Thomas Heldt

List of Publications by Citations

43 papers	1,804 citations	13 h-index	42 g-index
49 ext. papers	2,081 ext. citations	6.1 avg, IF	4.4 L-index

#	Paper	IF	Citations
43	Multiparameter Intelligent Monitoring in Intensive Care II: a public-access intensive care unit database. *Critical Care Medicine*, **2011**, 39, 952-60	1.4	1185
42	Computational modeling of cardiovascular response to orthostatic stress. *Journal of Applied Physiology*, **2002**, 92, 1239-54	3.7	202
41	Presenting Symptoms Independently Predict Mortality in Septic Shock: Importance of a Previously Unmeasured Confounder. *Critical Care Medicine*, **2018**, 46, 1592-1599	1.4	68
40	Model-based noninvasive estimation of intracranial pressure from cerebral blood flow velocity and arterial pressure. *Science Translational Medicine*, **2012**, 4, 129ra44	17.5	66
39	Integrating data, models, and reasoning in critical care. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, **2006**, 2006, 350-3		21
38	Intracranial Pressure and Intracranial Elastance Monitoring in Neurocritical Care. *Annual Review of Biomedical Engineering*, **2019**, 21, 523-549	12	19
37	Blood Pressure Coefficient of Variation and Its Association With Cardiac Surgical Outcomes. *Anesthesia and Analgesia*, **2018**, 127, 832-839	3.9	19
36	Effects of artificial gravity on the cardiovascular system: Computational approach. *Acta Astronautica*, **2016**, 126, 395-410	2.9	17
35	Blood pressure variability: can nonlinear dynamics enhance risk assessment during cardiovascular surgery?. *Journal of Cardiothoracic and Vascular Anesthesia*, **2014**, 28, 392-7	2.1	17
34	Antibiotic Delays and Feasibility of a 1-Hour-From-Triage Antibiotic Requirement: Analysis of an Emergency Department Sepsis Quality Improvement Database. *Annals of Emergency Medicine*, **2020** , 75, 93-99	2.1	16
33	Cycle-Averaged Models of Cardiovascular Dynamics. *IEEE Transactions on Circuits and Systems Part 1: Regular Papers*, **2006**, 53, 2459-2468		14
32	Fully automated, real-time, calibration-free, continuous noninvasive estimation of intracranial pressure in children. *Journal of Neurosurgery: Pediatrics*, **2019**, 1-11	2.1	14
31	Noninvasive Intracranial Pressure Determination in Patients with Subarachnoid Hemorrhage. *Acta Neurochirurgica Supplementum*, **2016**, 122, 65-8	1.7	13
30	Short-Term Cardiovascular Response to Short-Radius Centrifugation With and Without Ergometer Exercise. *Frontiers in Physiology*, **2018**, 9, 1492	4.6	13
29	Challenges and Opportunities for Emergency Department Sepsis Screening at Triage. *Scientific Reports*, **2018**, 8, 11059	4.9	12
28	CVSim: An Open-Source Cardiovascular Simulator for Teaching and Research **2010**, 3, 45-54		12
27	Epidemiology of patient monitoring alarms in the neonatal intensive care unit. *Journal of Perinatology*, **2018**, 38, 1030-1038	3.1	9

26	A computational model of hemorrhage and dehydration suggests a pathophysiological mechanism: Starling-mediated protein trapping. *American Journal of Physiology - Heart and Circulatory Physiology*, **2013**, 304, H620-31	5.2	9
25	Long-duration spaceflight alters estimated intracranial pressure and cerebral blood velocity. *Journal of Physiology*, **2021**, 599, 1067-1081	3.9	9
24	Cardiovascular responses to artificial gravity combined with exercise **2015**,		8
23	Computational model of cardiovascular response to centrifugation and lower body cycling exercise. *Journal of Applied Physiology*, **2019**, 127, 1453-1468	3.7	7
22	Continuous quantitative monitoring of cerebral oxygen metabolism in neonates by ventilator-gated analysis of NIRS recordings. *Acta Neurochirurgica Supplementum*, **2012**, 114, 177-80	1.7	7
21	Measuring Saccade Latency Using Smartphone Cameras. *IEEE Journal of Biomedical and Health Informatics*, **2020**, 24, 885-897	7.2	6
20	Model-Based Estimation of Respiratory Parameters from Capnography, With Application to Diagnosing Obstructive Lung Disease. *IEEE Transactions on Biomedical Engineering*, **2017**, 64, 2957-2967	5	5
19	Pseudo-Bayesian Model-Based Noninvasive Intracranial Pressure Estimation and Tracking. *IEEE Transactions on Biomedical Engineering*, **2020**, 67, 1604-1615	5	5
18	Prediction of postoperative outcomes using intraoperative hemodynamic monitoring data. *Scientific Reports*, **2017**, 7, 16376	4.9	4
17	A Time-Frequency Approach for Cerebral Embolic Load Monitoring. *IEEE Transactions on Biomedical Engineering*, **2020**, 67, 1007-1018	5	4
16	Integrating Data, Models, and Reasoning in Critical Care		3
15	A Waveform Archiving System for the GE Solar 8000i Bedside Monitor. *Acta Neurochirurgica Supplementum*, **2018**, 126, 173-177	1.7	3
14	A Spectral Approach to Model-Based Noninvasive Intracranial Pressure Estimation. *IEEE Journal of Biomedical and Health Informatics*, **2020**, 24, 2398-2406	7.2	3
13	Cerebral Emboli Monitoring Using Transcranial Doppler Ultrasonography in Adults and Children: A Review of the Current Technology and Clinical Applications in the Perioperative and Intensive Care Setting. *Anesthesia and Analgesia*, **2021**, 133, 379-392	3.9	2
12	Model-Based Separation, Detection, and Classification of Eye Movements. *IEEE Transactions on Biomedical Engineering*, **2020**, 67, 588-600	5	2
11	Enabling Saccade Latency Measurements with Consumer-Grade Cameras **2018**,		2
10	Model-based data integration in clinical environments. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2010**, 2010, 5209-12	0.9	1
9	Know the shunt flow. *Science Translational Medicine*, **2015**, 7, 316ec208-316ec208	17.5	1

8	Fluid dynamics of disease transmission. *Science Translational Medicine*, **2016**, 8, 328ec36-328ec36	17.5	1
7	An Embedded Device for Real-Time Noninvasive Intracranial Pressure Estimation. *Acta Neurochirurgica Supplementum*, **2018**, 126, 85-88	1.7	1
6	Beep, beeep, beeeep, beeeeeep. *Science Translational Medicine*, **2015**, 7,	17.5	1
5	Tracking autonomic balance using an open-loop model of the arterial baroreflex. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, **2019**, 316, R121-R129	3.2	1
4	Distortion of the Intracranial Pressure Waveform by Extraventricular Drainage System. *IEEE Transactions on Biomedical Engineering*, **2021**, 68, 1646-1657	5	1
3	Adaptive Maximal Blood Flow Velocity Estimation From Transcranial Doppler Echos. *IEEE Journal of Translational Engineering in Health and Medicine*, **2020**, 8, 1800511	3	0
2	An Enhanced Mechanistic Model For Capnography, With Application To CHF-COPD Discrimination. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2018**, 2018, 5267-5272	0.9	
1	Modeling of Usual Care: Vasopressor Initiation for Sepsis With Hypotension.. *Frontiers in Medicine*, **2022**, 9, 715856	4.9	