Marcus Kelm

List of Publications by Year in Descending Order

41 papers	317 citations	10 h-index	16 g-index
44 ext. papers	441 ext. citations	4.7 avg, IF	2.97 L-index

#	Paper	IF	Citations
41	Hemodynamic Changes During Physiological and Pharmacological Stress Testing in Patients With Heart Failure: A Systematic Review and Meta-Analysis.. *Frontiers in Cardiovascular Medicine*, **2022**, 9, 718114	5.4	1
40	Cardiac Phenotype and Tissue Sodium Content in Adolescents With Defects in the Melanocortin System. *Journal of Clinical Endocrinology and Metabolism*, **2021**, 106, 2606-2616	5.6	0
39	Applications of artificial intelligence/machine learning approaches in cardiovascular medicine: a systematic review with recommendations. *European Heart Journal Digital Health*, **2021**, 2, 424-436	2.3	6
38	Transcatheter aortic valve implantation in a 13-year-old child with end-stage heart failure: a case report. *European Heart Journal - Case Reports*, **2021**, 5, ytab034	0.9	0
37	Image-Based Computational Model Predicts Dobutamine-Induced Hemodynamic Changes in Patients With Aortic Coarctation. *Circulation: Cardiovascular Imaging*, **2021**, 14, e011523	3.9	1
36	Myocardial deformation assessed among heart failure entities by cardiovascular magnetic resonance imaging. *ESC Heart Failure*, **2021**, 8, 890-897	3.7	2
35	Non-invasive CMR-Based Quantification of Myocardial Power and Efficiency Under Stress and Ischemic Conditions in Landrace Pigs. *Frontiers in Cardiovascular Medicine*, **2021**, 8, 689255	5.4	3
34	Skin Sodium Accumulates in Psoriasis and Reflects Disease Severity. *Journal of Investigative Dermatology*, **2021**,	4.3	2
33	Variability of Myocardial Strain During Isometric Exercise in Subjects With and Without Heart Failure. *Frontiers in Cardiovascular Medicine*, **2020**, 7, 111	5.4	3
32	Wearable devices can predict the outcome of standardized 6-minute walk tests in heart disease. *Npj Digital Medicine*, **2020**, 3, 92	15.7	4
31	Proteomic Analysis Reveals Upregulation of ACE2 (Angiotensin-Converting Enzyme 2), the Putative SARS-CoV-2 Receptor in Pressure-but Not Volume-Overloaded Human Hearts. *Hypertension*, **2020**, 76, e41-e43	8.5	3
30	Assessment of hemodynamic responses to exercise in aortic coarctation using MRI-ergometry in combination with computational fluid dynamics. *Scientific Reports*, **2020**, 10, 18894	4.9	2
29	Abnormal aortic flow profiles persist after aortic valve replacement in the majority of patients with aortic valve disease: how model-based personalized therapy planning could improve results. A pilot study approach. *European Journal of Cardio-thoracic Surgery*, **2020**, 57, 133-141	3	2
28	Validation of simple measures of aortic distensibility based on standard 4-chamber cine CMR: a new approach for clinical studies. *Clinical Research in Cardiology*, **2020**, 109, 454-464	6.1	3
27	Impact of valve morphology, hypertension and age on aortic wall properties in patients with coarctation: a two-centre cross-sectional study. *BMJ Open*, **2020**, 10, e034853	3	1
26	Hemodynamic Changes During Physiological and Pharmacological Stress Testing in Healthy Subjects, Aortic Stenosis and Aortic Coarctation Patients-A Systematic Review and Meta-Analysis. *Frontiers in Cardiovascular Medicine*, **2019**, 6, 43	5.4	8
25	Impact of predictive medicine on therapeutic decision making: a randomized controlled trial in congenital heart disease. *Npj Digital Medicine*, **2019**, 2, 17	15.7	2

24	Surrogates for myocardial power and power efficiency in patients with aortic valve disease. *Scientific Reports*, **2019**, 9, 16407	4.9	4
23	Surgical Aortic Valve Replacement: Are We Able to Improve Hemodynamic Outcome?. *Biophysical Journal*, **2019**, 117, 2324-2336	2.9	4
22	Tissue Sodium Content and Arterial Hypertension in Obese Adolescents. *Journal of Clinical Medicine*, **2019**, 8,	5.1	3
21	Patient-specific requirements and clinical validation of MRI-based pressure mapping: A two-center study in patients with aortic coarctation. *Journal of Magnetic Resonance Imaging*, **2019**, 49, 81-89	5.6	9
20	Renal sympathetic denervation restores aortic distensibility in patients with resistant hypertension: data from a multi-center trial. *Clinical Research in Cardiology*, **2018**, 107, 642-652	6.1	13
19	Hemodynamic Evaluation of a Biological and Mechanical Aortic Valve Prosthesis Using Patient-Specific MRI-Based CFD. *Artificial Organs*, **2018**, 42, 49-57	2.6	22
18	Development of a modeling pipeline for the prediction of hemodynamic outcome after virtual mitral valve repair using image-based CFD. *International Journal of Computer Assisted Radiology and Surgery*, **2018**, 13, 1795-1805	3.9	12
17	Non-invasive assessment of patient-specific aortic haemodynamics from four-dimensional flow MRI data. *Interface Focus*, **2018**, 8, 20170006	3.9	6
16	Impact of patient-specific LVOT inflow profiles on aortic valve prosthesis and ascending aorta hemodynamics. *Journal of Computational Science*, **2018**, 24, 91-100	3.4	10
15	3D Shape Analysis for Coarctation of the Aorta. *Lecture Notes in Computer Science*, **2018**, 73-77	0.9	1
14	Assessment of wall stresses and mechanical heart power in the left ventricle: Finite element modeling versus Laplace analysis. *International Journal for Numerical Methods in Biomedical Engineering*, **2018**, 34, e3147	2.6	16
13	CMR-Based and Time-Shift Corrected Pressure Gradients Provide Good Agreement to Invasive Measurements in Aortic Coarctation. *JACC: Cardiovascular Imaging*, **2018**, 11, 1725-1727	8.4	1
12	Avoidable costs of stenting for aortic coarctation in the United Kingdom: an economic model. *BMC Health Services Research*, **2017**, 17, 258	2.9	1
11	Model-Based Therapy Planning Allows Prediction of Haemodynamic Outcome after Aortic Valve Replacement. *Scientific Reports*, **2017**, 7, 9897	4.9	11
10	Beyond Pressure Gradients: The Effects of Intervention on Heart Power in Aortic Coarctation. *PLoS ONE*, **2017**, 12, e0168487	3.7	11
9	Longitudinal Analysis Using Personalised 3D Cardiac Models with Population-Based Priors: Application to Paediatric Cardiomyopathies. *Lecture Notes in Computer Science*, **2017**, 350-358	0.9	
8	Balloon Dilatation and Stenting for Aortic Coarctation: A Systematic Review and Meta-Analysis. *Circulation: Cardiovascular Interventions*, **2016**, 9,	6	28
7	Interactive virtual stent planning for the treatment of coarctation of the aorta. *International Journal of Computer Assisted Radiology and Surgery*, **2016**, 11, 133-44	3.9	17

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6	MRI as a tool for non-invasive vascular profiling: a pilot study in patients with aortic coarctation. *Expert Review of Medical Devices*, **2016**, 13, 103-12	3.5	7
5	Bicuspid aortic valve disease: systematic review and meta-analysis of surgical aortic valve repair. *Open Heart*, **2016**, 3, e000502	3	8
4	Training neonatal cardiopulmonary resuscitation: can it be improved by playing a musical prompt? A pilot study. *American Journal of Perinatology*, **2014**, 31, 245-8	3.3	10
3	Manual neonatal ventilation training: a respiratory function monitor helps to reduce peak inspiratory pressures and tidal volumes during resuscitation. *Journal of Perinatal Medicine*, **2012**, 40, 583-6	2.7	7
2	Equipment and operator training denote manual ventilation performance in neonatal resuscitation. *American Journal of Perinatology*, **2010**, 27, 753-8	3.3	17
1	Manual ventilation devices in neonatal resuscitation: tidal volume and positive pressure-provision. *Resuscitation*, **2010**, 81, 202-5	4	57