

Michael Markl

List of Publications by Year in descending order

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311
papers

14,169
citations

18436

62
h-index

27345

106
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314
all docs

314
docs citations

314
times ranked

8137
citing authors

#	ARTICLE	IF	CITATIONS
1	Global Aortic Pulse Wave Velocity is Unchanged in Bicuspid Aortopathy With Normal Valve Function but Elevated in Patients With Aortic Valve Stenosis: Insights From a <sc>4D</sc> Flow <sc>MRI</sc> Study of 597 Subjects. Journal of Magnetic Resonance Imaging, 2023, 57, 126-136.	1.9	4
2	Comparison of Improved <sc>Unidirectional</sc> Dual <sc>Velocityâ€€Encoding MRI</sc> Methods. Journal of Magnetic Resonance Imaging, 2023, 57, 763-773.	1.9	3
3	Fourâ€€Dimensional flow Magnetic Resonance Imaging for Assessment of Pediatric Coarctation of the Aorta. Journal of Magnetic Resonance Imaging, 2022, 55, 200-208.	1.9	5
4	Association of Regional Wall Shear Stress and Progressive Ascending Aorta Dilatation in Bicuspid Aortic Valve. JACC: Cardiovascular Imaging, 2022, 15, 33-42.	2.3	37
5	Cardiac Magnetic Resonance Imaging Feature Tracking Demonstrates Altered Biventricular Strain in Obese Subjects in the Absence of Clinically Apparent Cardiovascular Disease. Journal of Thoracic Imaging, 2022, 37, W1-W2.	0.8	4
6	Evaluation of Pulmonary Hypertension Using <sc>4D</sc> Flow <sc>MRI</sc>. Journal of Magnetic Resonance Imaging, 2022, 56, 234-245.	1.9	18
7	Pilot tone navigation for respiratory and cardiac motionâ€€resolved freeâ€€running 5D flow MRI. Magnetic Resonance in Medicine, 2022, 87, 718-732.	1.9	17
8	Segmentation of the Aorta and Pulmonary Arteries Based on <sc>4D</sc> Flow <sc>MRI</sc> in the Pediatric Setting Using Fully Automated Multiâ€€Site, Multiâ€€Vendor, and Multiâ€€Label Dense Uâ€€Net. Journal of Magnetic Resonance Imaging, 2022, 55, 1666-1680.	1.9	12
9	Aortic Pulse Wave Velocity Evaluated by <sc>4D</sc> Flow <sc>MRI</sc> Across the Adult Lifespan. Journal of Magnetic Resonance Imaging, 2022, 56, 464-473.	1.9	10
10	A multi-modality approach for enhancing 4D flow magnetic resonance imaging via sparse representation. Journal of the Royal Society Interface, 2022, 19, 20210751.	1.5	2
11	Why do humans undergo an adiposity rebound? Exploring links with the energetic costs of brain development in childhood using MRI-based 4D measures of total cerebral blood flow. International Journal of Obesity, 2022, 46, 1044-1050.	1.6	5
12	Intracranial Blood Flow Quantification by Accelerated Dualâ€€i>venc</i> <sc>4D</sc> Flow <sc>MRI</sc>: Comparison With Transcranial Doppler Ultrasound. Journal of Magnetic Resonance Imaging, 2022, 56, 1256-1264.	1.9	3
13	Special Issue on 4D Flow MRI in Magnetic Resonance in Medical Sciences. Magnetic Resonance in Medical Sciences, 2022, 21, 257-257.	1.1	0
14	Two wrongs sometimes do make a right: errors in aortic valve stenosis assessment by same-day Doppler echocardiography and 4D flow MRI. International Journal of Cardiovascular Imaging, 2022, 38, 1815-1823.	0.7	0
15	Bicuspid aortic valve morphology and hemodynamics by same-day echocardiography and cardiac MRI. International Journal of Cardiovascular Imaging, 2022, 38, 2047-2056.	0.7	0
16	30-minute CMR for common clinical indications:â€€Society for Cardiovascular Magnetic Resonance white paper. Journal of Cardiovascular Magnetic Resonance, 2022, 24, 13.	1.6	21
17	Deep <sc>learningâ€€based</sc> velocity antialiasing of <sc>4D</sc>â€€flow <sc>MRI</sc>. Magnetic Resonance in Medicine, 2022, 88, 449-463.	1.9	9
18	<sc>MRA</sc> of the Supraaortic Vasculature: Comparison of Gadobutrol and Gadoterate Meglumine at 1.<sc>5 T</sc>. Journal of Magnetic Resonance Imaging, 2022, 56, 440-449.	1.9	1

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19	4D flow MRI derived aortic hemodynamics multi-year follow-up in repaired coarctation with bicuspid aortic valve. <i>Diagnostic and Interventional Imaging</i> , 2022, 103, 418-426.	1.8	6
20	Multiparametric Cardiac Magnetic Resonance Imaging Detects Altered Myocardial Tissue and Function in Heart Transplantation Recipients Monitored for Cardiac Allograft Vasculopathy. <i>Journal of Cardiovascular Imaging</i> , 2022, 30, 263.	0.2	3
21	Enhanced 4D Flow MRI-Based CFD with Adaptive Mesh Refinement for Flow Dynamics Assessment in Coarctation of the Aorta. <i>Annals of Biomedical Engineering</i> , 2022, 50, 1001-1016.	1.3	9
22	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.	1.9	13
23	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.	1.9	5
24	Intracardiac and Vascular Hemodynamics with Cardiovascular Magnetic Resonance in Heart Failure. <i>Heart Failure Clinics</i> , 2021, 17, 135-147.	1.0	0
25	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.	0.7	3
26	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.	1.9	18
27	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.	1.9	2
28	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.	1.9	17
29	4D flow MRI for the assessment of renal transplant dysfunction: initial results. <i>European Radiology</i> , 2021, 31, 909-919.	2.3	6
30	Rapid reconstruction of highly undersampled, non-Cartesian real-time cine k _t space data using a perceptual complex neural network (PCNN). <i>NMR in Biomedicine</i> , 2021, 34, e4405.	1.6	16
31	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.	1.0	0
32	Cine MRI detects elevated left heart pressure in pulmonary hypertension. <i>Journal of Magnetic Resonance Imaging</i> , 2021, 54, 275-283.	1.9	4
33	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.	1.9	14
34	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.	0.7	3
35	4D flow MRI after aortic replacement with frozen elephant trunk using thoraflex hybrid graft. <i>Journal of Cardiac Surgery</i> , 2021, 36, 1543-1545.	0.3	1
36	Four-Dimensional Magnetic Resonance After Ross Procedure for Unicuspid Aortic Valve. <i>Circulation: Cardiovascular Imaging</i> , 2021, 14, e011500.	1.3	1

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37	Visceral adiposity, muscle composition, and exercise tolerance in heart failure with preserved ejection fraction. ESC Heart Failure, 2021, 8, 2535-2545.	1.4	21
38	Cine MRI characterizes HFpEF and HFrEF in post-capillary pulmonary hypertension. European Journal of Radiology, 2021, 139, 109679.	1.2	3
39	Complete Regional Absence of Vasa Vasorum in an Ascending Aortic Aneurysm. Circulation: Cardiovascular Imaging, 2021, 14, e012312.	1.3	1
40	Effect of age and sex on fully automated deep learning assessment of left ventricular function, volumes, and contours in cardiac magnetic resonance imaging. International Journal of Cardiovascular Imaging, 2021, 37, 3539-3547.	0.7	2
41	Summary: international consensus statement on nomenclature and classification of the congenital bicuspid aortic valve and its aortopathy, for clinical, surgical, interventional and research purposes. European Journal of Cardio-thoracic Surgery, 2021, 60, 481-496.	0.6	2
42	International consensus statement on nomenclature and classification of the congenital bicuspid aortic valve and its aortopathy, for clinical, surgical, interventional and research purposes. European Journal of Cardio-thoracic Surgery, 2021, 60, 448-476.	0.6	61
43	International Consensus Statement on Nomenclature and Classification of the Congenital Bicuspid Aortic Valve and Its Aortopathy, for Clinical, Surgical, Interventional and Research Purposes. Radiology: Cardiothoracic Imaging, 2021, 3, e200496.	0.9	15
44	Automated segmentation of biventricular contours in tissue phase mapping using deep learning. NMR in Biomedicine, 2021, 34, e4606.	1.6	2
45	International Consensus Statement on Nomenclature and Classification of the Congenital Bicuspid Aortic Valve and Its Aortopathy, for Clinical, Surgical, Interventional and Research Purposes. Annals of Thoracic Surgery, 2021, 112, e203-e235.	0.7	25
46	International consensus statement on nomenclature and classification of the congenital bicuspid aortic valve and its aortopathy, for clinical, surgical, interventional and research purposes. Journal of Thoracic and Cardiovascular Surgery, 2021, 162, e383-e414.	0.4	47
47	Summary: International consensus statement on nomenclature and classification of the congenital bicuspid aortic valve and its aortopathy, for clinical, surgical, interventional, and research purposes. Journal of Thoracic and Cardiovascular Surgery, 2021, 162, 781-797.	0.4	6
48	Summary: International Consensus Statement on Nomenclature and Classification of the Congenital Bicuspid Aortic Valve and Its Aortopathy, for Clinical, Surgical, Interventional and Research Purposes. Annals of Thoracic Surgery, 2021, 112, 1005-1022.	0.7	1
49	Divergence-Free Constrained Phase Unwrapping and Denoising for 4D Flow MRI Using Weighted Least-Squares. IEEE Transactions on Medical Imaging, 2021, 40, 3389-3399.	5.4	5
50	Is cardiac magnetic resonance ready for aortic regurgitation?. Kardiologia Polska, 2021, 79, 945-946.	0.3	0
51	Accelerating compressed sensing reconstruction of subsampled radial k-space data using geometrically-derived density compensation. Physics in Medicine and Biology, 2021, 66, 21NT01.	1.6	2
52	Standards for writing Society for Cardiovascular Magnetic Resonance (SCMR) endorsed guidelines, expert consensus, and recommendations: a report of the publications committee. Journal of Cardiovascular Magnetic Resonance, 2021, 23, 129.	1.6	2
53	Valvular regurgitation flow jet assessment using in vitro 4D flow MRI: Implication for mitral regurgitation. Magnetic Resonance in Medicine, 2021, , .	1.9	3
54	Multi-parametric cardiovascular magnetic resonance with regadenoson stress perfusion is safe following pediatric heart transplantation and identifies history of rejection and cardiac allograft vasculopathy. Journal of Cardiovascular Magnetic Resonance, 2021, 23, 135.	1.6	14

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55	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.	1.6	6
56	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.	1.9	11
57	Altered 4-D magnetic resonance imaging flow characteristics in complex congenital aortic arch repair. <i>Pediatric Radiology</i> , 2020, 50, 17-27.	1.1	2
58	Gluteal Vein Anatomy: Location, Caliber, Impact of Patient Positioning, and Implications for Fat Grafting. <i>Aesthetic Surgery Journal</i> , 2020, 40, 642-649.	0.9	22
59	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.	1.9	6
60	Efficient triple-echo VENC phase-contrast MRI for improved velocity dynamic range. <i>Magnetic Resonance in Medicine</i> , 2020, 83, 505-520.	1.9	14
61	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.	1.9	27
62	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.	1.1	7
63	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.	0.3	3
64	Diffuse right ventricular fibrosis in heart failure with preserved ejection fraction and pulmonary hypertension. <i>ESC Heart Failure</i> , 2020, 7, 254-264.	1.4	39
65	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.	0.8	5
66	Four-dimensional Flow Magnetic Resonance Imaging Quantification of Blood Flow in Bicuspid Aortic Valve. <i>Journal of Thoracic Imaging</i> , 2020, Publish Ahead of Print, 383-388.	0.8	7
67	Complicated Double-Orifice Mitral Regurgitation: Combined Hemodynamic Assessment Using Echocardiography and Four-Dimensional Flow Magnetic Resonance Imaging. <i>Case</i> , 2020, 4, 494-499.	0.1	0
68	Hypertrophic Cardiomyopathy Is Associated with Altered Left Ventricular 3D Blood Flow Dynamics. <i>Radiology: Cardiothoracic Imaging</i> , 2020, 2, e190038.	0.9	7
69	How Well Does an Automated Approach Calculate and Visualize Blood Flow Vorticity at 4D Flow MRI?. <i>Radiology: Cardiothoracic Imaging</i> , 2020, 2, e190233.	0.9	4
70	Turning Up the Flow: Cardiovascular 4D Flow MRI during Exercise. <i>Radiology: Cardiothoracic Imaging</i> , 2020, 2, e200063.	0.9	1
71	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.	0.9	5
72	Highlights of the 2020 23rd Society for Cardiovascular Magnetic Resonance Scientific Sessions. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2020, 22, 75.	1.6	1

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73	Multimodal imaging of a giant left ventricular basal aneurysm and resulting intracardiac flow disturbances. <i>European Heart Journal Cardiovascular Imaging</i> , 2020, 21, 1050-1050.	0.5	1
74	Applications of a Specialty Bicuspid Aortic Valve Program: Clinical Continuity and Translational Collaboration. <i>Journal of Clinical Medicine</i> , 2020, 9, 1354.	1.0	4
75	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.	1.6	10
76	Detecting Aortic Valve-Induced Abnormal Flow with Seismocardiography and Cardiac MRI. <i>Annals of Biomedical Engineering</i> , 2020, 48, 1779-1792.	1.3	12
77	4D Flow with MRI. <i>Annual Review of Biomedical Engineering</i> , 2020, 22, 103-126.	5.7	53
78	Impact of age, sex, and global function on normal aortic hemodynamics. <i>Magnetic Resonance in Medicine</i> , 2020, 84, 2088-2102.	1.9	15
79	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.	1.9	94
80	Development of a rotation phantom for phase contrast MRI sequence validation and quality control. <i>Magnetic Resonance in Medicine</i> , 2020, 84, 3333-3341.	1.9	5
81	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, spcone.	1.9	1
82	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.	1.9	1
83	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.	1.6	13
84	Prognostic Value of Myocardial Extracellular Volume Fraction and T2-mapping in Heart Transplant Patients. <i>JACC: Cardiovascular Imaging</i> , 2020, 13, 1521-1530.	2.3	29
85	Identification of Vortex Cores in Cerebral Aneurysms on 4D Flow MRI. <i>American Journal of Neuroradiology</i> , 2020, 41, E26-E26.	1.2	2
86	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.	0.9	30
87	Hemodynamic Aspects of Vessel Wall Imaging: 4D Flow. , 2020, , 297-330.		1
88	Cardiac Structure-Function MRI in Patients After Heart Transplantation. <i>Journal of Magnetic Resonance Imaging</i> , 2019, 49, 678-687.	1.9	14
89	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.	0.9	10
90	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.	1.9	35

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91	On the "cusp" of clinical feasibility: aortic wall shear stress derived non-invasively with 4D flow MRI. <i>Journal of Thoracic Disease</i> , 2019, 11, E96-E97.	0.6	2
92	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.	1.9	32
93	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.	3.6	12
94	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.	0.6	12
95	Four-dimensional Virtual Catheter: Noninvasive Assessment of Intra-aortic Hemodynamics in Bicuspid Aortic Valve Disease. <i>Radiology</i> , 2019, 293, 541-550.	3.6	21
96	Multi-modality cerebral aneurysm haemodynamic analysis: <i>in vivo</i> 4D flow MRI, <i>in vitro</i> volumetric particle velocimetry and <i>in silico</i> computational fluid dynamics. <i>Journal of the Royal Society Interface</i> , 2019, 16, 20190465.	1.5	40
97	Techniques in the Assessment of Cardiovascular Blood Flow and Velocity. <i>Contemporary Cardiology</i> , 2019, , 113-125.	0.0	1
98	The Role of Imaging of Flow Patterns by 4D Flow MRI in Aortic Stenosis. <i>JACC: Cardiovascular Imaging</i> , 2019, 12, 252-266.	2.3	120
99	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.	0.7	19
100	Standardized Evaluation of Cerebral Arteriovenous Malformations Using Flow Distribution Network Graphs and Dual-contrast 4D Flow MRI. <i>Journal of Magnetic Resonance Imaging</i> , 2019, 50, 1718-1730.	1.9	28
101	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.		0
102	Detection and Hemodynamic Evaluation of Flap Fenestrations in Type B Aortic Dissection with 4D Flow MRI: Comparison with Conventional MRI and CT Angiography. <i>Radiology: Cardiothoracic Imaging</i> , 2019, 1, e180009.	0.9	34
103	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.	1.9	32
104	Multiparametric Cardiac Magnetic Resonance Imaging Can Detect Acute Cardiac Allograft Rejection After Heart Transplantation. <i>JACC: Cardiovascular Imaging</i> , 2019, 12, 1632-1641.	2.3	60
105	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.	1.9	70
106	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.	0.7	12
107	Standardized Evaluation of Cerebral Arteriovenous Malformations Using Flow Distribution Network Graphs and Dual-contrast 4D Flow MRI. <i>Journal of Magnetic Resonance Imaging</i> , 2019, 50, spcone.	1.9	0
108	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.	0.9	2

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109	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.	0.6	20
110	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.	1.1	16
111	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.	2.3	8
112	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.	1.9	24
113	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.	1.1	22
114	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.	1.9	15
115	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.	1.9	8
116	Assessing wall stresses in bicuspid aortic valve-associated aortopathy: Forecasting the perfect storm?. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 2018, 156, 471-472.	0.4	8
117	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.	2.3	17
118	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.	0.4	33
119	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.	1.9	24
120	Accelerated aortic 4D flow MRI in under two minutes: Feasibility and impact of resolution, space sampling patterns, and respiratory navigator gating on hemodynamic measurements. <i>Magnetic Resonance in Medicine</i> , 2018, 79, 195-207.	1.9	42
121	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.	1.9	52
122	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.	1.9	16
123	4D flow MRI, cardiac function, and T ₁ mapping: Association of valve-mediated changes in aortic hemodynamics with left ventricular remodeling. <i>Journal of Magnetic Resonance Imaging</i> , 2018, 48, 121-131.	1.9	24
124	Altered Aortic 3-Dimensional Hemodynamics in Patients With Functionally Unicuspid Aortic Valves. <i>Circulation: Cardiovascular Imaging</i> , 2018, 11, e007915.	1.3	2
125	Variability of native T1 values: implication for defining regional myocardial changes using MRI. <i>International Journal of Cardiovascular Imaging</i> , 2018, 34, 1637-1645.	0.7	4
126	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.	0.4	103

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127	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.	0.4	70
128	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.	0.4	202
129	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.	1.6	12
130	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, .	1.0	1
131	4D flow MR imaging of the portal venous system: a feasibility study in children. <i>European Radiology</i> , 2017, 27, 832-840.	2.3	20
132	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.	1.2	18
133	Accelerated dual- <i>venc</i> 4D flow MRI for neurovascular applications. <i>Journal of Magnetic Resonance Imaging</i> , 2017, 46, 102-114.	1.9	76
134	Acute Cerebral Venous Thrombosis. <i>Stroke</i> , 2017, 48, 671-677.	1.0	20
135	The consistency of myocardial strain derived from heart deformation analysis. <i>International Journal of Cardiovascular Imaging</i> , 2017, 33, 1169-1177.	0.7	7
136	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.	0.4	50
137	Magnetic resonance imaging 4-D flow-based analysis of aortic hemodynamics in Turner syndrome. <i>Pediatric Radiology</i> , 2017, 47, 382-390.	1.1	13
138	Importance of variants in cerebrovascular anatomy for potential retrograde embolization in cryptogenic stroke. <i>European Radiology</i> , 2017, 27, 4145-4152.	2.3	9
139	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.	1.0	14
140	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.	1.0	7
141	Superior Abdominal 4D Flow MRI Data Consistency with Adjusted Preprocessing Workflow and Noncontrast Acquisitions. <i>Academic Radiology</i> , 2017, 24, 350-358.	1.3	5
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