Ethan O Kung

List of Publications by Year
in descending order

33	701	623188	552369
papers	citations	14 h-index	26 g-index

40	40	40	805
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	In Vitro Validation of Finite Element Analysis of Blood Flow in Deformable Models. Annals of Biomedical Engineering, 2011, 39, 1947-1960.	1.3	81
2	Predictive modeling of the virtual Hemi-Fontan operation for second stage single ventricle palliation: Two patient-specific cases. Journal of Biomechanics, 2013, 46, 423-429.	0.9	71
3	In Vitro Validation of Finite-Element Model of AAA Hemodynamics Incorporating Realistic Outlet Boundary Conditions. Journal of Biomechanical Engineering, 2011, 133, 041003.	0.6	55
4	An integrated approach to patient-specific predictive modeling for single ventricle heart palliation. Computer Methods in Biomechanics and Biomedical Engineering, 2014, 17, 1572-1589.	0.9	55
5	Thrombotic risk stratification using computational modeling in patients with coronary artery aneurysms following Kawasaki disease. Biomechanics and Modeling in Mechanobiology, 2014, 13, 1261-1276.	1.4	53
6	Moving Domain Computational Fluid Dynamics to Interface with an Embryonic Model of Cardiac Morphogenesis. PLoS ONE, 2013, 8, e72924.	1.1	51
7	A Simulation Protocol for Exercise Physiology in Fontan Patients Using a Closed Loop Lumped-Parameter Model. Journal of Biomechanical Engineering, 2014, 136, .	0.6	50
8	Development of a Physical Windkessel Module to Re-Create In Vivo Vascular Flow Impedance for In Vitro Experiments. Cardiovascular Engineering and Technology, 2011, 2, 2-14.	0.7	38
9	Hemodynamic effects of left pulmonary artery stenosis after superior cavopulmonary connection: A patient-specific multiscale modeling study. Journal of Thoracic and Cardiovascular Surgery, 2015, 149, 689-696.e3.	0.4	34
10	In Vitro Validation of Patient-Specific Hemodynamic Simulations in Coronary Aneurysms Caused by Kawasaki Disease. Cardiovascular Engineering and Technology, 2014, 5, 189-201.	0.7	28
11	Superior performance of continuous over pulsatile flow ventricular assist devices in the single ventricle circulation: A computational study. Journal of Biomechanics, 2017, 52, 48-54.	0.9	24
12	An interactive simulation tool for patient-specific clinical decision support in single-ventricle physiology. Journal of Thoracic and Cardiovascular Surgery, 2018, 155, 712-721.	0.4	24
13	A Real-Time Programmable Pulsatile Flow Pump for In Vitro Cardiovascular Experimentation. Journal of Biomechanical Engineering, 2016, 138, .	0.6	20
14	A Hybrid Experimental-Computational Modeling Framework for Cardiovascular Device Testing. Journal of Biomechanical Engineering, 2019, 141, .	0.6	18
15	Effect of respiration on cardiac filling at rest and during exercise in Fontan patients: A clinical and computational modeling study. IJC Heart and Vasculature, 2015, 9, 100-108.	0.6	15
16	Integration of Clinical Data Collected at Different Times for Virtual Surgery in Single Ventricle Patients: A Case Study. Annals of Biomedical Engineering, 2015, 43, 1310-1320.	1.3	15
17	Computational Modeling of Pathophysiologic Responses to Exercise in Fontan Patients. Annals of Biomedical Engineering, 2015, 43, 1335-1347.	1.3	14
18	Risks and Benefits of Using a Commercially Available Ventricular Assist Device for Failing Fontan Cavopulmonary Support: A Modeling Investigation. IEEE Transactions on Biomedical Engineering, 2020, 67, 213-219.	2.5	10

#	Article	IF	Citations
19	An algorithm for coupling multibranch in vitro experiment to numerical physiology simulation for a hybrid cardiovascular model. International Journal for Numerical Methods in Biomedical Engineering, 2020, 36, e3289.	1.0	9
20	Multiscale Modeling of Superior Cavopulmonary Circulation: Hemi-Fontan and Bidirectional Glenn Are Equivalent. Seminars in Thoracic and Cardiovascular Surgery, 2020, 32, 883-892.	0.4	9
21	Factors Affecting Cardiovascular Physiology in Cardiothoracic Surgery: Implications for Lumped-Parameter Modeling. Frontiers in Surgery, 2019, 6, 62.	0.6	8
22	Does TCPC power loss really affect exercise capacity?. Heart, 2015, 101, 575.1-575.	1.2	3
23	Target Flow-Pressure Operating Range for Designing a Failing Fontan Cavopulmonary Support Device. IEEE Transactions on Biomedical Engineering, 2020, 67, 2925-2933.	2.5	3
24	Predictive Models for Pulmonary Artery Size in Fontan Patients. Journal of Cardiovascular Translational Research, 2021, 14, 782-789.	1.1	3
25	Design, Development, and Temporal Evaluation of a Magnetic Resonance Imaging-Compatible In Vitro Circulation Model Using a Compliant Abdominal Aortic Aneurysm Phantom. Journal of Biomechanical Engineering, 2021, 143, .	0.6	3
26	Plaque contact surface area and lumen volume predict stroke risk in extracranial carotid artery stenosis. Journal of Vascular Surgery, 2022, 76, 482-488.	0.6	3
27	Tunable Blood Shunt for Neonates With Complex Congenital Heart Defects. Frontiers in Bioengineering and Biotechnology, 2021, 9, 734310.	2.0	1
28	An Automated Simulation Protocol for Exercise Physiology in Fontan Patients Using a Closed-Loop Lumped-Parameter Model. , 2013, , .		0
29	A protocol for automated a posteriori adaptive meshing with SimVascular: a test case. BMC Research Notes, 2020, 13, 229.	0.6	0
30	Hemodynamic Response to Device Titration in the Shunted Single Ventricle Circulation. ASAIO Journal, 2021, Publish Ahead of Print, .	0.9	0
31	Systematic Review and Regression Modeling of the Effects of Age, Body Size, and Exercise on Cardiovascular Parameters in Healthy Adults. Cardiovascular Engineering and Technology, 2021, , 1.	0.7	0
32	In Vitro Validation of Finite Element Model of AAA Hemodynamics Incorporating Realistic Outflow Boundary Conditions. , 2010, , .		0
33	A Hemi Fontan Operation Performed by an Engineer: Considerations on Virtual Surgery. , 2013, , .		0