Michalis A Xenos

List of Publications by Year
in descending order

70	1,874	304602 22	265120 42
papers	citations	h-index	g-index

73	73	73	1720
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Cerebrospinal Fluid Flow in the Normal and Hydrocephalic Human Brain. IEEE Transactions on Biomedical Engineering, 2007, 54, 291-302.	2.5	144
2	Pulsatile Cerebrospinal Fluid Dynamics in the Human Brain. IEEE Transactions on Biomedical Engineering, 2005, 52, 557-565.	2.5	139
3	A mathematical model of blood, cerebrospinal fluid and brain dynamics. Journal of Mathematical Biology, 2009, 59, 729-759.	0.8	124
4	Device Thrombogenicity Emulator (DTE) â^' Design optimization methodology for cardiovascular devices: A study in two bileaflet MHV designs. Journal of Biomechanics, 2010, 43, 2400-2409.	0.9	107
5	Evaluation of Shear-Induced Platelet Activation Models Under Constant and Dynamic Shear Stress Loading Conditions Relevant to Devices. Annals of Biomedical Engineering, 2013, 41, 1279-1296.	1.3	96
6	Dynamics of lateral ventricle and cerebrospinal fluid in normal and hydrocephalic brains. Journal of Magnetic Resonance Imaging, 2006, 24, 756-770.	1.9	93
7	Three-dimensional computational prediction of cerebrospinal fluid flow in the human brain. Computers in Biology and Medicine, 2011, 41, 67-75.	3.9	91
8	Device Thrombogenicity Emulation: A Novel Method for Optimizing Mechanical Circulatory Support Device Thromboresistance. PLoS ONE, 2012, 7, e32463.	1.1	86
9	Biomagnetic fluid flow in a driven cavity. Meccanica, 2013, 48, 187-200.	1.2	80
10	Patient-Based Abdominal Aortic Aneurysm Rupture Risk Prediction with Fluid Structure Interaction Modeling. Annals of Biomedical Engineering, 2010, 38, 3323-3337.	1.3	79
11	Thromboresistance Comparison of the HeartMate II Ventricular Assist Device With the Device Thrombogenicity Emulation-Optimized HeartAssist 5 VAD. Journal of Biomechanical Engineering, 2014, 136, 021014.	0.6	73
12	Microcalcifications Increase Coronary Vulnerable Plaque Rupture Potential: A Patient-Based Micro-CT Fluidâ€“Structure Interaction Study. Annals of Biomedical Engineering, 2012, 40, 1443-1454.	1.3	58
13	Cardiovascular disease management: the need for better diagnostics. Medical and Biological Engineering and Computing, 2008, 46, 1059-1068.	1.6	57
14	Design Optimization of a Mechanical Heart Valve for Reducing Valve Thrombogenicityâ€”A Case Study with ATS Valve. ASAIO Journal, 2010, 56, 389-396.	0.9	51
15	Progression of Abdominal Aortic Aneurysm Towards Rupture: Refining Clinical Risk Assessment Using a Fully Coupled Fluidâ€“Structure Interaction Method. Annals of Biomedical Engineering, 2015, 43, 139-153.	1.3	46
16	The effect of angulation in abdominal aortic aneurysms: fluidâ€“structure interaction simulations of idealized geometries. Medical and Biological Engineering and Computing, 2010, 48, 1175-1190.	1.6	43
17	Particle-Based Methods for Multiscale Modeling of Blood Flow in the Circulation and in Devices: Challenges and Future Directions. Annals of Biomedical Engineering, 2010, 38, 1225-1235.	1.3	40
18	Toward Optimization of a Novel Trileaflet Polymeric Prosthetic Heart Valve via Device Thrombogenicity Emulation. ASAIO Journal, 2013, 59, 275-283.	0.9	40

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19	Interactions and stability of solitary waves in shallow water. Chaos, Solitons and Fractals, 2002, 14, 87-95.	2.5	37
20	Systematic design of drug delivery therapies. Computers and Chemical Engineering, 2008, 32, 89-98.	2.0	35
21	Turbulent biomagnetic fluid flow in a rectangular channel under the action of a localized magnetic field. International Journal of Engineering Science, 2006, 44, 1205-1224.	2.7	25
22	Viscous flow simulation in a stenosis model using discrete particle dynamics: a comparison between DPD and CFD. Biomechanics and Modeling in Mechanobiology, 2012, 11, 119-129.	1.4	24
23	Biomechanical factors in coronary vulnerable plaque risk of rupture. Coronary Artery Disease, 2013, 24, 75-87.	0.3	22
24	Fluid Structure Interaction With Contact Surface Methodology for Evaluation of Endovascular Carotid Implants for Drug-Resistant Hypertension Treatment. Journal of Biomechanical Engineering, 2012, 134, 041001.	0.6	21
25	Solving the Nonlinear Boundary Layer Flow Equations with Pressure Gradient and Radiation. Symmetry, 2020, 12, 710.	1.1	21
26	Discovery of transport and reaction properties in distributed systems. AICHE Journal, 2007, 53, 381-396.	1.8	20
27	Abdominal Aortic Aneurysm Endovascular Repair: Profiling Postimplantation Morphometry and Hemodynamics With Image-Based Computational Fluid Dynamics. Journal of Biomechanical Engineering, 2018, 140, .	0.6	19
28	Numerical study of two dimensional laminar boundary layer compressible flow with pressure gradient and heat and mass transfer. International Journal of Engineering Science, 1999, 37, 1795-1812.	2.7	16
29	The impact of hemodynamic factors in a coronary main artery to detect the atherosclerotic severity: Single and multiple sequential stenosis cases. Physics of Fluids, 2021, 33, .	1.6	14
30	Numerical investigation of two-dimensional turbulent boundary-layer compressible flow with adverse pressure gradient and heat and mass transfer. Acta Mechanica, 2000, 141, 201-223.	1.1	13
31	Comparison of physiological and post-endovascular aneurysm repair infrarenal blood flow. Computer Methods in Biomechanics and Biomedical Engineering, 2017, 20, 242-249.	0.9	13
32	Haemodynamic performance of AFX and Nellix endografts: a computational fluid dynamics study. Interactive Cardiovascular and Thoracic Surgery, 2018, 26, 826-833.	0.5	11
33	Hemodynamic Profile of Two Aortic Endografts Accounting for Their Postimplantation Position. Journal of Medical Devices, Transactions of the ASME, 2017, 11, .	0.4	10
34	Finite element analysis of magnetohydrodynamic effects on blood flow in an aneurysmal geometry. Physics of Fluids, 2014, 26, .	1.6	9
35	In-stent graft helical flow intensity reduces the risk of migration after endovascular aortic repair. Journal of Biomechanics, 2019, 94, 170-179.	0.9	9
36	Studying the Interaction of Stent-Grafts and Treated Abdominal Aortic Aneurysms. Journal of Endovascular Therapy, 2015, 22, 413-420.	0.8	8

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37	Comparative study of flow in right-sided and left-sided aortas: numerical simulations in patient-based models. Computer Methods in Biomechanics and Biomedical Engineering, 2015, 18, 414-425.	0.9	8
38	An Eulerâ€“Lagrange approach for studying blood flow in an aneurysmal geometry. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2017, 473, 20160774.	1.0	8
39	Applying Findings of Computational Studies in Vascular Clinical Practice: Fact, Fiction, or Misunderstanding?. Journal of Endovascular Therapy, 2014, 21, 434-438.	0.8	7
40	Effect of macroscale formation of intraluminal thrombus on blood flow in abdominal aortic aneurysms. Computer Methods in Biomechanics and Biomedical Engineering, 2016, 19, 84-92.	0.9	7
41	Radiation effect on the turbulent compressible boundary layer flow with adverse pressure gradient. Applied Mathematics and Computation, 2017, 299, 153-164.	1.4	7
42	Endograft Specific Haemodynamics After Endovascular Aneurysm Repair: Flow Characteristics of Four Stent Graft Systems. European Journal of Vascular and Endovascular Surgery, 2019, 58, 538-547.	0.8	7
43	Radiation Effects on Flow past a Stretching Plate with Temperature Dependent Viscosity. Applied Mathematics, 2013, 04, 1-5.	0.1	7
44	MHD compressible turbulent boundary-layer flow with adverse pressure gradient. Acta Mechanica, 2005, 177, 171-190.	1.1	6
45	Loss of Dopamine D2 Receptors Induces Atrophy in the Temporal and Parietal Cortices and the Caudal Thalamus of Ethanolâ€Consuming Mice. Alcoholism: Clinical and Experimental Research, 2012, 36, 815-825.	1.4	6
46	Remodeling effects of carotid artery stenting versus endarterectomy with patch angioplasty in terms of morphology and hemodynamics. Computers in Biology and Medicine, 2022, 140, 105072.	3.9	6
47	MHD Free Convective Flow of Water near 4â„ƒ past a Vertical Moving Plate with Constant Suction. Applied Mathematics, 2013, 04, 52-57.	0.1	5
48	Hemodynamic characteristics expose the atherosclerotic severity in coronary main arteries: One-dimensional and three-dimensional approaches. Physics of Fluids, 2021, 33, .	1.6	5
49	Methods of optimizing separation of compressible turbulent boundary-layer over a wedge with heat and mass transfer. International Journal of Heat and Mass Transfer, 2009, 52, 488-496.	2.5	4
50	Numerical study of the combined free-forced convective boundary layer flow through a highly permeable porous medium. Mechanics Research Communications, 1995, 22, 503-510.	1.0	3
51	Patient based Abdominal Aortic Aneurysm rupture risk prediction combining clinical visualizing modalities with fluid structure interaction numerical simulations. , 2010, 2010, 5173-6.		3
52	Computational Fluid Dynamic Analysis Supports the Hemodynamic Stability of Hybrid Combinations With the AFX Bifurcate and Nitinol-Based Proximal Segments in Solutions of Failed Endovascular Aneurysm Repair. Vascular and Endovascular Surgery, 2021, 55, 153857442110374.	0.3	2
53	Dynamic Shear Stress Induced Platelet Activation in Blood Recirculation Devices: Implications for Thrombogenicity Minimization. , 2009, , .		1
54	Oscillating Magnetohydrodynamic Stokes Flow between Porous Plates with Spatiotemporally Periodic Reabsorption. Fluids, 2021, 6, 156.	0.8	1

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55	Modeling and Computational Comparison of the Displacement Forces Exerted between the AFX Unibody Aortic Stent Graft and its Hybrid Combination with a Nitinol-based Proximal Aortic Cuff. Annals of Vascular Surgery, 2021, 74, 400-409.	0.4	1
56	Wall shear stress indicators influence the regular hemodynamic conditions in coronary main arterial diseases: cardiovascular abnormalities. Computer Methods in Biomechanics and Biomedical Engineering, 2023, 26, 235-248.	0.9	1
57	Systematic design of drug delivery therapies. Computer Aided Chemical Engineering, 2006, , 1693-1698.	0.3	0
58	A Patient Based Approach for Fluid Structure Interaction in Ruptured Abdominal Aortic Aneurysms. , 2009, , .		0
59	Turbulent and Direct Numerical Simulations for Optimizing Mechanical Heart Valve Designs. , 2009, , .		0
60	A Fluid Structure Interaction Approach for Patient Based Abdominal Aortic Aneurysm Rupture Risk Prediction. , 2010, , .		0
61	Design Optimization of a Mechanical Heart Valve for Reducing Valve Thrombogenicity: A Case Study With ATS Valve. , 2010, , .		0
62	Evaluation of Syncardia Total Artificial Heart Using Device Thrombogenicity Emulator. , 2011, , .		0
63	Design Optimization of Rotary Blood Pumps: Alternatives to Anticoagulation Therapy. , 2011, , .		0
64	Dynamic Numerical and Experimental Evaluation of Trileaflet Polymer Prosthetic Heart Valves. , 2011, , .		0
65	Risk of Rupture in Coronary Vulnerable Plaques: Fluid-Structure Interaction Studies Using Patient Based Micro-CT and IVUS Measurements. , 2011, , .		0
66	Development and Optimization of a Novel Polymeric Prosthetic Heart Valve Using the Device Thrombogenicity Emulation (DTE) Methodology. , 2012, , .		0
67	MAGNETOHYDRODYNAMIC EFFECTS ON THE GRANULAR TEMPERATURE OF RED BLOOD CELLS IN MICROVASCULATURE. Journal of Mechanics in Medicine and Biology, 2017, 17, 1750003.	0.3	0
68	Fluid Structure Interaction (FSI) Methodology for Evaluation of a Passive Endovascular Carotid Implant for Hypertension Treatment. , 2011, , .		0
69	Thrombogenicity Comparison of Axial Ventricular Assist Devices by DTE Methodology: MicroMed HeartAssist 5 and Thoratec Heartmate II. , 2012, , .		0
70	Evaluation of Platelet Activation Models With Dynamic Shear Stress In Vitro Experiments. , 2012, , .		0