

# Michael S Hansen

## List of Publications by Year in descending order

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Version: 2024-02-01

88  
papers

4,772  
citations

109321

35  
h-index

95266

68  
g-index

88  
all docs

88  
docs citations

88  
times ranked

5044  
citing authors

| #  | ARTICLE                                                                                                                                                                                                                                                                | IF  | CITATIONS |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 1  | Equilibrium Contrast Cardiovascular Magnetic Resonance for the Measurement of Diffuse Myocardial Fibrosis. <i>Circulation</i> , 2010, 122, 138-144.                                                                                                                    | 1.6 | 793       |
| 2  | T1-mapping in the heart: accuracy and precision. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2014, 16, 2.                                                                                                                                                    | 3.3 | 551       |
| 3  | Gadgetron: An open source framework for medical image reconstruction. <i>Magnetic Resonance in Medicine</i> , 2013, 69, 1768-1776.                                                                                                                                     | 3.0 | 237       |
| 4  | Opportunities in Interventional and Diagnostic Imaging by Using High-Performance Low-Field-Strength MRI. <i>Radiology</i> , 2019, 293, 384-393.                                                                                                                        | 7.3 | 224       |
| 5  | Myocardial perfusion cardiovascular magnetic resonance: optimized dual sequence and reconstruction for quantification. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2016, 19, 43.                                                                             | 3.3 | 185       |
| 6  | Accelerating cine phase-contrast flow measurements using k-t BLAST and k-t SENSE. <i>Magnetic Resonance in Medicine</i> , 2005, 54, 1430-1438.                                                                                                                         | 3.0 | 127       |
| 7  | Whole-heart cine MRI using real-time respiratory self-gating. <i>Magnetic Resonance in Medicine</i> , 2007, 57, 606-613.                                                                                                                                               | 3.0 | 120       |
| 8  | Adiabatic inversion pulses for myocardial T1 mapping. <i>Magnetic Resonance in Medicine</i> , 2014, 71, 1428-1434.                                                                                                                                                     | 3.0 | 119       |
| 9  | Wall shear rates differ between the normal carotid, femoral, and brachial arteries: An in vivo MRI study. <i>Journal of Magnetic Resonance Imaging</i> , 2004, 19, 188-193.                                                                                            | 3.4 | 116       |
| 10 | Fully quantitative cardiovascular magnetic resonance myocardial perfusion ready for clinical use: a comparison between cardiovascular magnetic resonance imaging and positron emission tomography. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2016, 19, 78. | 3.3 | 110       |
| 11 | Improvement in left ventricular filling properties after relief of right ventricle to pulmonary artery conduit obstruction: contribution of septal motion and interventricular mechanical delay. <i>European Heart Journal</i> , 2009, 30, 2266-2274.                  | 2.2 | 95        |
| 12 | Accelerating the Nonequispaced Fast Fourier Transform on Commodity Graphics Hardware. <i>IEEE Transactions on Medical Imaging</i> , 2008, 27, 538-547.                                                                                                                 | 8.9 | 91        |
| 13 | Real-time MRI-guided right heart catheterization in adults using passive catheters. <i>European Heart Journal</i> , 2013, 34, 380-389.                                                                                                                                 | 2.2 | 88        |
| 14 | Influence of Off-resonance in myocardial T1-mapping using SSFP based MOLLI method. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2013, 15, 63.                                                                                                                 | 3.3 | 85        |
| 15 | Real-time Assessment of Right and Left Ventricular Volumes and Function in Patients with Congenital Heart Disease by Using High Spatiotemporal Resolution Radial k-t SENSE. <i>Radiology</i> , 2008, 248, 782-791.                                                     | 7.3 | 81        |
| 16 | Characterization of myocardial T1-mapping bias caused by intramyocardial fat in inversion recovery and saturation recovery techniques. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2015, 17, 33.                                                             | 3.3 | 80        |
| 17 | Retrospective reconstruction of high temporal resolution cine images from real-time MRI using iterative motion correction. <i>Magnetic Resonance in Medicine</i> , 2012, 68, 741-750.                                                                                  | 3.0 | 78        |
| 18 | Cartesian SENSE and k-t SENSE reconstruction using commodity graphics hardware. <i>Magnetic Resonance in Medicine</i> , 2008, 59, 463-468.                                                                                                                             | 3.0 | 76        |

| #  | ARTICLE                                                                                                                                                                                                                                     | IF  | CITATIONS |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 19 | High spatial and temporal resolution retrospective cine cardiovascular magnetic resonance from shortened free breathing real-time acquisitions. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2013, 15, 102.                        | 3.3 | 75        |
| 20 | Going virtual with quicktime VR: New methods and standardized tools for interactive dynamic visualization of anatomical structures. <i>The Anatomical Record</i> , 2000, 261, 64-77.                                                        | 1.8 | 67        |
| 21 | Dark blood late enhancement imaging. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2016, 18, 77.                                                                                                                                    | 3.3 | 64        |
| 22 | On the influence of training data quality on k-t BLAST reconstruction. <i>Magnetic Resonance in Medicine</i> , 2004, 52, 1175-1183.                                                                                                         | 3.0 | 61        |
| 23 | Cardiac and Respiratory Motion Correction for Simultaneous Cardiac PET/MR. <i>Journal of Nuclear Medicine</i> , 2017, 58, 846-852.                                                                                                          | 5.0 | 60        |
| 24 | ISMRM Raw data format: A proposed standard for MRI raw datasets. <i>Magnetic Resonance in Medicine</i> , 2017, 77, 411-421.                                                                                                                 | 3.0 | 59        |
| 25 | Feasibility and reproducibility of biventricular volumetric assessment of cardiac function during exercise using real-time radial k-t SENSE magnetic resonance imaging. <i>Journal of Magnetic Resonance Imaging</i> , 2009, 29, 1062-1070. | 3.4 | 56        |
| 26 | Real-time distortion correction of spiral and echo planar images using the gradient system impulse response function. <i>Magnetic Resonance in Medicine</i> , 2016, 75, 2278-2285.                                                          | 3.0 | 56        |
| 27 | Real-Time Reconstruction of Sensitivity Encoded Radial Magnetic Resonance Imaging Using a Graphics Processing Unit. <i>IEEE Transactions on Medical Imaging</i> , 2009, 28, 1974-1985.                                                      | 8.9 | 55        |
| 28 | Native T1 values identify myocardial changes and stratify disease severity in patients with Duchenne muscular dystrophy. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2016, 18, 72.                                                | 3.3 | 51        |
| 29 | Distributed MRI reconstruction using gadgetron-based cloud computing. <i>Magnetic Resonance in Medicine</i> , 2015, 73, 1015-1025.                                                                                                          | 3.0 | 50        |
| 30 | Rapid Flow Assessment of Congenital Heart Disease with High-Spatiotemporal-Resolution Gated Spiral Phase-Contrast MR Imaging. <i>Radiology</i> , 2011, 260, 79-87.                                                                          | 7.3 | 49        |
| 31 | Radiation-free CMR diagnostic heart catheterization in children. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2016, 19, 65.                                                                                                        | 3.3 | 45        |
| 32 | k-t BLAST reconstruction from non-Cartesian k-t space sampling. <i>Magnetic Resonance in Medicine</i> , 2006, 55, 85-91.                                                                                                                    | 3.0 | 44        |
| 33 | Image reconstruction: An overview for clinicians. <i>Journal of Magnetic Resonance Imaging</i> , 2015, 41, 573-585.                                                                                                                         | 3.4 | 43        |
| 34 | CMR fluoroscopy right heart catheterization for cardiac output and pulmonary vascular resistance: results in 102 patients. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2016, 19, 54.                                              | 3.3 | 41        |
| 35 | Prospective comparison of novel dark blood late gadolinium enhancement with conventional bright blood imaging for the detection of scar. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2016, 19, 91.                                | 3.3 | 36        |
| 36 | Myocardial T2* mapping: influence of noise on accuracy and precision. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2015, 17, 7.                                                                                                    | 3.3 | 35        |

| #  | ARTICLE                                                                                                                                                                                                                                                                | IF  | CITATIONS |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 37 | Accelerated dynamic Fourier velocity encoding by exploiting velocity-spatio-temporal correlations. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 2004, 17, 86-94.                                                                            | 2.0 | 31        |
| 38 | Free-breathing T2* mapping using respiratory motion corrected averaging. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2015, 17, 3.                                                                                                                            | 3.3 | 29        |
| 39 | Improved cardiac magnetic resonance thermometry and dosimetry for monitoring lesion formation during catheter ablation. <i>Magnetic Resonance in Medicine</i> , 2017, 77, 673-683.                                                                                     | 3.0 | 26        |
| 40 | Whole-heart imaging using undersampled radial phase encoding (RPE) and iterative sensitivity encoding (SENSE) reconstruction. <i>Magnetic Resonance in Medicine</i> , 2009, 62, 1331-1337.                                                                             | 3.0 | 25        |
| 41 | Closed-Chest Transthoracic Magnetic Resonance Imaging-Guided Ventricular Septal Defect Closure in Swine. <i>JACC: Cardiovascular Interventions</i> , 2011, 4, 1326-1334.                                                                                               | 2.9 | 25        |
| 42 | Improved workflow for quantification of left ventricular volumes and mass using free-breathing motion corrected cine imaging. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2016, 18, 10.                                                                      | 3.3 | 24        |
| 43 | Magnetic Resonance Sequences and Rapid Acquisition for MR-Guided Interventions. <i>Magnetic Resonance Imaging Clinics of North America</i> , 2015, 23, 669-679.                                                                                                        | 1.1 | 23        |
| 44 | Magnetic Resonance Imaging-Guided Transcatheter Cavopulmonary Shunt. <i>JACC: Cardiovascular Interventions</i> , 2016, 9, 959-970.                                                                                                                                     | 2.9 | 23        |
| 45 | Predictors and prognosis of right ventricular function in pulmonary hypertension due to heart failure with reduced ejection fraction. <i>ESC Heart Failure</i> , 2021, 8, 2968-2981.                                                                                   | 3.1 | 23        |
| 46 | Determination of Peak Velocity in Stenotic Areas: Echocardiography versus k-t SENSE Accelerated MR Fourier Velocity Encoding. <i>Radiology</i> , 2008, 246, 249-257.                                                                                                   | 7.3 | 22        |
| 47 | Real-time cardiovascular magnetic resonance subxiphoid pericardial access and pericardiocentesis using off-the-shelf devices in swine. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2013, 15, 61.                                                             | 3.3 | 22        |
| 48 | Parallel transmit excitation at 1.5 T based on the minimization of a driving function for device heating. <i>Medical Physics</i> , 2015, 42, 359-371.                                                                                                                  | 3.0 | 22        |
| 49 | Direct Percutaneous Left Ventricular Access and Port Closure. <i>JACC: Cardiovascular Interventions</i> , 2011, 4, 1318-1325.                                                                                                                                          | 2.9 | 21        |
| 50 | Transthoracic delivery of large devices into the left ventricle through the right ventricle and interventricular septum: preclinical feasibility. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2013, 15, 10.                                                  | 3.3 | 20        |
| 51 | Free-breathing motion-corrected late-gadolinium-enhancement imaging improves image quality in children. <i>Pediatric Radiology</i> , 2016, 46, 983-990.                                                                                                                | 2.0 | 20        |
| 52 | User-initialized active contour segmentation and golden-angle real-time cardiovascular magnetic resonance enable accurate assessment of LV function in patients with sinus rhythm and arrhythmias. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2015, 17, 37. | 3.3 | 19        |
| 53 | Lipid content in the musculature of the lower leg: Evaluation with high-resolution spectroscopic imaging. <i>Magnetic Resonance in Medicine</i> , 2005, 54, 152-158.                                                                                                   | 3.0 | 18        |
| 54 | Spiral tissue phase velocity mapping in a breath-hold with non-cartesian SENSE. <i>Magnetic Resonance in Medicine</i> , 2014, 72, 659-668.                                                                                                                             | 3.0 | 18        |

| #  | ARTICLE                                                                                                                                                                                                               | IF  | CITATIONS |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 55 | Real-Time Magnetic Resonance Imaging Technique for Determining Left Ventricle Pressure-Volume Loops. <i>Annals of Thoracic Surgery</i> , 2014, 97, 1597-1603.                                                         | 1.3 | 18        |
| 56 | Optimized protocols for cardiac magnetic resonance imaging in patients with thoracic metallic implants. <i>Pediatric Radiology</i> , 2015, 45, 1455-1464.                                                             | 2.0 | 18        |
| 57 | Dual echo positive contrast bSSFP for real-time visualization of passive devices during magnetic resonance guided cardiovascular catheterization. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2014, 16, 88. | 3.3 | 17        |
| 58 | Acute Cardiac MRI Assessment of Radiofrequency Ablation Lesions for Pediatric Ventricular Arrhythmia: Feasibility and Clinical Correlation. <i>Journal of Cardiovascular Electrophysiology</i> , 2017, 28, 517-522.   | 1.7 | 14        |
| 59 | Positive contrast spiral imaging for visualization of commercial nitinol guidewires with reduced heating. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2015, 17, 114.                                        | 3.3 | 12        |
| 60 | Wireless access to a pharmaceutical database: A demonstrator for data driven Wireless Application Protocol applications in medical information processing. <i>Journal of Medical Internet Research</i> , 2001, 3, e4. | 4.3 | 11        |
| 61 | Virtual dye angiography: Flow visualization for MRI-guided interventions. <i>Magnetic Resonance in Medicine</i> , 2012, 67, 1013-1021.                                                                                | 3.0 | 9         |
| 62 | Noise propagation in region of interest measurements. <i>Magnetic Resonance in Medicine</i> , 2015, 73, 1300-1308.                                                                                                    | 3.0 | 8         |
| 63 | Dark blood Late Gadolinium Enhancement improves conspicuity of ablation lesions. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2016, 18, P211.                                                                | 3.3 | 8         |
| 64 | Interventional-Cardiovascular MR: Role of the Interventional MR Technologist. <i>Radiologic Technology</i> , 2016, 87, 261-70.                                                                                        | 0.1 | 8         |
| 65 | Interactive black blood preparation for interventional cardiovascular MRI. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2014, 16, P32.                                                                       | 3.3 | 7         |
| 66 | Image Fusion Guided Device Closure of Left Ventricle to Right Atrium Shunt. <i>Circulation</i> , 2015, 132, 1366-1367.                                                                                                | 1.6 | 6         |
| 67 | Accelerated parallel imaging by transform coding data compression with k-t SENSE. , 2006, 2006, 372.                                                                                                                  |     | 4         |
| 68 | Method for calculating confidence intervals for phase contrast flow measurements. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2014, 16, 46.                                                                 | 3.3 | 4         |
| 69 | Transcatheter bidirectional Glenn shunt guided by real-time MRI. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2015, 17, O23.                                                                                 | 3.3 | 2         |
| 70 | Correcting T2* effects in the myocardial perfusion arterial input function avoids overestimation of myocardial blood flow. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2016, 18, Q14.                       | 3.3 | 2         |
| 71 | Two RR myocardial perfusion acquisition achieves unbiased Myocardial Blood Flow (MBF) estimates. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2016, 18, W12.                                                 | 3.3 | 2         |
| 72 | Breath-hold spiral tissue phase velocity mapping (TPVM) with non-Cartesian SENSE. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2014, 16, P40.                                                                | 3.3 | 1         |

| #  | ARTICLE                                                                                                                                                                                                                            | IF  | CITATIONS |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 73 | Realtime MR guided endomyocardial biopsy with an active visualization biptome. Journal of Cardiovascular Magnetic Resonance, 2015, 17, P235.                                                                                       | 3.3 | 1         |
| 74 | Two channel passive visualization of a nitinol guidewire with iron markers. Journal of Cardiovascular Magnetic Resonance, 2015, 17, P236.                                                                                          | 3.3 | 1         |
| 75 | Continuous adaptive radial sampling of k-space from real-time physiologic feedback in MRI. Journal of Cardiovascular Magnetic Resonance, 2015, 17, P37.                                                                            | 3.3 | 1         |
| 76 | Real-time inversion recovery for infarct visualization during MR-guided interventions. Journal of Cardiovascular Magnetic Resonance, 2016, 18, P205.                                                                               | 3.3 | 1         |
| 77 | A Comprehensive Free-Breathing Protocol for Cardiovascular Magnetic Resonance Imaging of Ischemia and Cardiomyopathies: a Feasibility Study. Journal of Cardiovascular Magnetic Resonance, 2016, 18, P313.                         | 3.3 | 1         |
| 78 | Inline quantitative myocardial perfusion flow mapping. Journal of Cardiovascular Magnetic Resonance, 2016, 18, W8.                                                                                                                 | 3.3 | 1         |
| 79 | A framework for constraining image SNR loss due to MR raw data compression. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2019, 32, 213-225.                                                                     | 2.0 | 1         |
| 80 | Self-navigated ideal water-fat separation with variable k-space averaging. , 2009, , .                                                                                                                                             |     | 0         |
| 81 | Equilibrium contrast CMR for the measurement of diffuse myocardial fibrosis. Journal of Cardiovascular Magnetic Resonance, 2010, 12, .                                                                                             | 3.3 | 0         |
| 82 | Virtual Dye Angiography: flow visualization for MRI-guided interventions using endogenous contrast. Journal of Cardiovascular Magnetic Resonance, 2011, 13, .                                                                      | 3.3 | 0         |
| 83 | Dual echo bSSFP for real-time positive contrast of passive nitinol guidewires in MRI-guided cardiovascular interventions. Journal of Cardiovascular Magnetic Resonance, 2014, 16, O79.                                             | 3.3 | 0         |
| 84 | Accelerating spiral tissue phase velocity mapping without affecting peak velocity measurements. Journal of Cardiovascular Magnetic Resonance, 2014, 16, W31.                                                                       | 3.3 | 0         |
| 85 | The Frank-Starling relationship of the heart revealed in a large animal study utilizing real-time undersampled radial MRI at variable inotropic state and heart rate. Journal of Cardiovascular Magnetic Resonance, 2014, 16, P57. | 3.3 | 0         |
| 86 | Percutaneous MR guided direct left atrial access to deliver large interventional devices. Journal of Cardiovascular Magnetic Resonance, 2015, 17, O19.                                                                             | 3.3 | 0         |
| 87 | Spiral imaging with off-resonance reconstruction for MRI-guided cardiovascular catheterizations using commercial off-the-shelf nitinol guidewires. Journal of Cardiovascular Magnetic Resonance, 2016, 18, P216.                   | 3.3 | 0         |
| 88 | Techniques for T1, T2, and Extracellular Volume Mapping. , 2019, , 15-26.e2.                                                                                                                                                       |     | 0         |