

Michael Markl

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

287
papers

10,359
citations

55
h-index

93
g-index

314
ext. papers

12,479
ext. citations

5.1
avg, IF

6.17
L-index

#	Paper	IF	Citations
287	A multi-modality approach for enhancing 4D flow magnetic resonance imaging via sparse representation.. <i>Journal of the Royal Society Interface</i> , 2022 , 19, 20210751	4.1	
286	Pilot tone navigation for respiratory and cardiac motion-resolved free-running 5D flow MRI. <i>Magnetic Resonance in Medicine</i> , 2022 , 87, 718-732	4.4	2
285	Cardiac Magnetic Resonance Imaging Feature Tracking Demonstrates Altered Biventricular Strain in Obese Subjects in the Absence of Clinically Apparent Cardiovascular Disease. <i>Journal of Thoracic Imaging</i> , 2022 , 37, W1-W2	5.6	1
284	Special Issue on 4D Flow MRI in Magnetic Resonance in Medical Sciences.. <i>Magnetic Resonance in Medical Sciences</i> , 2022 , 21, 257	2.9	
283	Two wrongs sometimes do make a right: errors in aortic valve stenosis assessment by same-day Doppler echocardiography and 4D flow MRI.. <i>International Journal of Cardiovascular Imaging</i> , 2022 , 1	2.5	
282	Bicuspid aortic valve morphology and hemodynamics by same-day echocardiography and cardiac MRI.. <i>International Journal of Cardiovascular Imaging</i> , 2022 , 1	2.5	
281	30-minute CMR for common clinical indications: A Society for Cardiovascular Magnetic Resonance white paper.. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2022 , 24, 13	6.9	1
280	Standards for writing Society for Cardiovascular Magnetic Resonance (SCMR) endorsed guidelines, expert consensus, and recommendations: a report of the publications committee. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2021 , 23, 129	6.9	0
279	Multi-parametric cardiovascular magnetic resonance with regadenoson stress perfusion is safe following pediatric heart transplantation and identifies history of rejection and cardiac allograft vasculopathy. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2021 , 23, 135	6.9	1
278	Is cardiac magnetic resonance ready for aortic regurgitation?. <i>Kardiologia Polska</i> , 2021 , 79, 945-946	0.9	
277	Four-Dimensional Magnetic Resonance After Ross Procedure for Unicuspid Aortic Valve. <i>Circulation: Cardiovascular Imaging</i> , 2021 , 14, e011500	3.9	
276	Visceral adiposity, muscle composition, and exercise tolerance in heart failure with preserved ejection fraction. <i>ESC Heart Failure</i> , 2021 , 8, 2535-2545	3.7	9
275	Cine MRI characterizes HFpEF and HFrEF in post-capillary pulmonary hypertension. <i>European Journal of Radiology</i> , 2021 , 139, 109679	4.7	
274	Complete Regional Absence of Vasa Vasorum in an Ascending Aortic Aneurysm. <i>Circulation: Cardiovascular Imaging</i> , 2021 , 14, e012312	3.9	
273	Effect of age and sex on fully automated deep learning assessment of left ventricular function, volumes, and contours in cardiac magnetic resonance imaging. <i>International Journal of Cardiovascular Imaging</i> , 2021 , 37, 3539-3547	2.5	0
272	Impact of sequence type and field strength (1.5, 3, and 7T) on 4D flow MRI hemodynamic aortic parameters in healthy volunteers. <i>Magnetic Resonance in Medicine</i> , 2021 , 85, 721-733	4.4	6
271	Cardiac MRI Reveals Late Diastolic Changes in Left Ventricular Relaxation Patterns During Healthy Aging. <i>Journal of Magnetic Resonance Imaging</i> , 2021 , 53, 766-774	5.6	2

270	Intracardiac and Vascular Hemodynamics with Cardiovascular Magnetic Resonance in Heart Failure. <i>Heart Failure Clinics</i> , 2021 , 17, 135-147	3.3	
269	Aortic annular dimensions by non-contrast MRI using k-t accelerated 3D cine b-SSFP in pre-procedural assessment for transcatheter aortic valve implantation: a technical feasibility study. <i>International Journal of Cardiovascular Imaging</i> , 2021 , 37, 651-661	2.5	1
268	Highly accelerated aortic 4D flow MRI using compressed sensing: Performance at different acceleration factors in patients with aortic disease. <i>Magnetic Resonance in Medicine</i> , 2021 , 85, 2174-2187	4.4	5
267	Renin Angiotensin System Inhibitors Reduce Aortic Stiffness and Flow Reversal After a Cryptogenic Stroke. <i>Journal of Magnetic Resonance Imaging</i> , 2021 , 53, 213-221	5.6	0
266	Investigation of Aortic Wall Thickness, Stiffness and Flow Reversal in Patients With Cryptogenic Stroke: A 4D Flow MRI Study. <i>Journal of Magnetic Resonance Imaging</i> , 2021 , 53, 942-952	5.6	5
265	4D flow MRI for the assessment of renal transplant dysfunction: initial results. <i>European Radiology</i> , 2021 , 31, 909-919	8	3
264	Rapid reconstruction of highly undersampled, non-Cartesian real-time cine k-space data using a perceptual complex neural network (PCNN). <i>NMR in Biomedicine</i> , 2021 , 34, e4405	4.4	5
263	Stochastic 4D Flow Vector-Field Signatures: A New Approach for Comprehensive 4D Flow MRI Quantification. <i>Lecture Notes in Computer Science</i> , 2021 , 215-224	0.9	
262	Cine MRI detects elevated left heart pressure in pulmonary hypertension. <i>Journal of Magnetic Resonance Imaging</i> , 2021 , 54, 275-283	5.6	2
261	Using 5D flow MRI to decode the effects of rhythm on left atrial 3D flow dynamics in patients with atrial fibrillation. <i>Magnetic Resonance in Medicine</i> , 2021 , 85, 3125-3139	4.4	4
260	4D flow MRI left atrial kinetic energy in hypertrophic cardiomyopathy is associated with mitral regurgitation and left ventricular outflow tract obstruction. <i>International Journal of Cardiovascular Imaging</i> , 2021 , 37, 2755-2765	2.5	1
259	4D flow MRI after aortic replacement with frozen elephant trunk using thoraflex hybrid graft. <i>Journal of Cardiac Surgery</i> , 2021 , 36, 1543-1545	1.3	0
258	Summary: international consensus statement on nomenclature and classification of the congenital bicuspid aortic valve and its aortopathy, for clinical, surgical, interventional and research purposes. <i>European Journal of Cardio-thoracic Surgery</i> , 2021 , 60, 481-496	3	1
257	International consensus statement on nomenclature and classification of the congenital bicuspid aortic valve and its aortopathy, for clinical, surgical, interventional and research purposes. <i>European Journal of Cardio-thoracic Surgery</i> , 2021 , 60, 448-476	3	5
256	International Consensus Statement on Nomenclature and Classification of the Congenital Bicuspid Aortic Valve and Its Aortopathy, for Clinical, Surgical, Interventional and Research Purposes. <i>Radiology: Cardiothoracic Imaging</i> , 2021 , 3, e200496	8.3	2
255	Association of Regional Wall Shear Stress and Progressive Ascending Aorta Dilation in Bicuspid Aortic Valve. <i>JACC: Cardiovascular Imaging</i> , 2021 ,	8.4	4
254	Automated segmentation of biventricular contours in tissue phase mapping using deep learning. <i>NMR in Biomedicine</i> , 2021 , 34, e4606	4.4	
253	International Consensus Statement on Nomenclature and Classification of the Congenital Bicuspid Aortic Valve and Its Aortopathy, for Clinical, Surgical, Interventional and Research Purposes. <i>Annals of Thoracic Surgery</i> , 2021 , 112, e203-e235	2.7	3

252	International consensus statement on nomenclature and classification of the congenital bicuspid aortic valve and its aortopathy, for clinical, surgical, interventional and research purposes. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 2021 , 162, e383-e414	1.5	9
251	Summary: International consensus statement on nomenclature and classification of the congenital bicuspid aortic valve and its aortopathy, for clinical, surgical, interventional, and research purposes. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 2021 , 162, 781-797	1.5	0
250	Summary: International Consensus Statement on Nomenclature and Classification of the Congenital Bicuspid Aortic Valve and Its Aortopathy, for Clinical, Surgical, Interventional and Research Purposes. <i>Annals of Thoracic Surgery</i> , 2021 , 112, 1005-1022	2.7	0
249	Divergence-Free Constrained Phase Unwrapping and Denoising for 4D Flow MRI Using Weighted Least-Squares. <i>IEEE Transactions on Medical Imaging</i> , 2021 , 40, 3389-3399	11.7	0
248	Direct mitral regurgitation quantification in hypertrophic cardiomyopathy using 4D flow CMR jet tracking: evaluation in comparison to conventional CMR. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2021 , 23, 138	6.9	0
247	Complicated Double-Orifice Mitral Regurgitation: Combined Hemodynamic Assessment Using Echocardiography and Four-Dimensional Flow Magnetic Resonance Imaging. <i>Case</i> , 2020 , 4, 494-499	0.5	
246	Hypertrophic Cardiomyopathy Is Associated with Altered Left Ventricular 3D Blood Flow Dynamics. <i>Radiology: Cardiothoracic Imaging</i> , 2020 , 2, e190038	8.3	3
245	How Well Does an Automated Approach Calculate and Visualize Blood Flow Vorticity at 4D Flow MRI?. <i>Radiology: Cardiothoracic Imaging</i> , 2020 , 2, e190233	8.3	0
244	Turning Up the Flow: Cardiovascular 4D Flow MRI during Exercise. <i>Radiology: Cardiothoracic Imaging</i> , 2020 , 2, e200063	8.3	
243	Accelerated 3D Left Atrial Late Gadolinium Enhancement in Patients with Atrial Fibrillation at 1.5 T: Technical Development. <i>Radiology: Cardiothoracic Imaging</i> , 2020 , 2, e200134	8.3	1
242	Highlights of the 2020 23rd Society for Cardiovascular Magnetic Resonance Scientific Sessions. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2020 , 22, 75	6.9	1
241	Multimodal imaging of a giant left ventricular basal aneurysm and resulting intracardiac flow disturbances. <i>European Heart Journal Cardiovascular Imaging</i> , 2020 , 21, 1050	4.1	1
240	Cardiac MRI Myocardial Functional and Tissue Characterization Detects Early Cardiac Dysfunction in a Mouse Model of Chemotherapy-Induced Cardiotoxicity. <i>NMR in Biomedicine</i> , 2020 , 33, e4327	4.4	5
239	Detecting Aortic Valve-Induced Abnormal Flow with Seismocardiography and Cardiac MRI. <i>Annals of Biomedical Engineering</i> , 2020 , 48, 1779-1792	4.7	5
238	4D Flow with MRI. <i>Annual Review of Biomedical Engineering</i> , 2020 , 22, 103-126	12	15
237	Impact of age, sex, and global function on normal aortic hemodynamics. <i>Magnetic Resonance in Medicine</i> , 2020 , 84, 2088-2102	4.4	3
236	Fully automated 3D aortic segmentation of 4D flow MRI for hemodynamic analysis using deep learning. <i>Magnetic Resonance in Medicine</i> , 2020 , 84, 2204-2218	4.4	35
235	Development of a rotation phantom for phase contrast MRI sequence validation and quality control. <i>Magnetic Resonance in Medicine</i> , 2020 , 84, 3333-3341	4.4	3

234	Evaluating Biventricular Myocardial Velocity and Interventricular Dyssynchrony in Adult Patients During the First Year After Heart Transplantation. <i>Journal of Magnetic Resonance Imaging</i> , 2020 , 52, 920-929	5.6	1
233	Highly accelerated, real-time phase-contrast MRI using radial k-space sampling and GROG-GRASP reconstruction: a feasibility study in pediatric patients with congenital heart disease. <i>NMR in Biomedicine</i> , 2020 , 33, e4240	4.4	7
232	Prognostic Value of Myocardial Extracellular Volume Fraction and T2-mapping in Heart Transplant Patients. <i>JACC: Cardiovascular Imaging</i> , 2020 , 13, 1521-1530	8.4	12
231	Identification of Vortex Cores in Cerebral Aneurysms on 4D Flow MRI. <i>American Journal of Neuroradiology</i> , 2020 , 41, E26	4.4	2
230	5D Flow MRI: A Fully Self-gated, Free-running Framework for Cardiac and Respiratory Motion-resolved 3D Hemodynamics. <i>Radiology: Cardiothoracic Imaging</i> , 2020 , 2, e200219	8.3	13
229	Hemodynamic Aspects of Vessel Wall Imaging: 4D Flow 2020 , 297-330		0
228	Parametric Hemodynamic 4D Flow MRI Maps for the Characterization of Chronic Thoracic Descending Aortic Dissection. <i>Journal of Magnetic Resonance Imaging</i> , 2020 , 51, 1357-1368	5.6	16
227	Altered regional myocardial velocities by tissue phase mapping and feature tracking in pediatric patients with hypertrophic cardiomyopathy. <i>Pediatric Radiology</i> , 2020 , 50, 168-179	2.8	4
226	Seismocardiography and 4D flow MRI reveal impact of aortic valve replacement on chest acceleration and aortic hemodynamics. <i>Journal of Cardiac Surgery</i> , 2020 , 35, 232-235	1.3	1
225	Diffuse right ventricular fibrosis in heart failure with preserved ejection fraction and pulmonary hypertension. <i>ESC Heart Failure</i> , 2020 , 7, 253-263	3.7	27
224	Semi-quantitative myocardial perfusion MRI in heart transplant recipients at rest: repeatability in healthy controls and assessment of cardiac allograft vasculopathy. <i>Clinical Imaging</i> , 2020 , 61, 62-68	2.7	3
223	Four-dimensional Flow Magnetic Resonance Imaging Quantification of Blood Flow in Bicuspid Aortic Valve. <i>Journal of Thoracic Imaging</i> , 2020 , 35, 383-388	5.6	3
222	Effect of Aortic Valve Disease on 3D Hemodynamics in Patients With Aortic Dilation and Trileaflet Aortic Valve Morphology. <i>Journal of Magnetic Resonance Imaging</i> , 2020 , 51, 481-491	5.6	7
221	Altered 4-D magnetic resonance imaging flow characteristics in complex congenital aortic arch repair. <i>Pediatric Radiology</i> , 2020 , 50, 17-27	2.8	1
220	Gluteal Vein Anatomy: Location, Caliber, Impact of Patient Positioning, and Implications for Fat Grafting. <i>Aesthetic Surgery Journal</i> , 2020 , 40, 642-649	2.4	3
219	Myocardial velocity, intra-, and interventricular dyssynchrony evaluated by tissue phase mapping in pediatric heart transplant recipients. <i>Journal of Magnetic Resonance Imaging</i> , 2020 , 51, 1212-1222	5.6	3
218	Efficient triple-VENC phase-contrast MRI for improved velocity dynamic range. <i>Magnetic Resonance in Medicine</i> , 2020 , 83, 505-520	4.4	7
217	Multi-modality cerebral aneurysm haemodynamic analysis: 4D flow MRI, volumetric particle velocimetry and computational fluid dynamics. <i>Journal of the Royal Society Interface</i> , 2019 , 16, 20190465	4.1	18

216	Techniques in the Assessment of Cardiovascular Blood Flow and Velocity. <i>Contemporary Cardiology</i> , 2019 , 113-125	0.1	
215	The Role of Imaging of Flow Patterns by 4D Flow MRI in Aortic Stenosis. <i>JACC: Cardiovascular Imaging</i> , 2019 , 12, 252-266	8.4	64
214	Interval changes in aortic peak velocity and wall shear stress in patients with bicuspid aortic valve disease. <i>International Journal of Cardiovascular Imaging</i> , 2019 , 35, 1925-1934	2.5	10
213	Standardized Evaluation of Cerebral Arteriovenous Malformations Using Flow Distribution Network Graphs and Dual-venic 4D Flow MRI. <i>Journal of Magnetic Resonance Imaging</i> , 2019 , 50, 1718-1730	5.6	12
212	Impact of Aortopathy and Aortic Valve Disease on 3D Blood Flow and Wall Shear Stress in the Thoracic Aorta: As Assessed by 4D Flow MRI 2019 , 447-464		
211	Detection and Hemodynamic Evaluation of Flap Fenestrations in Type B Aortic Dissection with 4D Flow MRI: Comparison with Conventional MRI and CTA. <i>Radiology: Cardiothoracic Imaging</i> , 2019 , 1,	8.3	23
210	Semi-automated analysis of 4D flow MRI to assess the hemodynamic impact of intracranial atherosclerotic disease. <i>Magnetic Resonance in Medicine</i> , 2019 , 82, 749-762	4.4	13
209	Multiparametric Cardiac Magnetic Resonance Imaging Can Detect Acute Cardiac Allograft Rejection After Heart Transplantation. <i>JACC: Cardiovascular Imaging</i> , 2019 , 12, 1632-1641	8.4	29
208	Aortic 4D flow MRI in 2 minutes using compressed sensing, respiratory controlled adaptive k-space reordering, and inline reconstruction. <i>Magnetic Resonance in Medicine</i> , 2019 , 81, 3675-3690	4.4	41
207	Impact of age and cardiac disease on regional left and right ventricular myocardial motion in healthy controls and patients with repaired tetralogy of fallot. <i>International Journal of Cardiovascular Imaging</i> , 2019 , 35, 1119-1132	2.5	7
206	Cardiac Structure-Function MRI in Patients After Heart Transplantation. <i>Journal of Magnetic Resonance Imaging</i> , 2019 , 49, 678-687	5.6	12
205	Two-Minute k-Space and Time-accelerated Aortic Four-dimensional Flow MRI: Dual-Center Study of Feasibility and Impact on Velocity and Wall Shear Stress Quantification. <i>Radiology: Cardiothoracic Imaging</i> , 2019 , 1, e180008	8.3	6
204	Intracardiac 4D Flow MRI in Congenital Heart Disease: Recommendations on Behalf of the ISMRM Flow & Motion Study Group. <i>Journal of Magnetic Resonance Imaging</i> , 2019 , 50, spcone-spcone	5.6	20
203	On the RuspPof clinical feasibility: aortic wall shear stress derived non-invasively with 4D flow MRI. <i>Journal of Thoracic Disease</i> , 2019 , 11, E96-E97	2.6	1
202	Intracardiac 4D Flow MRI in Congenital Heart Disease: Recommendations on Behalf of the ISMRM Flow & Motion Study Group. <i>Journal of Magnetic Resonance Imaging</i> , 2019 , 50, 677-681	5.6	16
201	Reproducibility and Changes in Vena Caval Blood Flow by Using 4D Flow MRI in Pulmonary Emphysema and Chronic Obstructive Pulmonary Disease (COPD): The Multi-Ethnic Study of Atherosclerosis (MESA) COPD Substudy. <i>Radiology</i> , 2019 , 292, 585-594	20.5	9
200	Comprehensive MR Analysis of Cardiac Function, Aortic Hemodynamics and Left Ventricular Strain in Pediatric Cohort with Isolated Bicuspid Aortic Valve. <i>Pediatric Cardiology</i> , 2019 , 40, 1450-1459	2.1	4
199	Four-dimensional Virtual Catheter: Noninvasive Assessment of Intra-aortic Hemodynamics in Bicuspid Aortic Valve Disease. <i>Radiology</i> , 2019 , 293, 541-550	20.5	10

198	Donor and Recipient Characteristics in Heart Transplantation Are Associated with Altered Myocardial Tissue Structure and Cardiac Function. <i>Radiology: Cardiothoracic Imaging</i> , 2019 , 1, e190009	8.3	1
197	Aortic stenosis exacerbates flow aberrations related to the bicuspid aortic valve fusion pattern and the aortopathy phenotype. <i>European Journal of Cardio-thoracic Surgery</i> , 2019 , 55, 534-542	3	10
196	4-D flow MRI aortic 3-D hemodynamics and wall shear stress remain stable over short-term follow-up in pediatric and young adult patients with bicuspid aortic valve. <i>Pediatric Radiology</i> , 2019 , 49, 57-67	2.8	9
195	Comprehensive evaluation of macroscopic and microscopic myocardial fibrosis by cardiac MR: intra-individual comparison of gadobutrol versus gadoterate meglumine. <i>European Radiology</i> , 2019 , 29, 4357-4367	8	6
194	Hemodynamic measurements with an abdominal 4D flow MRI sequence with spiral sampling and compressed sensing in patients with chronic liver disease. <i>Journal of Magnetic Resonance Imaging</i> , 2019 , 49, 994-1005	5.6	9
193	4-D flow magnetic-resonance-imaging-derived energetic biomarkers are abnormal in children with repaired tetralogy of Fallot and associated with disease severity. <i>Pediatric Radiology</i> , 2019 , 49, 308-317	2.8	10
192	Autocalibrated multiband CAIPIRINHA with through-time encoding: Proof of principle and application to cardiac tissue phase mapping. <i>Magnetic Resonance in Medicine</i> , 2019 , 81, 1016-1030	4.4	12
191	Caval to pulmonary 3D flow distribution in patients with Fontan circulation and impact of potential 4D flow MRI error sources. <i>Magnetic Resonance in Medicine</i> , 2019 , 81, 1205-1218	4.4	6
190	Accelerated real-time cardiac MRI using iterative sparse SENSE reconstruction: comparing performance in patients with sinus rhythm and atrial fibrillation. <i>European Radiology</i> , 2018 , 28, 3088-3096	8	6
189	Perioperative evaluation of regional aortic wall shear stress patterns in patients undergoing aortic valve and/or proximal thoracic aortic replacement. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 2018 , 155, 2277-2286.e2	1.5	22
188	Valve mediated hemodynamics and their association with distal ascending aortic diameter in bicuspid aortic valve subjects. <i>Journal of Magnetic Resonance Imaging</i> , 2018 , 47, 246-254	5.6	22
187	k-t accelerated aortic 4D flow MRI in under two minutes: Feasibility and impact of resolution, k-space sampling patterns, and respiratory navigator gating on hemodynamic measurements. <i>Magnetic Resonance in Medicine</i> , 2018 , 79, 195-207	4.4	35
186	Distribution of blood flow velocity in the normal aorta: Effect of age and gender. <i>Journal of Magnetic Resonance Imaging</i> , 2018 , 47, 487-498	5.6	29
185	Voxel-by-voxel 4D flow MRI-based assessment of regional reverse flow in the aorta. <i>Journal of Magnetic Resonance Imaging</i> , 2018 , 47, 1276-1286	5.6	12
184	Aortic valve-mediated wall shear stress is heterogeneous and predicts regional aortic elastic fiber thinning in bicuspid aortic valve-associated aortopathy. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 2018 , 156, 2112-2120.e2	1.5	50
183	The American Association for Thoracic Surgery consensus guidelines on bicuspid aortic valve-related aortopathy: Executive summary. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 2018 , 156, 473-480	1.5	42
182	The American Association for Thoracic Surgery consensus guidelines on bicuspid aortic valve-related aortopathy: Full online-only version. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 2018 , 156, e41-e74	1.5	109
181	The growth and evolution of cardiovascular magnetic resonance: a 20-year history of the Society for Cardiovascular Magnetic Resonance (SCMR) annual scientific sessions. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2018 , 20, 8	6.9	8

180	Abstract TP119: Feasibility of Automated Analysis of Dual-Venc 4d Flow Mri to Assess Hemodynamics in Patients With Intracranial Atherosclerotic Disease. <i>Stroke</i> , 2018 , 49,	6.7	1
179	4D flow MRI, cardiac function, and T-mapping: Association of valve-mediated changes in aortic hemodynamics with left ventricular remodeling. <i>Journal of Magnetic Resonance Imaging</i> , 2018 , 48, 121-131	5.6	19
178	Altered Aortic 3-Dimensional Hemodynamics in Patients With Functionally Unicuspid Aortic Valves. <i>Circulation: Cardiovascular Imaging</i> , 2018 , 11, e007915	3.9	0
177	Variability of native T1 values: implication for defining regional myocardial changes using MRI. <i>International Journal of Cardiovascular Imaging</i> , 2018 , 34, 1637-1645	2.5	2
176	4D flow MR imaging of the portal venous system: a feasibility study in children. <i>European Radiology</i> , 2017 , 27, 832-840	8	12
175	In Vivo Assessment of the Impact of Regional Intracranial Atherosclerotic Lesions on Brain Arterial 3D Hemodynamics. <i>American Journal of Neuroradiology</i> , 2017 , 38, 515-522	4.4	10
174	Accelerated dual-venc 4D flow MRI for neurovascular applications. <i>Journal of Magnetic Resonance Imaging</i> , 2017 , 46, 102-114	5.6	44
173	Acute Cerebral Venous Thrombosis: Three-Dimensional Visualization and Quantification of Hemodynamic Alterations Using 4-Dimensional Flow Magnetic Resonance Imaging. <i>Stroke</i> , 2017 , 48, 671-677	6.7	14
172	The consistency of myocardial strain derived from heart deformation analysis. <i>International Journal of Cardiovascular Imaging</i> , 2017 , 33, 1169-1177	2.5	7
171	Aortic shear stress in patients with bicuspid aortic valve with stenosis and insufficiency. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 2017 , 153, 1263-1272.e1	1.5	35
170	Magnetic resonance imaging 4-D flow-based analysis of aortic hemodynamics in Turner syndrome. <i>Pediatric Radiology</i> , 2017 , 47, 382-390	2.8	12
169	Importance of variants in cerebrovascular anatomy for potential retrograde embolization in cryptogenic stroke. <i>European Radiology</i> , 2017 , 27, 4145-4152	8	6
168	JOURNAL CLUB: Four-Dimensional Flow MRI-Based Splenic Flow Index for Predicting Cirrhosis-Associated Hypersplenism. <i>American Journal of Roentgenology</i> , 2017 , 209, 46-54	5.4	8
167	Automated Description of Regional Left Ventricular Motion in Patients With Cardiac Amyloidosis: A Quantitative Study Using Heart Deformation Analysis. <i>American Journal of Roentgenology</i> , 2017 , 209, W57-W63	5.4	6
166	Superior Abdominal 4D Flow MRI Data Consistency with Adjusted Preprocessing Workflow and Noncontrast Acquisitions. <i>Academic Radiology</i> , 2017 , 24, 350-358	4.3	3
165	Aortic Valve Stenosis Alters Expression of Regional Aortic Wall Shear Stress: New Insights From a 4-Dimensional Flow Magnetic Resonance Imaging Study of 571 Subjects. <i>Journal of the American Heart Association</i> , 2017 , 6,	6	81
164	Cardiovascular MRI in Thoracic Aortopathy: A Focused Review of Recent Literature Updates. <i>Current Radiology Reports</i> , 2017 , 5, 1	0.5	1
163	Altered aortic 3D hemodynamics and geometry in pediatric Marfan syndrome patients. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2017 , 19, 30	6.9	26

162	Longitudinal Evaluation of Aortic Hemodynamics in Marfan Syndrome: New Insights from a 4D Flow Cardiovascular Magnetic Resonance Multi-Year Follow-Up Study. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2017 , 19, 33	6.9	38
161	Heart deformation analysis: the distribution of regional myocardial motion patterns at left ventricle. <i>International Journal of Cardiovascular Imaging</i> , 2017 , 33, 351-359	2.5	6
160	Volumetric quantification of absolute local normalized helicity in patients with bicuspid aortic valve and aortic dilatation. <i>Magnetic Resonance in Medicine</i> , 2017 , 78, 689-701	4.4	28
159	Quantification and comparison of 4D-flow MRI-derived wall shear stress and MRE-derived wall stiffness of the abdominal aorta. <i>Journal of Magnetic Resonance Imaging</i> , 2017 , 45, 771-778	5.6	23
158	T1 mapping in children and young adults with hypertrophic cardiomyopathy. <i>International Journal of Cardiovascular Imaging</i> , 2017 , 33, 109-117	2.5	12
157	Reproducibility of cine displacement encoding with stimulated echoes (DENSE) in human subjects. <i>Magnetic Resonance Imaging</i> , 2017 , 35, 148-153	3.3	17
156	Spatial phenotyping of the endocardial endothelium as a function of intracardiac hemodynamic shear stress. <i>Journal of Biomechanics</i> , 2017 , 50, 11-19	2.9	7
155	Evolution of Precision Medicine and Surgical Strategies for Bicuspid Aortic Valve-Associated Aortopathy. <i>Frontiers in Physiology</i> , 2017 , 8, 475	4.6	6
154	Left Atrial and Left Atrial Appendage 4D Blood Flow Dynamics in Atrial Fibrillation. <i>Circulation: Cardiovascular Imaging</i> , 2016 , 9, e004984	3.9	51
153	Improved Semiautomated 4D Flow MRI Analysis in the Aorta in Patients With Congenital Aortic Valve Anomalies Versus Tricuspid Aortic Valves. <i>Journal of Computer Assisted Tomography</i> , 2016 , 40, 102-8	2.2	24
152	Comparison of 4D flow and 2D velocity-encoded phase contrast MRI sequences for the evaluation of aortic hemodynamics. <i>International Journal of Cardiovascular Imaging</i> , 2016 , 32, 1529-41	2.5	41
151	Optimized AIR and investigational MOLLI cardiac T1 mapping pulse sequences produce similar intra-scan repeatability in patients at 3T. <i>NMR in Biomedicine</i> , 2016 , 29, 1454-63	4.4	6
150	Hemodynamic evaluation in patients with transposition of the great arteries after the arterial switch operation: 4D flow and 2D phase contrast cardiovascular magnetic resonance compared with Doppler echocardiography. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2016 , 18, 59	6.9	17
149	Age-related changes in aortic 3D blood flow velocities and wall shear stress: Implications for the identification of altered hemodynamics in patients with aortic valve disease. <i>Journal of Magnetic Resonance Imaging</i> , 2016 , 43, 1239-49	5.6	45
148	Reduction of aberrant aortic haemodynamics following aortic root replacement with a mechanical valved conduit. <i>Interactive Cardiovascular and Thoracic Surgery</i> , 2016 , 23, 416-23	1.8	15
147	Highly accelerated cardiac MRI using iterative SENSE reconstruction: initial clinical experience. <i>International Journal of Cardiovascular Imaging</i> , 2016 , 32, 955-63	2.5	10
146	MR and CT Imaging for the Evaluation of Pulmonary Hypertension. <i>JACC: Cardiovascular Imaging</i> , 2016 , 9, 715-32	8.4	56
145	Analyzing myocardial torsion based on tissue phase mapping cardiovascular magnetic resonance. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2016 , 18, 15	6.9	7

144	Three-dimensional left atrial blood flow characteristics in patients with atrial fibrillation assessed by 4D flow CMR. <i>European Heart Journal Cardiovascular Imaging</i> , 2016 , 17, 1259-1268	4.1	26
143	Heart deformation analysis: measuring regional myocardial velocity with MR imaging. <i>International Journal of Cardiovascular Imaging</i> , 2016 , 32, 1103-11	2.5	13
142	Reproducibility and observer variability of tissue phase mapping for the quantification of regional myocardial velocities. <i>International Journal of Cardiovascular Imaging</i> , 2016 , 32, 1227-34	2.5	11
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