Marcus Granegger

List of Publications by Year
in descending order

47	701	516561 16	610775 24
papers	citations	h-index	g-index

47	47	47	555
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Fluid Dynamics in the HeartMate 3: Influence of the Artificial Pulse Feature and Residual Cardiac Pulsation. Artificial Organs, 2019, 43, 363-376.	1.0	72
2	Development of a Pump Flow Estimator for Rotary Blood Pumps to Enhance Monitoring of Ventricular Function. Artificial Organs, 2012, 36, 691-699.	1.0	62
3	Continuous Monitoring of Cardiac Rhythms in Left Ventricular Assist Device Patients. Artificial Organs, 2014, 38, 191-198.	1.0	30
4	Thrombotic Risk of Rotor Speed Modulation Regimes of Contemporary Centrifugal Continuous-flow Left Ventricular Assist Devices. ASAIO Journal, 2021, 67, 737-745.	0.9	30
5	Continuous Monitoring of Aortic Valve Opening in Rotary Blood Pump Patients. IEEE Transactions on Biomedical Engineering, 2016, 63, 1201-1207.	2.5	29
6	Hydraulic Characterization of Implantable Rotary Blood Pumps. IEEE Transactions on Biomedical Engineering, 2019, 66, 1618-1627.	2.5	27
7	Strong corruption of electrocardiograms caused by cardiopulmonary resuscitation reduces efficiency of two-channel methods for removing motion artefacts in non-shockable rhythms. Resuscitation, 2009, 80, 1301-1307.	1.3	25
8	Reduction of CPR artifacts in the ventricular fibrillation ECG by coherent line removal. BioMedical Engineering OnLine, 2010, 9, 2.	1.3	25
9	Assessment of Aortic Valve Opening During Rotary Blood Pump Support Using Pump Signals. Artificial Organs, 2014, 38, 290-297.	1.0	25
10	Use of continuous flow ventricular assist devices in patients with heart failure and a normal ejection fraction: A computer-simulation study. Journal of Thoracic and Cardiovascular Surgery, 2013, 145, 1352-1358.	0.4	24
11	Blood trauma potential of the HeartWare Ventricular Assist Device in pediatric patients. Journal of Thoracic and Cardiovascular Surgery, 2020, 159, 1519-1527.e1.	0.4	24
12	Evaluation of Left Ventricular Relaxation in Rotary Blood Pump Recipients Using the Pump Flow Waveform: A Simulation Study. Artificial Organs, 2012, 36, 470-478.	1.0	22
13	Investigation of the Axial Gap Clearance in a Hydrodynamicâ€Passive Magnetically Levitated Rotary Blood Pump Using Xâ€Ray Radiography. Artificial Organs, 2018, 42, 510-515.	1.0	22
14	Pump Speed Waveform Analysis to Detect Aortic Valve Opening in Patients on Ventricular Assist Device Support. Artificial Organs, 2015, 39, 704-709.	1.0	21
15	A Valveless Pulsatile Pump for Heart Failure with Preserved Ejection Fraction: Hemo- and Fluid Dynamic Feasibility. Annals of Biomedical Engineering, 2020, 48, 1821-1836.	1.3	21
16	A Versatile Hybrid Mock Circulation for Hydraulic Investigations of Active and Passive Cardiovascular Implants. ASAIO Journal, 2019, 65, 495-502.	0.9	19
17	A long-term mechanical cavopulmonary support device for patients with Fontan circulation. Medical Engineering and Physics, 2019, 70, 9-18.	0.8	18
18	Daily Life Activity in Patients with Left Ventricular Assist Devices. International Journal of Artificial Organs, 2016, 39, 22-27.	0.7	15

#	Article	IF	Citations
19	Cavopulmonary mechanical circulatory support in Fontan patients and the need for physiologic control: A computational study with a closed-loop exercise model. International Journal of Artificial Organs, 2018, 41, 261-268.	0.7	15
20	Investigation of Hemodynamics in the Assisted Isolated Porcine Heart. International Journal of Artificial Organs, 2013, 36, 878-886.	0.7	14
21	Use of independent component analysis for reducing CPR artefacts in human emergency ECGs. Resuscitation, 2011, 82, 79-84.	1.3	13
22	A Valveless Pulsatile Pump for the Treatment of Heart Failure with Preserved Ejection Fraction: A Simulation Study. Cardiovascular Engineering and Technology, 2019, 10, 69-79.	0.7	13
23	Ventricular Flow Field Visualization During Mechanical Circulatory Support in the Assisted Isolated Beating Heart. Annals of Biomedical Engineering, 2020, 48, 794-804.	1.3	13
24	The Efficacy of Spontaneous and Controlled Ventilation With Various Cricothyrotomy Devices: A Quantitative In Vitro Assessment in a Model Lung. Journal of Trauma, 2011, 71, 886-892.	2.3	11
25	Blood Damage in Ventricular Assist Devices. International Journal of Artificial Organs, 2016, 39, 147-149.	0.7	11
26	A Cavopulmonary Assist Device for Long-Term Therapy of Fontan Patients. Seminars in Thoracic and Cardiovascular Surgery, 2022, 34, 238-248.	0.4	10
27	Inflow cannula position as risk factor for stroke in patients with HeartMate 3 left ventricular assist devices. Artificial Organs, 2022, 46, 1149-1157.	1.0	10
28	Insights Into Myocardial Oxygen Consumption, Energetics, and Efficiency Under Left Ventricular Assist Device Support Using Noninvasive Pressure-Volume Loops. Circulation: Heart Failure, 2019, 12, e006191.	1.6	9
29	The left ventricular assist device as a patient monitoring system. Annals of Cardiothoracic Surgery, 2021, 10, 221-232.	0.6	7
30	Interaction of a Transapical Miniaturized Ventricular Assist Device With the Left Ventricle: Hemodynamic Evaluation and Visualization in an Isolated Heart Setup. Artificial Organs, 2016, 40, 1113-1120.	1.0	6
31	Incidence, clinical relevance and therapeutic options for outflow graft stenosis in patients with left ventricular assist devices. European Journal of Cardio-thoracic Surgery, 2022, 61, 716-724.	0.6	6
32	Hemolytic Footprint of Rotodynamic Blood Pumps. IEEE Transactions on Biomedical Engineering, 2022, 69, 2423-2432.	2.5	6
33	When Nothing Goes Right: Risk Factors and Biomarkers of Right Heart Failure after Left Ventricular Assist Device Implantation. Life, 2022, 12, 459.	1.1	6
34	Comparison of device-based therapy options for heart failure with preserved ejection fraction: a simulation study. Scientific Reports, 2022, 12, 5761.	1.6	6
35	Comparative analysis of cardiac mechano-energetics in isolated hearts supported by pulsatile or rotary blood pumps. Scientific Reports, 2019, 9, 20058.	1.6	5
36	Approaches to Establish Extracardiac Total Cavopulmonary Connections in Animal Modelsâ€"A Review. World Journal for Pediatric & Congenital Heart Surgery, 2019, 10, 81-89.	0.3	5

#	Article	IF	Citations
37	Linking Hydraulic Properties to Hemolytic Performance of Rotodynamic Blood Pumps. Advanced Theory and Simulations, 2022, 5, .	1.3	5
38	Human ECGs corrupted with real CPR artefacts in an animal model: Generating a database to evaluate and refine algorithms for eliminating CPR artefacts. Resuscitation, 2010, 81, 730-736.	1.3	4
39	Serial assessment of somatic and cardiovascular development in patients with single ventricle undergoing Fontan procedure. International Journal of Cardiology, 2021, 322, 135-141.	0.8	4
40	A passive beating heart setup for interventional cardiology training. Current Directions in Biomedical Engineering, 2016, 2, 735-739.	0.2	3
41	Validation of Numerically Predicted Shear Stress-dependent Dissipative Losses Within a Rotary Blood Pump. ASAIO Journal, 2021, 67, 1148-1158.	0.9	3
42	Noninvasive assessment of blood pressure in rotary blood pump recipients using a novel ultrasonic Doppler method. International Journal of Artificial Organs, 2019, 42, 226-232.	0.7	2
43	Impact of Infant Positioning on Cardiopulmonary Resuscitation Performance During Simulated Pediatric Cardiac Arrest: A Randomized Crossover Study. Pediatric Critical Care Medicine, 2020, 21, e1076-e1083.	0.2	2
44	Mechanical circulatory support in pediatric patients with biventricular and univentricular hearts. JTCVS Open, 2021, 6, 202-208.	0.2	1
45	Preference of infant position in paediatric life support. Resuscitation, 2013, 84, S75.	1.3	0
46	Intraventricular flow features and cardiac mechano-energetics after mitral valve interventions â€“ feasibility of an isolated heart model. Current Directions in Biomedical Engineering, 2020, 6, .	0.2	0
47	Experimental Hydraulic and Mechanical Characterisation of a Double-Flow Implantable Blood Pump. , 2020, , .		0