Eun Bo Shim

List of Publications by Year
in descending order

56 papers	765 citations	516710 16 h-index	580821 25 g-index
57 all docs	57 docs citations	57 times ranked	895 citing authors

#	Article	IF	Citations
1	Continuum-based modeling of collective cell migration. Journal of Mechanical Science and Technology, 2021, 35, 4271-4277.	1.5	0
2	A Simple Method for Automatic 3D Reconstruction of Coronary Arteries From X-Ray Angiography. Frontiers in Physiology, 2021, 12, 724216.	2.8	2
3	Electrophysiological significance of the interatrial conduction including cavoâ€tricuspid isthmus during atrial fibrillation. Journal of Physiology, 2020, 598, 3597-3612.	2.9	16
4	In silico models for evaluating proarrhythmic risk of drugs. APL Bioengineering, 2020, 4, 021502.	6.2	9
5	Diagnostic performance of a vessel-length-based method to compute the instantaneous wave-free ratio in coronary arteries. Scientific Reports, 2020, 10, 1132.	3.3	4
6	Three-Dimensional Heart Model-Based Screening of Proarrhythmic Potential by in silico Simulation of Action Potential and Electrocardiograms. Frontiers in Physiology, 2019, 10, 1139.	2.8	14
7	Machine Learning Approach to Predict Ventricular Fibrillation Based on QRS Complex Shape. Frontiers in Physiology, 2019, 10, 1193.	2.8	30
8	Prediction of Plaque Progression in Coronary Arteries Based on a Novel Hemodynamic Index Calculated From Virtual Stenosis Method. Frontiers in Physiology, 2019, 10, 400.	2.8	3
9	Computational analysis of the electromechanical performance of mitral valve cerclage annuloplasty using a patient-specific ventricular model. Korean Journal of Physiology and Pharmacology, 2019, 23, 63.	1.2	5
10	Multiple factors influence the morphology of the bipolar electrogram: An in silico modeling study. PLoS Computational Biology, 2019, 15, e1006765.	3.2	28
11	In silico evaluation of the acute occlusion effect of coronary artery on cardiac electrophysiology and the body surface potential map. Korean Journal of Physiology and Pharmacology, 2019, 23, 71.	1.2	7
12	Clinical Usefulness of Computational Modeling-Guided Persistent Atrial Fibrillation Ablation: Updated Outcome of Multicenter Randomized Study. Frontiers in Physiology, 2019, 10, 1512.	2.8	19
13	Computational analysis of the effect of mitral and aortic regurgitation on the function of ventricular assist devices using 3D cardiac electromechanical model. Medical and Biological Engineering and Computing, 2018, 56, 889-898.	2.8	2
14	Influence of LVAD function on mechanical unloading and electromechanical delay: a simulation study. Medical and Biological Engineering and Computing, 2018, 56, 911-921.	2.8	11
15	Pro-Arrhythmogenic Effects of Heterogeneous Tissue Curvatureã€€â€• A Suggestion for Role of Left Atrial Appendage in Atrial Fibrillation â€•. Circulation Journal, 2018, 83, 32-40.	1.6	11
16	Thrombus and Plaque Erosion Characterized by Optical Coherence Tomography in Patients With Vasospastic Angina. Revista Espanola De Cardiologia (English Ed), 2017, 70, 459-466.	0.6	8
17	Physiome approach for the analysis of vascular flow reserve in the heart and brain. Pflugers Archiv European Journal of Physiology, 2017, 469, 613-628.	2.8	5
18	Diagnostic Performance of a Novel Method for Fractional Flow Reserve Computed from Noninvasive Computed Tomography Angiography (NOVEL-FLOW Study). American Journal of Cardiology, 2017, 120, 362-368.	1.6	21

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19	Physiological indices for the categorization of Mibyeong severity. Integrative Medicine Research, 2017, 6, 88-92.	1.8	0
20	Lower cellular metabolic power can be an explanation for obesity trend in Tae-Eum type: hypothesis and clinical observation. Integrative Medicine Research, 2017, 6, 254-259.	1.8	3
21	A vessel length-based method to compute coronary fractional flow reserve from optical coherence tomography images. BioMedical Engineering OnLine, 2017, 16, 83.	2.7	21
22	Ganglionated plexi stimulation induces pulmonary vein triggers and promotes atrial arrhythmogenecity: In silico modeling study. PLoS ONE, 2017, 12, e0172931.	2.5	16
23	Effectiveness of atrial fibrillation rotor ablation is dependent on conduction velocity: An in-silico 3-dimensional modeling study. PLoS ONE, 2017, 12, e0190398.	2.5	28
24	Spatial reproducibility of complex fractionated atrial electrogram depending on the direction and configuration of bipolar electrodes: anin-silicomodeling study. Korean Journal of Physiology and Pharmacology, 2016, 20, 507.	1.2	7
25	Inducibility of human atrial fibrillation in anin silicomodel reflecting local acetylcholine distribution and concentration. Korean Journal of Physiology and Pharmacology, 2016, 20, 111.	1.2	5
26	Minimal systems analysis of mitochondria-dependent apoptosis induced by cisplatin. Korean Journal of Physiology and Pharmacology, 2016, 20, 367.	1.2	4
27	Electrophysiological Rotor Ablation in In-Silico Modeling of Atrial Fibrillation: Comparisons with Dominant Frequency, Shannon Entropy, and Phase Singularity. PLoS ONE, 2016, 11, e0149695.	2.5	37
28	Computational simulations of the effects of the G229D KCNQ1 mutation on human atrial fibrillation. Journal of Physiological Sciences, 2016, 66, 407-415.	2.1	10
29	A patient-specific virtual stenotic model of the coronary artery to analyze the relationship between fractional flow reserve and wall shear stress. International Journal of Cardiology, 2016, 222, 799-805.	1.7	18
30	A model for allometric scaling of mammalian metabolism with ambient heat loss. Integrative Medicine Research, 2016, 5, 30-36.	1.8	16
31	Estimation of the flow resistances exerted in coronary arteries using a vessel length-based method. Pflugers Archiv European Journal of Physiology, 2016, 468, 1449-1458.	2.8	11
32	Mathematical analysis of the effects of valvular regurgitation on the pumping efficacy of continuous and pulsatile left ventricular assist devices. Integrative Medicine Research, 2016, 5, 22-29.	1.8	7
33	Fibrillation Number Based on Wavelength and Critical Mass in Patients Who Underwent Radiofrequency Catheter Ablation for Atrial Fibrillation. IEEE Transactions on Biomedical Engineering, 2015, 62, 673-679.	4.2	16
34	The Relationship among Complex Fractionated Electrograms, Wavebreak, Phase Singularity, and Local Dominant Frequency in Fibrillation Wave-Dynamics: a Modeling Comparison Study. Journal of Korean Medical Science, 2014, 29, 370.	2.5	10
35	Computational prediction of proarrhythmogenic effect of the V241F KCNQ1 mutation in human atrium. Progress in Biophysics and Molecular Biology, 2014, 116, 70-75.	2.9	13
36	Virtual ablation for atrial fibrillation in personalized in-silico three-dimensional left atrial modeling: Comparison with clinical catheter ablation. Progress in Biophysics and Molecular Biology, 2014, 116, 40-47.	2.9	40

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37	Clinical application of the fibrillation number in patients with an implantable cardioverter defibrillator. Progress in Biophysics and Molecular Biology, 2014, 116, 33-39.	2.9	2
38	A novel patient-specific model to compute coronary fractional flow reserve. Progress in Biophysics and Molecular Biology, 2014, 116, 48-55.	2.9	29
39	Special issue on â€œToward physiome based therapeuticsâ€• Progress in Biophysics and Molecular Biology, 2014, 116, 1-2.	2.9	1
40	Patient-Specific Identification of Optimal Ubiquitous Electrocardiogram (U-ECG) Placement Using a Three-Dimensional Model of Cardiac Electrophysiology. IEEE Transactions on Biomedical Engineering, 2013, 60, 245-249.	4.2	15
41	An Integrative Model of the Cardiovascular System Coupling Heart Cellular Mechanics with Arterial Network Hemodynamics. Journal of Korean Medical Science, 2013, 28, 1161.	2.5	5
42	Taeeum-type people in Sasang constitutional medicine have a reduced mitochondrial metabolism. Integrative Medicine Research, 2012, 1, 41-45.	1.8	12
43	Mitochondrial medicine and biomedical engineering. Biomedical Engineering Letters, 2011, 1, 21-26.	4.1	0
44	Mitochondrial dysfunction and metabolic syndromeâ€”looking for environmental factors. Biochimica Et Biophysica Acta - General Subjects, 2010, 1800, 282-289.	2.4	48
45	Computational analysis of the effect of the type of LVAD flow on coronary perfusion and ventricular afterload. Journal of Physiological Sciences, 2009, 59, 307-316.	2.1	37
46	A new integrated method for analyzing heart mechanics using a cellâ€“hemodynamicsâ€“autonomic nerve control coupled model of the cardiovascular system. Progress in Biophysics and Molecular Biology, 2008, 96, 44-59.	2.9	16
47	Theoretical analysis of the magnetocardiographic pattern for reentry wave propagation in a three-dimensional human heart model. Progress in Biophysics and Molecular Biology, 2008, 96, 339-356.	2.9	22
48	Numerical Simulation of the Effect of Sodium Profile on Cardiovascular Response to Hemodialysis. Yonsei Medical Journal, 2008, 49, 581.	2.2	3
49	Physiome and Sasang Constitutional Medicine. Journal of Physiological Sciences, 2008, 58, 433-440.	2.1	51
50	A new multi-scale simulation model of the circulation: from cells to system. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2006, 364, 1483-1500.	3.4	24
51	QRP03-5: SLA-Constrained Resource Scheduling Policy for Group Peering in P2P Grid. IEEE Global Telecommunications Conference (GLOBECOM), 2006, , .	0.0	2
52	Computational analysis of the three-dimensional hemodynamics of the blood sac in the twin-pulse life-support system. Journal of Artificial Organs, 2005, 7, 174-180.	0.9	2
53	Computational study on the hemodynamics of the bypass shunt directly connecting the left ventricle to a coronary artery. Journal of Mechanical Science and Technology, 2005, 19, 1158-1168.	1.5	1
54	Computational Analysis of Tumor Angiogenesis Patterns Using a Two-dimensional Model. Yonsei Medical Journal, 2005, 46, 275.	2.2	6

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55	Mathematical Modeling of Cardiovascular System Dynamics Using a Lumped Parameter Method. The Japanese Journal of Physiology, 2004, 54, 545-553.	0.9	27
56	Computational Modeling of the Cardiovascular System After Fontan Procedure. Lecture Notes in Computer Science, 2002, , 105-114.	1.3	5