Giancarlo Pennati

List of Publications by Year in descending order

152	4,327	94269 37	143772 57
papers	citations	h-index	g-index

156	156	156	3340
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Modeling of the Norwood circulation: effects of shunt size, vascular resistances, and heart rate. American Journal of Physiology - Heart and Circulatory Physiology, 2001, 280, H2076-H2086.	1.5	174
2	Simultaneous measurements of umbilical venous, fetal hepatic, and ductus venosus blood flow in growth-restricted human fetuses. American Journal of Obstetrics and Gynecology, 2004, 190, 1347-1358.	0.7	173
3	Multiscale modelling in biofluidynamics: Application to reconstructive paediatric cardiac surgery. Journal of Biomechanics, 2006, 39, 1010-1020.	0.9	164
4	Multiscale modeling of the cardiovascular system: application to the study of pulmonary and coronary perfusions in the univentricular circulation. Journal of Biomechanics, 2005, 38, 1129-1141.	0.9	134
5	Role of ductus venosus in distribution of umbilical blood flow in human fetuses during second half of pregnancy. American Journal of Physiology - Heart and Circulatory Physiology, 2000, 279, H1256-H1263.	1.5	102
6	A new comprehensive reaction mechanism for combustion of hydrocarbon fuels. Combustion and Flame, 1994, 99, 201-211.	2.8	93
7	The hemodynamic effects of double-orifice valve repair for mitral regurgitation: a 3D computational model1. European Journal of Cardio-thoracic Surgery, 1999, 15, 419-425.	0.6	85
8	Use of mathematic modeling to compare and predict hemodynamic effects of the modified Blalockâ€“Taussig and right ventricleâ€“pulmonary artery shunts for hypoplastic left heart syndrome. Journal of Thoracic and Cardiovascular Surgery, 2008, 136, 312-320.e2.	0.4	85
9	Biomechanical properties of human articular cartilage under compressive loads. Biorheology, 2004, 41, 159-66.	1.2	77
10	Virtual surgeries in patients with congenital heart disease: a multi-scale modelling test case. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2011, 369, 4316-4330.	1.6	76
11	Mathematical modelling of the human foetal cardiovascular system based on Doppler ultrasound data. Medical Engineering and Physics, 1997, 19, 327-335.	0.8	75
12	A Wide Range Modeling Study of Methane Oxidation. Combustion Science and Technology, 1994, 96, 279-325.	1.2	73
13	Prediction of Kinetic Parameters for Hydrogen Abstraction Reactions. Combustion Science and Technology, 1993, 95, 1-50.	1.2	72
14	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
15	Use of Mathematical Modeling to Compare and Predict Hemodynamic Effects Between Hybrid and Surgical Norwood Palliations for Hypoplastic Left Heart Syndrome. Circulation, 2011, 124, S204-10.	1.6	70
16	A mathematical model of circulation in the presence of the bidirectional cavopulmonary anastomosis in children with a univentricular heart. Medical Engineering and Physics, 1997, 19, 223-234.	0.8	69
17	Computational fluid dynamic study of flow optimization in realistic models of the total cavopulmonary connections. Journal of Surgical Research, 2004, 116, 305-313.	0.8	67
18	Multiscale modelling as a tool to prescribe realistic boundary conditions for the study of surgical procedures. Biorheology, 2002, 39, 359-64.	1.2	67

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19	Fluidâ€“Structure Interaction Model of a Percutaneous Aortic Valve: Comparison with an In Vitro Test and Feasibility Study in a Patient-Specific Case. Annals of Biomedical Engineering, 2016, 44, 590-603.	1.3	66
20	Pulmonary regurgitation: The effects of varying pulmonary artery compliance, and of increased resistance proximal or distal to the compliance. International Journal of Cardiology, 2009, 133, 157-166.	0.8	62
21	How successful is successful? Aortic arch shape after successful aortic coarctation repair correlates with left ventricular function. Journal of Thoracic and Cardiovascular Surgery, 2017, 153, 418-427.	0.4	61
22	Sequential Structural and Fluid Dynamic Numerical Simulations of a Stented Bifurcated Coronary Artery. Journal of Biomechanical Engineering, 2011, 133, 121010.	0.6	60
23	Computational model of the fluid dynamics in systemic-to-pulmonary shunts. Journal of Biomechanics, 2000, 33, 549-557.	0.9	55
24	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
25	Influence of plaque calcifications on coronary stent fracture: A numerical fatigue life analysis including cardiac wall movement. Journal of Biomechanics, 2014, 47, 899-907.	0.9	55
26	Fatigue behaviour of Nitinol peripheral stents: The role of plaque shape studied with computational structural analyses. Medical Engineering and Physics, 2014, 36, 842-849.	0.8	55
27	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
28	Patientâ€specific parameter estimation in singleâ€ventricle lumped circulation models under uncertainty. International Journal for Numerical Methods in Biomedical Engineering, 2017, 33, e02799.	1.0	48
29	Uterine artery blood flow volume in pregnant women with an abnormal pulsatility index of the uterine arteries delivering normal or intrauterine growth restricted newborns. Placenta, 2011, 32, 487-492.	0.7	47
30	Hemodynamic changes across the human ductus venosus: a comparison between clinical findings and mathematical calculations. Ultrasound in Obstetrics and Gynecology, 1997, 9, 383-391.	0.9	45
31	Computational analysis of the ductus venosus fluid dynamics based on Doppler measurements. Ultrasound in Medicine and Biology, 1996, 22, 1017-1029.	0.7	43
32	Blood Flow Through the Ductus Venosus in Human Fetus: Calculation Using Doppler Velocimetry and Computational Findings. Ultrasound in Medicine and Biology, 1998, 24, 477-487.	0.7	42
33	Using 4D Cardiovascular Magnetic Resonance Imaging to Validate Computational Fluid Dynamics: A Case Study. Frontiers in Pediatrics, 2015, 3, 107.	0.9	42
34	Blood flow volume of uterine arteries in human pregnancies determined using 3D and bi-dimensional imaging, angio-Doppler, and fluid-dynamic modeling. Placenta, 2010, 31, 37-43.	0.7	41
35	Computational fluid dynamic and magnetic resonance analyses of flow distribution between the lungs after total cavopulmonary connection. IEEE Transactions on Biomedical Engineering, 1999, 46, 393-399.	2.5	40
36	Scaling Approach to Study the Changes Through the Gestation of Human Fetal Cardiac and Circulatory Behaviors. Annals of Biomedical Engineering, 2000, 28, 442-452.	1.3	40

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37	Computational models to predict stenosis growth in carotid arteries: Which is the role of boundary conditions?. Computer Methods in Biomechanics and Biomedical Engineering, 2009, 12, 113-123.	0.9	40
38	Biomechanical properties of the human umbilical cord. Biorheology, 2001, 38, 355-66.	1.2	40
39	Calculating blood flow from Doppler measurements in the systemic-to-pulmonary artery shunt after the Norwood operation: a method based on computational fluid dynamics. Ultrasound in Medicine and Biology, 2000, 26, 209-219.	0.7	38
40	Influence of different computational approaches for stent deployment on cerebral aneurysm haemodynamics. Interface Focus, 2011, 1, 338-348.	1.5	37
41	Effects of pulmonary artery banding and retrograde aortic arch obstruction on the hybrid palliation of hypoplastic left heart syndrome. Journal of Thoracic and Cardiovascular Surgery, 2013, 146, 1341-1348.	0.4	37
42	Computational fluid dynamics models and congenital heart diseases. Frontiers in Pediatrics, 2013, 1, 4.	0.9	37
43	Failure of silicone gel breast implants: Is the mechanical weakening due to shell swelling a significant cause of prostheses rupture?. Journal of the Mechanical Behavior of Biomedical Materials, 2011, 4, 2002-2008.	1.5	36
44	An Axisymmetric Computational Model of Skin Expansion and Growth. Biomechanics and Modeling in Mechanobiology, 2007, 6, 177-188.	1.4	35
45	Data assimilation and modelling of patient-specific single-ventricle physiology with and without valve regurgitation. Journal of Biomechanics, 2016, 49, 2162-2173.	0.9	35
46	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
47	In vitro steady-flow analysis of systemic-to-pulmonary shunt haemodynamics. Journal of Biomechanics, 2001, 34, 23-30.	0.9	33
48	Mechanical behaviour of lime based mortars after surface consolidation. Construction and Building Materials, 2011, 25, 1553-1559.	3.2	33
49	Dilatation of the ductus venosus in human fetuses: ultrasonographic evidence and mathematical modeling. American Journal of Physiology - Heart and Circulatory Physiology, 1998, 275, H1759-H1767.	1.5	32
50	Computational Modeling to Predict Fatigue Behavior of NiTi Stents: What Do We Need?. Journal of Functional Biomaterials, 2015, 6, 299-317.	1.8	32
51	Boundary conditions of patient-specific fluid dynamics modelling of cavopulmonary connections: possible adaptation of pulmonary resistances results in a critical issue for a virtual surgical planning. Interface Focus, 2011, 1, 297-307.	1.5	31
52	Doppler Investigation in Intrauterine Growth Restrictionâ€"From Qualitative Indices to Flow Measurements. Annals of the New York Academy of Sciences, 2001, 943, 316-325.	1.8	30
53	Mechanical Properties of Open-Cell, Self-Expandable Shape Memory Alloy Carotid Stents. Artificial Organs, 2011, 35, 74-80.	1.0	30
54	FATIGUE BEHAVIOR CHARACTERIZATION OF NITINOL FOR PERIPHERAL STENTS. Functional Materials Letters, 2012, 05, 1250012.	0.7	30

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55	A Computational Approach for the Prediction of Fatigue Behaviour in Peripheral Stents: Application to a Clinical Case. Annals of Biomedical Engineering, 2016, 44, 536-547.	1.3	30
56	Spatial velocity profile changes along the cord in normal human fetuses: can these affect Doppler measurements of venous umbilical blood flow?. Ultrasound in Obstetrics and Gynecology, 2004, 23, 131-137.	0.9	29
57	Multiscale models of the hybrid palliation for hypoplastic left heart syndrome. Journal of Biomechanics, 2011, 44, 767-770.	0.9	29
58	Deployment of self-expandable stents in aneurysmatic cerebral vessels: comparison of different computational approaches for interventional planning. Computer Methods in Biomechanics and Biomedical Engineering, 2012, 15, 303-311.	0.9	28
59	Respiratory effects on hemodynamics in patient-specific CFD models of the Fontan circulation under exercise conditions. European Journal of Mechanics, B/Fluids, 2012, 35, 61-69.	1.2	27
60	Numerical blood flow simulation in surgical corrections: what do we need for an accurate analysis?. Journal of Surgical Research, 2014, 186, 44-55.	0.8	27
61	Inverse problems in reduced order models of cardiovascular haemodynamics: aspects of data assimilation and heart rate variability. Journal of the Royal Society Interface, 2017, 14, 20160513.	1.5	26
62	Looks Do Matter! Aortic Arch Shape After Hypoplastic Left Heart Syndrome Palliation Correlates With Cavopulmonary Outcomes. Annals of Thoracic Surgery, 2017, 103, 645-654.	0.7	26
63	Management of a Stenotic Right Ventricle-Pulmonary Artery Shunt Early After the Norwood Procedure. Annals of Thoracic Surgery, 2009, 88, 830-838.	0.7	25
64	Mock Circulatory System of the Fontan Circulation to Study Respiration Effects on Venous Flow Behavior. ASAIO Journal, 2013, 59, 253-260.	0.9	25
65	Hemodynamic analysis of outflow grafting positions of a ventricular assist device using closed-loop multiscale CFD simulations: Preliminary results. Journal of Biomechanics, 2016, 49, 2718-2725.	0.9	25
66	Modeling of braided stents: Comparison of geometry reconstruction and contact strategies. Journal of Biomechanics, 2020, 107, 109841.	0.9	25
67	Use of Mathematical Model to Predict Hemodynamics in Cavopulmonary Anastomosis with Persistent Forward Flow. Journal of Surgical Research, 2000, 89, 43-52.	0.8	24
68	Isometric elbow flexion efforts and related effort perception. Computer Methods in Biomechanics and Biomedical Engineering, 2009, 12, 113-114.	0.9	24
69	Fatigue Assessment of Nickelâ€“Titanium Peripheral Stents: Comparison of Multi-Axial Fatigue Models. Shape Memory and Superelasticity, 2018, 4, 186-196.	1.1	24
70	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
71	Umbilical flow distribution to the liver and the ductus venosus in human fetuses during gestation: an anatomy-based mathematical modeling. Medical Engineering and Physics, 2003, 25, 229-238.	0.8	23
72	Modeling of systemic-to-pulmonary shunts in newborns with a univentricular circulation: State of the art and future directions. Progress in Pediatric Cardiology, 2010, 30, 23-29.	0.2	22

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73	Control of Respiration-Driven Retrograde Flow in the Subdiaphragmatic Venous Return of the Fontan Circulation. ASAIO Journal, 2014, 60, 391-399.	0.9	22
74	Numerical Simulation of Thrombus Aspiration in Two Realistic Models of Catheter Tips. Artificial Organs, 2010, 34, 301-310.	1.0	21
75	Computational Modelling of In Vitro Set-Ups for Peripheral Self-Expanding Nitinol Stents: The Importance of Stentâ€“Wall Interaction in the Assessment of the Fatigue Resistance. Cardiovascular Engineering and Technology, 2013, 4, 474-484.	0.7	18
76	Pressure Drops in a Distensible Model of End-to-side Anastomosis in Systemic-to-pulmonary Shunts. Computer Methods in Biomechanics and Biomedical Engineering, 2002, 5, 243-248.	0.9	17
77	Geometrical and Stress Analysis of Factors Associated With Stent Fracture After Melody Percutaneous Pulmonary Valve Implantation. Circulation: Cardiovascular Interventions, 2014, 7, 510-517.	1.4	17
78	Pulmonary Hemodynamics Simulations Before Stage 2 Single Ventricle Surgery: Patient-Specific Parameter Identification and Clinical Data Assessment. Cardiovascular Engineering and Technology, 2015, 6, 268-280.	0.7	16
79	A multiscale model for the study of cardiac biomechanics in single-ventricle surgeries: a clinical case. Interface Focus, 2015, 5, 20140079.	1.5	16
80	Mathematical Modeling of Fluid Dynamics in Pulsatile Cardiopulmonary Bypass. Artificial Organs, 2004, 28, 196-209.	1.0	15
81	Computational Study of Axial Fatigue for Peripheral Nitinol Stents. Journal of Materials Engineering and Performance, 2014, 23, 2606-2613.	1.2	15
82	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
83	Computational and Experimental Fatigue Analysis of Contoured Spinal Rods. Journal of Biomechanical Engineering, 2019, 141, .	0.6	15
84	Analytical methods for braided stents design and comparison with FEA. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 119, 104560.	1.5	15
85	Impact of lower limb movement on the hemodynamics of femoropopliteal arteries: A computational study. Medical Engineering and Physics, 2020, 81, 105-117.	0.8	15
86	Computational fluid dynamics in a model of the total cavopulmonary connection reconstructed using magnetic resonance images. Cardiology in the Young, 2005, 15, 61-67.	0.4	14
87	An anisotropic model for tissue growth and remodeling during early development of cerebral aneurysms. Computational Materials Science, 2008, 43, 565-577.	1.4	14
88	Computational Modeling of Pathophysiologic Responses to Exercise in Fontan Patients. Annals of Biomedical Engineering, 2015, 43, 1335-1347.	1.3	14
89	The role of inelastic deformations in the mechanical response of endovascular shape memory alloy devices. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2017, 231, 391-404.	1.0	14
90	Biomechanical Impact of Wrong Positioning of a Dedicated Stent for Coronary Bifurcations: A Virtual Bench Testing Study. Cardiovascular Engineering and Technology, 2018, 9, 415-426.	0.7	13

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91	Residual Stresses in Titanium Spinal Rods: Effects of Two Contouring Methods and Material Plastic Properties. Journal of Biomechanical Engineering, 2018, 140, .	0.6	12
92	Nickelâ€“Titanium peripheral stents: Which is the best criterion for the multi-axial fatigue strength assessment?. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 113, 104142.	1.5	12
93	How to Validate in silico Deployment of Coronary Stents: Strategies and Limitations in the Choice of Comparator. Frontiers in Medical Technology, 2021, 3, 702656.	1.3	12
94	global mathematical modelling of the norwood circulation: a multiscale approach for the study of the pulmonary and coronary arterial perfusions. Cardiology in the Young, 2004, 14, 71-76.	0.4	11
95	Design of microfluidic devices for drug screening on in-vitro cells for osteoporosis therapies. Microelectronic Engineering, 2011, 88, 1801-1806.	1.1	11
96	The Effect of Modified Blalock-Taussig Shunt Size and Coarctation Severity on Coronary Perfusion After the Norwood Operation. Annals of Thoracic Surgery, 2014, 98, 648-654.	0.7	11
97	Mathematical modelling of the maternal cardiovascular system in the three stages of pregnancy. Medical Engineering and Physics, 2017, 47, 55-63.	0.8	11
98	From the real device to the digital twin: A coupled experimental-numerical strategy to investigate a novel bioresorbable vascular scaffold. PLoS ONE, 2021, 16, e0252788.	1.1	11
99	Computational Patient-Specific Models Based on 3-D Ultrasound Data to Quantify Uterine Arterial Flow During Pregnancy. IEEE Transactions on Medical Imaging, 2008, 27, 1715-1722.	5.4	10
100	Possible Benefits of Catheters With Lateral Holes in Coronary Thrombus Aspiration: A Computational Study for Different Clot Viscosities and Vacuum Pressures. Artificial Organs, 2014, 38, 845-855.	1.0	10
101	Evaluation of the Wharton×3s jelly poroelastic parameters through compressive tests on placental and foetal ends of human umbilical cords. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 35, 51-58.	1.5	10
102	Biomechanical interpretation of observed fatigue fractures of peripheral Nitinol stents in the superficial femoral arteries through in silico modelling. Medical Hypotheses, 2020, 142, 109771.	0.8	10
103	Validation of the computational model of a coronary stent: a fundamental step towards in silico trials. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 122, 104644.	1.5	10
104	Poroelastic numerical modelling of natural and engineered cartilage based on in vitro tests. Biorheology, 2006, 43, 235-47.	1.2	10
105	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
106	Left atrial appendage occlusion device: Development and validation of a finite element model. Medical Engineering and Physics, 2020, 82, 104-118.	0.8	9
107	Influence of Membrane Oxygenators on the Pulsatile flow in Extracorporeal Circuits: An Experimental Analysis. International Journal of Artificial Organs, 1997, 20, 455-462.	0.7	8
108	ten years of modelling to achieve haemodynamic optimisation of the total cavopulmonary connection. Cardiology in the Young, 2004, 14, 48-52.	0.4	8

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109	Comprehensive computational analysis of the crimping procedure of PLLA BVS: effects of material viscous-plastic and temperature dependent behavior. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 123, 104713.	1.5	8
110	Computational Models of Aortic Coarctation in Hypoplastic Left Heart Syndrome: Considerations on Validation of a Detailed 3D model. International Journal of Artificial Organs, 2014, 37, 371-381.	0.7	7
111	A Computational Model of Heat Loss and Water Condensation on the Gasâ€Side of Blood Oxygenators. Artificial Organs, 2018, 42, E380-E390.	1.0	7
112	The influence of systemic-to-pulmonary arterial shunts and peripheral vasculatures in univentricular circulations: Focus on coronary perfusion and aortic arch hemodynamics through computational multi-domain modeling. Journal of Biomechanics, 2018, 79, 97-104.	0.9	7
113	the effect of the position of an additional systemic-to-pulmonary shunt on the fluid dynamics of the bidirectional cavo-pulmonary anastomosis. Cardiology in the Young, 2004, 14, 38-43.	0.4	6
114	A Lumped Parameter Model to Study Atrioventricular Valve Regurgitation in Stage 1 and Changes Across Stage 2 Surgery in Single Ventricle Patients. IEEE Transactions on Biomedical Engineering, 2018, 65, 2450-2458.	2.5	6
115	Haematocrit heterogeneity in blood flows past microfluidic models of oxygenating fibre bundles. Medical Engineering and Physics, 2019, 73, 30-38.	0.8	6
116	Mass transfer efficiency of a commercial hollow fibre oxygenator during six-hour in vitro perfusion with steady and with pulsatile blood flow. International Journal of Artificial Organs, 1998, 21, 97-106.	0.7	6
117	Effect of geometrical imperfections in confined compression tests on parameter evaluation of hydrated soft tissues. Journal of Biomechanics, 2007, 40, 3041-3044.	0.9	5
118	How Do Cord Compressions Affect the Umbilical Venous Flow Resistance? An In Vitro Investigation of the Biomechanical Mechanisms. Cardiovascular Engineering and Technology, 2013, 4, 267-275.	0.7	5
119	Patient-specific biomechanical model of hypoplastic left heart to predict post-operative cardio-circulatory behaviour. Medical Engineering and Physics, 2017, 47, 85-92.	0.8	5
120	Modeling three-dimensional-printed trabecular metal structures with a homogenization approach: Application to hemipelvis reconstruction. International Journal of Artificial Organs, 2019, 42, 575-585.	0.7	5
121	Finite Element Simulations of the ID Venous System to Treat Venous Compression Disorders: From Model Validation to Realistic Implant Prediction. Annals of Biomedical Engineering, 2021, 49, 1493-1506.	1.3	5
122	Applications of computational fluid dynamics to congenital heart diseases: a practical review for cardiovascular professionals. Expert Review of Cardiovascular Therapy, 2021, 19, 907-916.	0.6	5
123	Towards a Digital Twin of Coronary Stenting: A Suitable and Validated Image-Based Approach for Mimicking Patient-Specific Coronary Arteries. Electronics (Switzerland), 2022, 11, 502.	1.8	5
124	Modeling and mechanobiology of cerebral aneurysms. Journal of Applied Biomaterials and Biomechanics, 2008, 6, 63-71.	0.4	5
125	Fluid Dynamics at Connections in Paediatric Cardiac Surgery*. Meccanica, 2002, 37, 453-463.	1.2	4
126	assessment by computational and in vitro studies of the blood flow rate through modified blalock-taussig shunts. Cardiology in the Young, 2004, 14, 24-29.	0.4	4

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127	Influence of membrane oxygenators on the pulsatile flow in extracorporeal circuits: an experimental analysis. International Journal of Artificial Organs, 1997, 20, 455-62.	0.7	4
128	Reliable Numerical Models of Nickel-Titanium Stents: How to Deduce the Specific Material Properties from Testing Real Devices. Annals of Biomedical Engineering, 2022, 50, 467-481.	1.3	4
129	Fatigue behavior of Nitinol medical devices under multi-axial non-proportional loads. MATEC Web of Conferences, 2019, 300, 12001.	0.1	3
130	a study of mathematical modelling of the competitions of flow in the cavopulmonary anastomosis with persistent forward flow. Cardiology in the Young, 2004, 14, 32-37.	0.4	2
131	Re: Ductus venosus shunting in growth-restricted fetuses and the effect of umbilical circulatory compromise. Ultrasound in Obstetrics and Gynecology, 2007, 29, 100-101.	0.9	2
132	FATIGUE BEHAVIOUR OF NITINOL PERIPHERAL STENTS: COMPUTATIONAL SIMULATIONS OF IN VITRO SET-UPS. Journal of Biomechanics, 2012, 45, S640.	0.9	2
133	Performance of a thrombectomy device for aspiration of thrombus with various sizes based on a computational fluid dynamic modeling. Biomedizinische Technik, 2016, 61, 337-344.	0.9	2
134	Simplified Multistage Computational Approach to Assess the Fatigue Behavior of a Niti Transcatheter Aortic Valve During In Vitro Tests: A Proof-of-Concept Study. Journal of Medical Devices, Transactions of the ASME, 2017, 11, .	0.4	2
135	Predicting fatigue life of a PMMA based knee spacer using a multiaxial fatigue criterion. Journal of Applied Biomaterials and Biomechanics, 2011, 9, 185-192.	0.4	2
136	Effects of blood flow pulse frequency on mass transfer efficiency of a commercial hollow fibre oxygenator. International Journal of Artificial Organs, 1998, 21, 535-41.	0.7	2
137	Factors affecting the respiratory ratio during cardiopulmonary by-pass. International Journal of Artificial Organs, 1998, 21, 802-8.	0.7	2
138	P09.14: In search of a novel methodology to measure uterine arteries blood flow in pregnancy. Ultrasound in Obstetrics and Gynecology, 2004, 24, 320-320.	0.9	1
139	P07.05: Uterine artery blood flow volume growth rate in uncomplicated human pregnancies. Ultrasound in Obstetrics and Gynecology, 2006, 28, 570-570.	0.9	1
140	Trends in biomedical engineering: focus on Patient Specific Modeling and Life Support Systems. Journal of Applied Biomaterials and Biomechanics, 2011, 9, 109-117.	0.4	1
141	Real time prediction of the fatigue behavior of peripheral stents. , 2013, , .		1
142	Computational Modeling of Passive Furrowed Channel Micromixers for Lab-on-a-chip Applications. Journal of Applied Biomaterials and Functional Materials, 2014, 12, 278-285.	0.7	1
143	Nickel-Titanium self-knotting suture wire for deep surgical field: A validated numerical model. Materials Today Communications, 2020, 24, 101038.	0.9	1
144	Fatigue life characterization and modeling of a Niâ€“Ti snake-like element for mini actuation. Smart Materials and Structures, 2020, 29, 095018.	1.8	1

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145	OP13.11: Uterine artery blood flow volume: ranges in uncomplicated human pregnancies. Ultrasound in Obstetrics and Gynecology, 2006, 28, 491-492.	0.9	0
146	P07.04: Uterine artery blood flow volume is reduced in human pregnancies with increase utero-placental downstream impedance. Ultrasound in Obstetrics and Gynecology, 2006, 28, 569-569.	0.9	0
147	EXPERIMENTAL EVALUATION OF THE TESTING CONDITIONS INFLUENCE ON SHOULDER PROSTHESES SUBLUXATION AND EDGE DISPLACEMENT DURING ASTM F2028-05 TESTING. Journal of Mechanics in Medicine and Biology, 2010, 10, 341-352.	0.3	0
148	Design of a â€˜driven cylinderâ€™ viscometer for bone cement rheological characterization. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2011, 225, 353-363.	1.0	0
149	An Automated Simulation Protocol for Exercise Physiology in Fontan Patients Using a Closed-Loop Lumped-Parameter Model. , 2013, , .		0
150	SIMULATION OF HEMODYNAMICS IN PULSATILE EXTRACORPO-REAL CIRCULATION. ASAIO Journal, 2002, 48, 154.	0.9	0
151	Influence of specimen molding technique on fatigue properties of a bone cement. Journal of Applied Biomaterials and Biomechanics, 2003, 1, 148-53.	0.4	0
152	Editorial: Verification and Validation of in silico Models for Biomedical Implantable Devices. Frontiers in Medical Technology, 2022, 4, 856067.	1.3	0