Vanessa DÃ-az-Zuccarini

List of Publications by Year
in descending order

37 papers	786 citations	567281 15 h-index	552781 26 g-index
40 all docs	40 docs citations	40 times ranked	1031 citing authors

#	Article	IF	Citations
1	A Computational Framework for Pre-Interventional Planning of Peripheral Arteriovenous Malformations. Cardiovascular Engineering and Technology, 2022, 13, 234-246.	1.6	2
2	Experimental evaluation of the patient-specific haemodynamics of an aortic dissection model using particle image velocimetry. Journal of Biomechanics, 2022, 134, 110963.	2.1	9
3	Computer assisted Doppler waveform analysis and ultrasound derived turbulence intensity ratios can predict early hyperplasia development in newly created vascular access fistula: Pilot study, methodology and analysis. JRSM Cardiovascular Disease, 2021, 10, 204800402110001.	0.7	2
4	Special Issue - â€œFrontiers of Simulation and Experimentation for Personalised Cardiovascular Management and Treatmentâ€• Medical Engineering and Physics, 2021, 95, 117-118.	1.7	0
5	A novel MRI-based data fusion methodology for efficient, personalised, compliant simulations of aortic haemodynamics. Journal of Biomechanics, 2021, 129, 110793.	2.1	17
6	Multiscale, patient-specific computational fluid dynamics models predict formation of neointimal hyperplasia in saphenous vein grafts. Journal of Vascular Surgery Cases and Innovative Techniques, 2020, 6, 292-306.	0.6	7
7	A Combined In Vivo, In Vitro, In Silico Approach for Patient-Specific Haemodynamic Studies of Aortic Dissection. Annals of Biomedical Engineering, 2020, 48, 2950-2964.	2.5	23
8	Low-Cost Fabrication of Polyvinyl Alcohol-Based Personalized Vascular Phantoms for In Vitro Hemodynamic Studies: Three Applications. Journal of Engineering and Science in Medical Diagnostics and Therapy, 2020, 3, .	0.5	7
9	Patient-specific haemodynamic simulations of complex aortic dissections informed by commonly available clinical datasets. Medical Engineering and Physics, 2019, 71, 45-55.	1.7	37
10	Investigating the physiology of normothermic ex vivo heart perfusion in an isolated slaughterhouse porcine model used for device testing and training. BMC Cardiovascular Disorders, 2019, 19, 254.	1.7	13
11	A modeling and machine learning approach to ECG feature engineering for the detection of ischemia using pseudo-ECG. PLoS ONE, 2019, 14, e0220294.	2.5	23
12	Impaired LXRÎ± Phosphorylation Attenuates Progression of Fatty Liver Disease. Cell Reports, 2019, 26, 984-995.e6.	6.4	46
13	An in silico study of the influence of vessel wall deformation on neointimal hyperplasia progression in peripheral bypass grafts. Medical Engineering and Physics, 2019, 74, 137-145.	1.7	4
14	Analysis of the Haemodynamic Factors Involved in Neointimal Hyperplasia Growth in Femoro-Popliteal Bypass Grafts Using Different Multi-scale, Patient-specific Modelling Approaches. European Journal of Vascular and Endovascular Surgery, 2018, 56, e19.	1.5	1
15	Virtual TEVAR: Overcoming the Roadblocks of In-Silico Tools for Aortic Dissection Treatment. Theranostics, 2018, 8, 6384-6385.	10.0	1
16	Editorial: Mathematics for Healthcare as Part of Computational Medicine. Frontiers in Physiology, 2018, 9, 985.	2.8	2
17	A simplified method to account for wall motion in patient-specific blood flow simulations of aortic dissection: Comparison with fluid-structure interaction. Medical Engineering and Physics, 2018, 58, 72-79.	1.7	37
18	Bridging Organ- and Cellular-Level Behavior in Ex Vivo Experimental Platforms Using Populations of Models of Cardiac Electrophysiology. Journal of Engineering and Science in Medical Diagnostics and Therapy, 2018, 1, .	0.5	2

#	Article	IF	Citations
19	A multiscale modelling approach to understand atherosclerosis formation: A patient-specific case study in the aortic bifurcation. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2017, 231, 378-390.	1.8	22
20	Computational tools for clinical support: a multi-scale compliant model for haemodynamic simulations in an aortic dissection based on multi-modal imaging data. Journal of the Royal Society Interface, 2017, 14, 20170632.	3.4	63
21	Patient-Specific, Multi-Scale Modeling of Neointimal Hyperplasia in Vein Grafts. Frontiers in Physiology, 2017, 8, 226.	2.8	26
22	Development of a Patient-Specific Multi-Scale Model to Understand Atherosclerosis and Calcification Locations: Comparison with In vivo Data in an Aortic Dissection. Frontiers in Physiology, 2016, 7, 238.	2.8	22
23	A Multiscale and Patient-specific Computational Framework of Atherosclerosis Formation and Progression: A Case Study in the Aorta and Peripheral Arteries. Procedia Computer Science, 2015, 51, 1118-1127.	2.0	12
24	Aortic dissection simulation models for clinical support: fluid-structure interaction vs. rigid wall models. BioMedical Engineering OnLine, 2015, 14, 34.	2.7	111
25	Evaluation of the Hemodynamic Effectiveness of Aortic Dissection Treatments via Virtual Stenting. International Journal of Artificial Organs, 2014, 37, 753-762.	1.4	16
26	Geometrical and Stress Analysis of Factors Associated With Stent Fracture After Melody Percutaneous Pulmonary Valve Implantation. Circulation: Cardiovascular Interventions, 2014, 7, 510-517.	3.9	17
27	Influence of an Arterial Stenosis on the Hemodynamics Within an Arteriovenous Fistula (AVF): Comparison Before and After Balloon-Angioplasty. Cardiovascular Engineering and Technology, 2014, 5, 233-243.	1.6	5
28	An in silico case study of idiopathic dilated cardiomyopathy via a multi-scale model of the cardiovascular system. Computers in Biology and Medicine, 2014, 53, 141-153.	7.0	5
29	Development of a patient-specific simulation tool to analyse aortic dissections: Assessment of mixed patient-specific flow and pressure boundary conditions. Medical Engineering and Physics, 2014, 36, 275-284.	1.7	75
30	Uncertainty assessment of imaging techniques for the 3D reconstruction of stent geometry. Medical Engineering and Physics, 2014, 36, 1062-1068.	1.7	10
31	Towards personalised management of atherosclerosis via computational models in vascular clinics: technology based on patientâ€specific simulation approach. Healthcare Technology Letters, 2014, 1, 13-18.	3.3	14
32	A vision and strategy for the virtual physiological human: 2012 update. Interface Focus, 2013, 3, 20130004.	3.0	74
33	Integrative approaches to computational biomedicine. Interface Focus, 2013, 3, 20130003.	3.0	10
34	Stent Geometry Reconstruction Using Imaging Techniques1. Journal of Medical Devices, Transactions of the ASME, 2013, 7, .	0.7	0
35	A Multiscale Model of Atherosclerotic Plaque Formation at Its Early Stage. IEEE Transactions on Biomedical Engineering, 2011, 58, 3460-3463.	4.2	33
36	On the formalization of multi-scale and multi-science processes for integrative biology. Interface Focus, 2011, 1, 426-437.	3.0	20

#	Article	IF	Citations
37	An in silico future for the engineering of functional tissues and organs. Organogenesis, 2010, 6, 245-251.	1.2	14