

Stijn Vandenberghe

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7881658/publications.pdf>

Version: 2024-02-01

58
papers

1,090
citations

394286

19
h-index

414303

32
g-index

59
all docs

59
docs citations

59
times ranked

1023
citing authors

#	ARTICLE	IF	CITATIONS
1	Energy Harvesting from the Beating Heart by a Mass Imbalance Oscillation Generator. <i>Annals of Biomedical Engineering</i> , 2013, 41, 131-141.	1.3	136
2	Design of a New Pulsatile Bioreactor for Tissue Engineered Aortic Heart Valve Formation. <i>Artificial Organs</i> , 2002, 26, 710-714.	1.0	78
3	A Novel Interface for Hybrid Mock Circulations to Evaluate Ventricular Assist Devices. <i>IEEE Transactions on Biomedical Engineering</i> , 2013, 60, 507-516.	2.5	68
4	Pulsatile control of rotary blood pumps: Does the modulation waveform matter?. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 2012, 144, 970-977.	0.4	62
5	Modeling Ventricular Function during Cardiac Assist: Does Time-Varying Elastance Work?. <i>ASAIO Journal</i> , 2006, 52, 4-8.	0.9	49
6	Hemodynamic Modes of Ventricular Assist with a Rotary Blood Pump: Continuous, Pulsatile, and Failure. <i>ASAIO Journal</i> , 2005, 51, 711-718.	0.9	45
7	Asymmetric speed modulation of a rotary blood pump affects ventricular unloading. <i>European Journal of Cardio-thoracic Surgery</i> , 2013, 43, 383-388.	0.6	43
8	A Physiological Controller for Turbodynamic Ventricular Assist Devices Based on a Measurement of the Left Ventricular Volume. <i>Artificial Organs</i> , 2014, 38, 527-538.	1.0	40
9	Unloading Effect of a Rotary Blood Pump Assessed by Mathematical Modeling. <i>Artificial Organs</i> , 2003, 27, 1094-1101.	1.0	38
10	A Cardiovascular Mathematical Model of Graded Head-Up Tilt. <i>PLoS ONE</i> , 2013, 8, e77357.	1.1	31
11	Control of ventricular unloading using an electrocardiogram-synchronized Thoratec paracorporeal ventricular assist device. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 2013, 146, 710-717.	0.4	28
12	Model dependence of gated blood pool SPECT ventricular function measurements*1. <i>Journal of Nuclear Cardiology</i> , 2004, 11, 282-292.	1.4	27
13	Effect of Rotary Blood Pump Failure on Left Ventricular Energetics Assessed by Mathematical Modeling. <i>Artificial Organs</i> , 2002, 26, 1032-1039.	1.0	24
14	Simulation of Dilated Heart Failure with Continuous Flow Circulatory Support. <i>PLoS ONE</i> , 2014, 9, e85234.	1.1	24
15	Effect of Pulsatility on the Mathematical Modeling of Rotary Blood Pumps. <i>Artificial Organs</i> , 2011, 35, 825-832.	1.0	21
16	Numerical Optimal Control of Turbo Dynamic Ventricular Assist Devices. <i>Bioengineering</i> , 2014, 1, 22-46.	1.6	21
17	Analysis of Pressure Head-Flow Loops of Pulsatile Rotodynamic Blood Pumps. <i>Artificial Organs</i> , 2014, 38, 316-326.	1.0	21
18	Ideal site for ventricular anchoring of artificial chordae in mitral regurgitation. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 2012, 143, S78-S81.	0.4	20

#	ARTICLE	IF	CITATIONS
19	A Robust Reference Signal Generator for Synchronized Ventricular Assist Devices. IEEE Transactions on Biomedical Engineering, 2013, 60, 2174-2183.	2.5	20
20	Pulsatile In Vitro Simulation of the Pediatric Univentricular Circulation for Evaluation of Cardiopulmonary Assist Scenarios. Artificial Organs, 2009, 33, 967-976.	1.0	19
21	Biocompatibility Assessment of the First Generation PediaFlow Pediatric Ventricular Assist Device. Artificial Organs, 2011, 35, 9-21.	1.0	19
22	Accuracy of 4 different algorithms for the analysis of tomographic radionuclide ventriculography using a physical, dynamic 4-chamber cardiac phantom. Journal of Nuclear Medicine, 2005, 46, 165-71.	2.8	19
23	The PediaFlow [®] , [†] Pediatric Ventricular Assist Device. Pediatric Cardiac Surgery Annual, 2006, 9, 92-98.	0.5	18
24	The Importance of dQ/dt on the Flow Field in a Turbodynamic Pump With Pulsatile Flow. Artificial Organs, 2009, 33, 757-762.	1.0	17
25	Validation of gated blood-pool SPECT cardiac measurements tested using a biventricular dynamic physical phantom. Journal of Nuclear Medicine, 2003, 44, 967-72.	2.8	17
26	Reliability of lithium dilution cardiac output in anaesthetized sheep. British Journal of Anaesthesia, 2013, 111, 833-839.	1.5	16
27	Effect of pressure-controlled intermittent coronary sinus occlusion (PICSO) on myocardial ischaemia and reperfusion in a closed-chest porcine model. EuroIntervention, 2013, 9, 398-406.	1.4	15
28	Mock Loop Testing of On-X Prosthetic Mitral Valve with Doppler Echocardiography. Artificial Organs, 2002, 26, 872-878.	1.0	12
29	Transapical off-pump removal of the native aortic valve: A proof-of-concept animal study. Journal of Thoracic and Cardiovascular Surgery, 2009, 138, 468-473.	0.4	12
30	In vitro assessment of the unloading and perfusion capacities of the PUCA II and the IABP. Perfusion (United Kingdom), 2004, 19, 25-32.	0.5	11
31	The Impact of Pump Speed and Inlet Cannulation Site on Left Ventricular Unloading with a Rotary Blood Pump. Artificial Organs, 2004, 28, 660-667.	1.0	11
32	In Vitro Evaluation of Ventricular Cannulation for Rotodynamic Cardiac Assist Devices. Cardiovascular Engineering and Technology, 2011, 2, 203-211.	0.7	10
33	Towards the Development of a Pediatric Ventricular Assist Device. Cell Transplantation, 2006, 15, 69-74.	1.2	9
34	Direct visualization of carbon dioxide field flooding: Optical and concentration level comparison of diffusor effectiveness. Journal of Thoracic and Cardiovascular Surgery, 2020, 159, 958-968.	0.4	9
35	In Vitro Evaluation of the PUCA II Intra-Arterial LVAD. International Journal of Artificial Organs, 2003, 26, 743-752.	0.7	8
36	Accuracy of commercially available processing algorithms for planar radionuclide ventriculography using data for a dynamic left ventricular phantom. Nuclear Medicine Communications, 2004, 25, 1197-1202.	0.5	7

#	ARTICLE	IF	CITATIONS
37	In Vitro and In Vivo Imaging Characteristics Assessment of Polymeric Coils Compared with Standard Platinum Coils for the Treatment of Intracranial Aneurysms. American Journal of Neuroradiology, 2013, 34, 2177-2183.	1.2	7
38	Classification of Unsteady Flow Patterns in a Rotodynamic Blood Pump: Introduction of Non-Dimensional Regime Map. Cardiovascular Engineering and Technology, 2015, 6, 230-241.	0.7	7
39	In Vitro Testing of a Temporary Catheter-Based Aortic "Parachute" Valve. ASAIO Journal, 2008, 54, 574-577.	0.9	6
40	Experimental Study of Micro-Scale Taylor Vortices Within a Co-Axial Mixed-Flow Blood Pump. Artificial Organs, 2016, 40, 1071-1078.	1.0	6
41	Dexrazoxane Shows No Protective Effect in the Acute Phase of Reperfusion during Myocardial Infarction in Pigs. PLoS ONE, 2016, 11, e0168541.	1.1	6
42	Omnicarbon, 21 mm Aortic Valve Prosthesis: In Vitro Hydrodynamic and Echo-Doppler Study. International Journal of Artificial Organs, 2002, 25, 783-790.	0.7	5
43	Hydrodynamic characterisation of ventricular assist devices. International Journal of Artificial Organs, 2001, 24, 470-7.	0.7	5
44	Aortic flow patterns resulting from right axillary artery cannulation. Interactive Cardiovascular and Thoracic Surgery, 2011, 12, 973-977.	0.5	4
45	In Vitro Hemodynamic Evaluation of Ventricular Suction Conditions of the EVAHEART Ventricular Assist Pump. International Journal of Artificial Organs, 2012, 35, 263-271.	0.7	4
46	Effects of Thoratec pulsatile ventricular assist device timing on the abdominal aortic wave intensity pattern. American Journal of Physiology - Heart and Circulatory Physiology, 2014, 307, H1243-H1251.	1.5	4
47	Reversed Auxiliary Flow to Reduce Embolism Risk During TAVI: A Computational Simulation and Experimental Study. Cardiovascular Engineering and Technology, 2019, 10, 124-135.	0.7	4
48	Hydraulic Bench Testing of the TruCATHTM/TruCCOMTM Continuous Cardiac Output Monitor. Cardiovascular Engineering (Dordrecht, Netherlands), 2003, 3, 93-102.	1.0	2
49	"The Balloon Plug Concept" for Tricuspid Valve Repair Ex Vivo Proof of Concept. Innovations: Technology and Techniques in Cardiothoracic and Vascular Surgery, 2015, 10, 27-32.	0.4	2
50	Patient tilt improves efficacy of CO2 field-flooding in minimally invasive cardiac surgery. Journal of Cardiothoracic Surgery, 2022, 17, .	0.4	2
51	Development of a Gastight Thoracotomy Model for Investigation of Carbon Dioxide Field-Flooding Efficacy. Cureus, 2022, 14, e21099.	0.2	1
52	TESTING OF CARDIAC ASSIST DEVICES IN A NEWLY DESIGNED MOCK LOOP. ASAIO Journal, 2001, 47, 105.	0.9	0
53	IN VITRO EVALUATION OF PULSATILE USE OF THE NEW MEDOS DELTASTREAM PUMP. ASAIO Journal, 2005, 51, 43A.	0.9	0
54	PROGRESS WITH PEDIAFLOW MAGLEV PUMP FOR INFANTS AND SMALL CHILDREN: FORM TO FUNCTION. ASAIO Journal, 2005, 51, 45A.	0.9	0

#	ARTICLE	IF	CITATIONS
55	OPTIMIZATION, VALIDATION, AND RE-OPTIMIZATION OF PEDIAFLOW MAGLEV TURBO-VAD. ASAIO Journal, 2006, 52, 56A.	0.9	0
56	Validation of Abdominal Aortic Aneurysm Dynamics: A Comparative Analysis of PIV, CFD, and FSI. , 2009, , .		0
57	Reply to the Editor. Journal of Thoracic and Cardiovascular Surgery, 2013, 145, 1145-1146.	0.4	0
58	â€œThe Balloon Plug Conceptâ€•for Tricuspid Valve Repair Ex Vivo Proof of Concept. Innovations: Technology and Techniques in Cardiothoracic and Vascular Surgery, 2015, 10, 27-32.	0.4	0