# Vanessa DÃ-az-Zuccarini

List of Publications by Year
in descending order



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|---|---|---|---|
| 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 | Aortic dissection simulation models for clinical support: fluid-structure interaction vs. rigid wall models. BioMedical Engineering OnLine, 2015, 14, 34. | 2.7 | 111 |
| 2 | 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 |
| 3 | A vision and strategy for the virtual physiological human: 2012 update. Interface Focus, 2013, 3, 20130004. | 3.0 | 74 |
| 4 | 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 |
| 5 | Impaired LXRÎ± Phosphorylation Attenuates Progression of Fatty Liver Disease. Cell Reports, 2019, 26, 984-995.e6. | 6.4 | 46 |
| 6 | 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 |
| 7 | 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 |
| 8 | A Multiscale Model of Atherosclerotic Plaque Formation at Its Early Stage. IEEE Transactions on Biomedical Engineering, 2011, 58, 3460-3463. | 4.2 | 33 |
| 9 | Patient-Specific, Multi-Scale Modeling of Neointimal Hyperplasia in Vein Grafts. Frontiers in Physiology, 2017, 8, 226. | 2.8 | 26 |
| 10 | 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 |
| 11 | 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 |
| 12 | 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 |
| 13 | 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 |
| 14 | On the formalization of multi-scale and multi-science processes for integrative biology. Interface Focus, 2011, 1, 426-437. | 3.0 | 20 |
| 15 | 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 |
| 16 | A novel MRI-based data fusion methodology for efficient, personalised, compliant simulations of aortic haemodynamics. Journal of Biomechanics, 2021, 129, 110793. | 2.1 | 17 |
| 17 | Evaluation of the Hemodynamic Effectiveness of Aortic Dissection Treatments via Virtual Stenting. International Journal of Artificial Organs, 2014, 37, 753-762. | 1.4 | 16 |
| 18 | An in silico future for the engineering of functional tissues and organs. Organogenesis, 2010, 6, 245-251. | 1.2 | 14 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | 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 |
| 20 | 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 |
| 21 | 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 |
| 22 | Integrative approaches to computational biomedicine. Interface Focus, 2013, 3, 20130003. | 3.0 | 10 |
| 23 | Uncertainty assessment of imaging techniques for the 3D reconstruction of stent geometry. Medical Engineering and Physics, 2014, 36, 1062-1068. | 1.7 | 10 |
| 24 | 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 |
| 25 | 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 |
| 26 | 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 |
| 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 | 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 |
| 30 | Editorial: Mathematics for Healthcare as Part of Computational Medicine. Frontiers in Physiology, 2018, 9, 985. | 2.8 | 2 |
| 31 | 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 |
| 32 | 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 |
| 33 | A Computational Framework for Pre-Interventional Planning of Peripheral Arteriovenous Malformations. Cardiovascular Engineering and Technology, 2022, 13, 234-246. | 1.6 | 2 |
| 34 | 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 |
| 35 | Virtual TEVAR: Overcoming the Roadblocks of In-Silico Tools for Aortic Dissection Treatment. Theranostics, 2018, 8, 6384-6385. | 10.0 | 1 |
| 36 | Stent Geometry Reconstruction Using Imaging Techniques1. Journal of Medical Devices, Transactions of the ASME, 2013, 7, . | 0.7 | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | 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 |