 2.6 | 68 |

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|---|---|---|---|
| 55 | Molecular Imaging of Early Î±<sub>v</sub>Î²<sub>3</sub> Integrin Expression Predicts Long-Term Left-Ventricle Remodeling After Myocardial Infarction in Rats. Journal of Nuclear Medicine, 2012, 53, 318-323. | 5.0 | 64 |
| 56 | Free-breathing 3D coronary MRA: The impact of ?Isotropic? image resolution. Journal of Magnetic Resonance Imaging, 2000, 11, 389-393. | 3.4 | 62 |
| 57 | Renal Arteries: Navigator-gated Balanced Fast Field-Echo Projection MR Angiography with Aortic Spin Labeling: Initial Experience. Radiology, 2002, 225, 589-596. | 7.3 | 61 |
| 58 | A New <sup>18</sup>F-Labeled Myocardial PET Tracer: Myocardial Uptake After Permanent and Transient Coronary Occlusion in Rats. Journal of Nuclear Medicine, 2008, 49, 1715-1722. | 5.0 | 60 |
| 59 | Molecular Magnetic Resonance Imaging of Myocardial Perfusion With EP-3600, a Collagen-Specific Contrast Agent. Circulation, 2009, 119, 1768-1775. | 1.6 | 58 |
| 60 | Scan Reproducibility of Magnetic Resonance Imaging Assessment of Aortic Atherosclerosis Burden. Journal of Cardiovascular Magnetic Resonance, 2001, 3, 331-338. | 3.3 | 58 |
| 61 | Coronary MR Angiography: Comparison of Quantitative and Qualitative Data from Four Techniques. American Journal of Roentgenology, 2004, 182, 515-521. | 2.2 | 57 |
| 62 | Elastin imaging enables noninvasive staging and treatment monitoring of kidney fibrosis. Science Translational Medicine, 2019, 11, . | 12.4 | 56 |
| 63 | 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. | 5.6 | 55 |
| 64 | Magnetic resonance imaging of myocardial injury and ventricular torsion after marathon running. Clinical Science, 2011, 120, 143-152. | 4.3 | 55 |
| 65 | 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. | 2.4 | 54 |
| 66 | 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. | 3.3 | 53 |
| 67 | A fast 3D approach for coronary MRA. Journal of Magnetic Resonance Imaging, 1999, 10, 821-825. | 3.4 | 52 |
| 68 | 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. | 6.2 | 51 |
| 69 | 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. | 3.4 | 50 |
| 70 | Multiâ€parametric liver tissue characterization using MR fingerprinting: Simultaneous T<sub>1</sub>, T<sub>2</sub>, T<sub>2</sub>*, and fat fraction mapping. Magnetic Resonance in Medicine, 2020, 84, 2625-2635. | 3.0 | 50 |
| 71 | Impact of navigator timing on free-breathing submillimeter 3D coronary magnetic resonance angiography. Magnetic Resonance in Medicine, 2002, 47, 196-201. | 3.0 | 49 |
| 72 | Selective three-dimensional visualization of the coronary arterial lumen using arterial spin tagging. Magnetic Resonance in Medicine, 2002, 47, 322-329. | 3.0 | 48 |

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|---|---|---|---|
| 73 | Firstâ€pass contrastâ€enhanced myocardial perfusion MRI in mice on a 3â€T clinical MR scanner. Magnetic Resonance in Medicine, 2010, 64, 1592-1598. | 3.0 | 48 |
| 74 | Gd-containing conjugated polymer nanoparticles: bimodal nanoparticles for fluorescence and MRI imaging. Nanoscale, 2014, 6, 8376-8386. | 5.6 | 48 |
| 75 | Waterâ€“fat Dixon cardiac magnetic resonance fingerprinting. Magnetic Resonance in Medicine, 2020, 83, 2107-2123. | 3.0 | 48 |
| 76 | Plow quantitation with echo-planar phase-contrast velocity mapping: In vitro and in vivo evaluation. Journal of Magnetic Resonance Imaging, 1995, 5, 656-662. | 3.4 | 47 |
| 77 | 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. | 3.4 | 47 |
| 78 | Coronary magnetic resonance imaging: visualization of the vessel lumen and the vessel wall and molecular imaging of arteriothrombosis. European Radiology, 2006, 16, 1-14. | 4.5 | 47 |
| 79 | Prospective respiratory motion correction for coronary MR angiography using a 2D image navigator. Magnetic Resonance in Medicine, 2013, 69, 486-494. | 3.0 | 46 |
| 80 | Sparsity and locally low rank regularization for MR fingerprinting. Magnetic Resonance in Medicine, 2019, 81, 3530-3543. | 3.0 | 46 |
| 81 | Noninvasive Assessment of Atherosclerotic Plaque Progression in ApoE <sup>â^'/â^'</sup> Mice Using Susceptibility Gradient Mapping. Circulation: Cardiovascular Imaging, 2011, 4, 295-303. | 2.6 | 45 |
| 82 | The impact of spatial resolution and respiratory motion on MR imaging of atherosclerotic plaque. Journal of Magnetic Resonance Imaging, 2003, 17, 538-544. | 3.4 | 44 |
| 83 | 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. | 2.6 | 44 |
| 84 | In Vivo Assessment of Aortic Aneurysm Wall Integrity Using Elastin-Specific Molecular Magnetic Resonance Imaging. Circulation: Cardiovascular Imaging, 2014, 7, 679-689. | 2.6 | 43 |
| 85 | 3D myocardial T <sub>1</sub> mapping using saturation recovery. Journal of Magnetic Resonance Imaging, 2017, 46, 218-227. | 3.4 | 43 |
| 86 | Clinical value of dark-blood late gadolinium enhancement cardiovascular magnetic resonance without additional magnetization preparation. Journal of Cardiovascular Magnetic Resonance, 2019, 21, 44. | 3.3 | 43 |
| 87 | Monitoring of Radio Frequency Tissue Ablation in an Interventional Magnetic Resonance Environment. Investigative Radiology, 1997, 32, 671-678. | 6.2 | 43 |
| 88 | MR Imaging of the Arterial Vessel Wall: Molecular Imaging from Bench to Bedside. Radiology, 2013, 269, 34-51. | 7.3 | 42 |
| 89 | Wholeâ€Heart Coronary <scp>MRA</scp> with 3D Affine Motion Correction Using 3D Imageâ€Based Navigation. Magnetic Resonance in Medicine, 2014, 71, 173-181. | 3.0 | 42 |
| 90 | Motionâ€corrected simultaneous cardiac positron emission tomography and coronary MR angiography with high acquisition efficiency. Magnetic Resonance in Medicine, 2018, 79, 339-350. | 3.0 | 42 |

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|---|---|---|---|
| 91 | Assessment of Myocardial Infarction and Postinfarction Scar Remodeling With an Elastin-Specific Magnetic Resonance Agent. Circulation: Cardiovascular Imaging, 2014, 7, 321-329. | 2.6 | 41 |
| 92 | In vivo assessment of intraplaque and endothelial fibrin in ApoEâ^'/â^' mice by molecular MRI. Atherosclerosis, 2012, 222, 43-49. | 0.8 | 40 |
| 93 | Correction for heart rate variability improves coronary magnetic resonance angiography. Journal of Magnetic Resonance Imaging, 2005, 22, 577-582. | 3.4 | 39 |
| 94 | Congenital Heart Disease: Cardiovascular MR Imaging by Using an Intravascular Blood Pool Contrast Agent. Radiology, 2011, 260, 680-688. | 7.3 | 38 |
| 95 | 100% Efficient threeâ€dimensional coronary MR angiography with twoâ€dimensional beatâ€toâ€beat translational and binâ€toâ€bin affine motion correction. Magnetic Resonance in Medicine, 2015, 74, 756-764. | 3.0 | 38 |
| 96 | Breathhold Three-Dimensional Coronary Magnetic Resonance Angiography Using Real-Time Navigator Technology. Journal of Cardiovascular Magnetic Resonance, 1999, 1, 233-238. | 3.3 | 37 |
| 97 | Coronary MR angiography. Magnetic Resonance Imaging Clinics of North America, 2003, 11, 81-99. | 1.1 | 37 |
| 98 | 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. | 1.5 | 37 |
| 99 | Multimodality Imaging of Subclinical Aortic Atherosclerosis. Hypertension, 2013, 61, 609-614. | 2.7 | 37 |
| 100 | Rigid motionâ€corrected magnetic resonance fingerprinting. Magnetic Resonance in Medicine, 2019, 81, 947-961. | 3.0 | 37 |
| 101 | 3D freeâ€breathing cardiac magnetic resonance fingerprinting. NMR in Biomedicine, 2020, 33, e4370. | 2.8 | 37 |
| 102 | 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. | 3.3 | 37 |
| 103 | Coronary Magnetic Resonance Angiography for Assessment of the Stent Lumen: A Phantom Study. Journal of Cardiovascular Magnetic Resonance, 2002, 4, 359-367. | 3.3 | 36 |
| 104 | Freeâ€running 3D whole heart myocardial T 1 mapping with isotropic spatial resolution. Magnetic Resonance in Medicine, 2019, 82, 1331-1342. | 3.0 | 36 |
| 105 | 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. | 3.4 | 35 |
| 106 | Three-Dimensional Imaging of the Aortic Vessel Wall Using an Elastin-Specific Magnetic Resonance Contrast Agent. Investigative Radiology, 2012, 47, 438-444. | 6.2 | 35 |
| 107 | Blackâ€Blood Contrast in Cardiovascular MRI. Journal of Magnetic Resonance Imaging, 2022, 55, 61-80. | 3.4 | 35 |
| 108 | Quantitative Assessment of Left Ventricular Function with Interactive Real-Time Spiral and Radial MR Imaging. Radiology, 2003, 227, 870-876. | 7.3 | 34 |

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|---|---|---|---|
| 109 | Navigator-Gated Coronary Magnetic Resonance Angiography Using Steady-State-Free-Precession. Investigative Radiology, 2003, 38, 263-268. | 6.2 | 34 |
| 110 | Advanced Respiratory Motion Compensation for Coronary MR Angiography. Sensors, 2013, 13, 6882-6899. | 3.8 | 34 |
| 111 | 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. | 3.7 | 34 |
| 112 | Characterization of Coronary Atherosclerosis by Magnetic Resonance Imaging. Circulation, 2013, 128, 1244-1255. | 1.6 | 33 |
| 113 | Simultaneous brightâ€•and blackâ€blood wholeâ€heart MRI for noncontrast enhanced coronary lumen and thrombus visualization. Magnetic Resonance in Medicine, 2018, 79, 1460-1472. | 3.0 | 33 |
| 114 | Non-Rigid Respiratory Motion Estimation of Whole-Heart Coronary MR Images Using Unsupervised Deep Learning. IEEE Transactions on Medical Imaging, 2021, 40, 444-454. | 8.9 | 33 |
| 115 | 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. | 3.0 | 32 |
| 116 | MR coronary vessel wall imaging: Comparison between radial and spiral k-space sampling. Journal of Magnetic Resonance Imaging, 2006, 23, 757-762. | 3.4 | 32 |
| 117 | Three-dimensional Dual-Phase Whole-Heart MR Imaging: Clinical Implications for Congenital Heart Disease. Radiology, 2012, 263, 547-554. | 7.3 | 32 |
| 118 | 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. | 3.3 | 32 |
| 119 | Concurrent Molecular Magnetic Resonance Imaging of Inflammatory Activity and Extracellular Matrix Degradation for the Prediction of Aneurysm Rupture. Circulation: Cardiovascular Imaging, 2019, 12, e008707. | 2.6 | 32 |
| 120 | A multi-scale variational neural network for accelerating motion-compensated whole-heart 3D coronary MR angiography. Magnetic Resonance Imaging, 2020, 70, 155-167. | 1.8 | 32 |
| 121 | Deepâ€learning based superâ€resolution for 3D isotropic coronary MR angiography in less than a minute. Magnetic Resonance in Medicine, 2021, 86, 2837-2852. | 3.0 | 32 |
| 122 | Coronary MR Imaging Using Free-Breathing 3D Steady-State Free Precession with Radial k-space Sampling. RoFo Fortschritte Auf Dem Gebiet Der Rontgenstrahlen Und Der Bildgebenden Verfahren, 2003, 175, 1330-1334. | 1.3 | 31 |
| 123 | Congenital Heart Disease in Children: Coronary MR Angiography during Systole and Diastole with Dual Cardiac Phase Whole-Heart Imaging. Radiology, 2011, 260, 232-240. | 7.3 | 31 |
| 124 | Flowâ€independent 3D wholeâ€heart vessel wall imaging using an interleaved T2â€preparation acquisition. Magnetic Resonance in Medicine, 2013, 69, 150-157. | 3.0 | 31 |
| 125 | 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. | 3.7 | 31 |
| 126 | Initial experiences with in vivo intravascular coronary vessel wall imaging. Journal of Magnetic Resonance Imaging, 2003, 17, 615-619. | 3.4 | 30 |

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|---|---|---|---|
| 127 | 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. | 3.0 | 30 |
| 128 | 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. | 3.3 | 30 |
| 129 | Simultaneous Assessment of Cardiac Inflammation and Extracellular Matrix Remodeling After Myocardial Infarction. Circulation: Cardiovascular Imaging, 2018, 11, . | 2.6 | 30 |
| 130 | Superiority of prone position in free-breathing 3D coronary MRA in patients with coronary disease. Journal of Magnetic Resonance Imaging, 2001, 13, 185-191. | 3.4 | 29 |
| 131 | Characterizing radial undersampling artifacts for cardiac applications. Magnetic Resonance in Medicine, 2006, 55, 396-403. | 3.0 | 29 |
| 132 | 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. | 7.3 | 29 |
| 133 | Coronary MR angiography at 3T: fat suppression versus water-fat separation. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2016, 29, 733-738. | 2.0 | 29 |
| 134 | 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. | 1.8 | 29 |
| 135 | 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. | 2.2 | 28 |
| 136 | The emerging role of cardiovascular magnetic resonance in the evaluation of Kawasaki disease. International Journal of Cardiovascular Imaging, 2013, 29, 1787-1798. | 1.5 | 28 |
| 137 | Molecular imaging of the extracellular matrix in the context of atherosclerosis. Advanced Drug Delivery Reviews, 2017, 113, 49-60. | 13.7 | 28 |
| 138 | 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. | 3.3 | 28 |
| 139 | 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. | 3.4 | 27 |
| 140 | Constitutive glycogen synthase kinase-3Î±/Î² activity protects against chronic Î²-adrenergic remodelling of the heart. Cardiovascular Research, 2010, 87, 494-503. | 3.8 | 27 |
| 141 | A Self-Normalization Reconstruction Technique for PET Scans Using the Positron Emission Data. IEEE Transactions on Medical Imaging, 2012, 31, 2234-2240. | 8.9 | 27 |
| 142 | Optimized respiratoryâ€resolved motionâ€compensated 3<scp>D C</scp>artesian coronary <scp>MR</scp> angiography. Magnetic Resonance in Medicine, 2018, 80, 2618-2629. | 3.0 | 27 |
| 143 | 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. | 6.4 | 27 |
| 144 | <scp>T1</scp>, <scp>T2,</scp> and Fat Fraction Cardiac MR Fingerprinting: Preliminary Clinical Evaluation. Journal of Magnetic Resonance Imaging, 2021, 53, 1253-1265. | 3.4 | 27 |

| # | Article | IF | Citations |
|---|---|---|---|
| 145 | Assessment of prosthetic aortic valve performance by magnetic resonance velocity imaging. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2000, 10, 18-26. | 2.0 | 26 |
| 146 | Sandwich Immunoassay for Soluble Glycoprotein VI in Patients with Symptomatic Coronary Artery Disease. Clinical Chemistry, 2011, 57, 898-904. | 3.2 | 26 |
| 147 | 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. | 3.3 | 26 |
| 148 | Molecular MRI of Atherosclerosis. Molecules, 2013, 18, 14042-14069. | 3.8 | 26 |
| 149 | Coronary Imaging With Cardiovascular Magnetic Resonance: Current State of the Art. Progress in Cardiovascular Diseases, 2011, 54, 240-252. | 3.1 | 25 |
| 150 | Tropoelastin. Circulation: Cardiovascular Imaging, 2018, 11, . | 2.6 | 25 |
| 151 | Coronary Magnetic Resonance Angiography. JACC: Cardiovascular Imaging, 2020, 13, 2653-2672. | 5.3 | 25 |
| 152 | Molecular Imaging of Abdominal Aortic Aneurysms. Trends in Molecular Medicine, 2017, 23, 150-164. | 6.7 | 24 |
| 153 | Motion-corrected 3D whole-heart water-fat high-resolution late gadolinium enhancement cardiovascular magnetic resonance imaging. Journal of Cardiovascular Magnetic Resonance, 2020, 22, 53. | 3.3 | 24 |
| 154 | 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. | 3.3 | 24 |
| 155 | Visualization of Coronary Wall Atherosclerosis in Asymptomatic Subjects and Patients with Coronary Artery Disease Using Magnetic Resonance Imaging. PLoS ONE, 2010, 5, e12998. | 2.5 | 23 |
| 156 | Dual Inversion-Recovery MR Imaging Sequence for Reduced Blood Signal on Late Gadolinium-enhanced Images of Myocardial Scar. Radiology, 2012, 264, 242-249. | 7.3 | 23 |
| 157 | 3D wholeâ€heart isotropicâ€resolution motionâ€compensated joint T<sub>1</sub>/T<sub>2</sub> mapping and water/fat imaging. Magnetic Resonance in Medicine, 2020, 84, 3009-3026. | 3.0 | 23 |
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