

# Giancarlo Pennati

## List of Publications by Year in descending order

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152  
papers

4,327  
citations

94269

37  
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143772

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156  
all docs

156  
docs citations

156  
times ranked

3340  
citing authors

#	ARTICLE	IF	CITATIONS
1	Towards a Digital Twin of Coronary Stenting: A Suitable and Validated Image-Based Approach for Mimicking Patient-Specific Coronary Arteries. <i>Electronics (Switzerland)</i> , 2022, 11, 502.	1.8	5
2	Reliable Numerical Models of Nickel-Titanium Stents: How to Deduce the Specific Material Properties from Testing Real Devices. <i>Annals of Biomedical Engineering</i> , 2022, 50, 467-481.	1.3	4
3	Editorial: Verification and Validation of in silico Models for Biomedical Implantable Devices. <i>Frontiers in Medical Technology</i> , 2022, 4, 856067.	1.3	0
4	Nickel-Titanium peripheral stents: Which is the best criterion for the multi-axial fatigue strength assessment?. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2021, 113, 104142.	1.5	12
5	From the real device to the digital twin: A coupled experimental-numerical strategy to investigate a novel bioresorbable vascular scaffold. <i>PLoS ONE</i> , 2021, 16, e0252788.	1.1	11
6	Analytical methods for braided stents design and comparison with FEA. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2021, 119, 104560.	1.5	15
7	How to Validate in silico Deployment of Coronary Stents: Strategies and Limitations in the Choice of Comparator. <i>Frontiers in Medical Technology</i> , 2021, 3, 702656.	1.3	12
8	Validation of the computational model of a coronary stent: a fundamental step towards in silico trials. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2021, 122, 104644.	1.5	10
9	Comprehensive computational analysis of the crimping procedure of PLLA BVS: effects of material viscous-plastic and temperature dependent behavior. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2021, 123, 104713.	1.5	8
10	Finite Element Simulations of the ID Venous System to Treat Venous Compression Disorders: From Model Validation to Realistic Implant Prediction. <i>Annals of Biomedical Engineering</i> , 2021, 49, 1493-1506.	1.3	5
11	Applications of computational fluid dynamics to congenital heart diseases: a practical review for cardiovascular professionals. <i>Expert Review of Cardiovascular Therapy</i> , 2021, 19, 907-916.	0.6	5
12	Multiscale Modeling of Superior Cavopulmonary Circulation: Hemi-Fontan and Bidirectional Glenn Are Equivalent. <i>Seminars in Thoracic and Cardiovascular Surgery</i> , 2020, 32, 883-892.	0.4	9
13	Left atrial appendage occlusion device: Development and validation of a finite element model. <i>Medical Engineering and Physics</i> , 2020, 82, 104-118.	0.8	9
14	Biomechanical interpretation of observed fatigue fractures of peripheral Nitinol stents in the superficial femoral arteries through in silico modelling. <i>Medical Hypotheses</i> , 2020, 142, 109771.	0.8	10
15	Nickel-Titanium self-knotting suture wire for deep surgical field: A validated numerical model. <i>Materials Today Communications</i> , 2020, 24, 101038.	0.9	1
16	Modeling of braided stents: Comparison of geometry reconstruction and contact strategies. <i>Journal of Biomechanics</i> , 2020, 107, 109841.	0.9	25
17	Impact of lower limb movement on the hemodynamics of femoropopliteal arteries: A computational study. <i>Medical Engineering and Physics</i> , 2020, 81, 105-117.	0.8	15
18	Fatigue life characterization and modeling of a Ni-Ti snake-like element for mini actuation. <i>Smart Materials and Structures</i> , 2020, 29, 095018.	1.8	1

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19	Haematocrit heterogeneity in blood flows past microfluidic models of oxygenating fibre bundles. <i>Medical Engineering and Physics</i> , 2019, 73, 30-38.	0.8	6
20	Modeling three-dimensional-printed trabecular metal structures with a homogenization approach: Application to hemipelvis reconstruction. <i>International Journal of Artificial Organs</i> , 2019, 42, 575-585.	0.7	5
21	Computational and Experimental Fatigue Analysis of Contoured Spinal Rods. <i>Journal of Biomechanical Engineering</i> , 2019, 141, .	0.6	15
22	Fatigue behavior of Nitinol medical devices under multi-axial non-proportional loads. <i>MATEC Web of Conferences</i> , 2019, 300, 12001.	0.1	3
23	A Lumped Parameter Model to Study Atrioventricular Valve Regurgitation in Stage 1 and Changes Across Stage 2 Surgery in Single Ventricle Patients. <i>IEEE Transactions on Biomedical Engineering</i> , 2018, 65, 2450-2458.	2.5	6
24	Fatigue Assessment of Nickel-Titanium Peripheral Stents: Comparison of Multi-Axial Fatigue Models. <i>Shape Memory and Superelasticity</i> , 2018, 4, 186-196.	1.1	24
25	An interactive simulation tool for patient-specific clinical decision support in single-ventricle physiology. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 2018, 155, 712-721.	0.4	24
26	A Computational Model of Heat Loss and Water Condensation on the Gas-Side of Blood Oxygenators. <i>Artificial Organs</i> , 2018, 42, E380-E390.	1.0	7
27	Biomechanical Impact of Wrong Positioning of a Dedicated Stent for Coronary Bifurcations: A Virtual Bench Testing Study. <i>Cardiovascular Engineering and Technology</i> , 2018, 9, 415-426.	0.7	13
28	Residual Stresses in Titanium Spinal Rods: Effects of Two Contouring Methods and Material Plastic Properties. <i>Journal of Biomechanical Engineering</i> , 2018, 140, .	0.6	12
29	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. <i>Journal of Biomechanics</i> , 2018, 79, 97-104.	0.9	7
30	Patient-specific parameter estimation in single-ventricle lumped circulation models under uncertainty. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2017, 33, e02799.	1.0	48
31	Simplified Multistage Computational Approach to Assess the Fatigue Behavior of a Niti Transcatheter Aortic Valve During In Vitro Tests: A Proof-of-Concept Study. <i>Journal of Medical Devices, Transactions of the ASME</i> , 2017, 11, .	0.4	2
32	Inverse problems in reduced order models of cardiovascular haemodynamics: aspects of data assimilation and heart rate variability. <i>Journal of the Royal Society Interface</i> , 2017, 14, 20160513.	1.5	26
33	The role of inelastic deformations in the mechanical response of endovascular shape memory alloy devices. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2017, 231, 391-404.	1.0	14
34	Patient-specific biomechanical model of hypoplastic left heart to predict post-operative cardio-circulatory behaviour. <i>Medical Engineering and Physics</i> , 2017, 47, 85-92.	0.8	5
35	Mathematical modelling of the maternal cardiovascular system in the three stages of pregnancy. <i>Medical Engineering and Physics</i> , 2017, 47, 55-63.	0.8	11
36	Looks Do Matter! Aortic Arch Shape After Hypoplastic Left Heart Syndrome Palliation Correlates With Cavopulmonary Outcomes. <i>Annals of Thoracic Surgery</i> , 2017, 103, 645-654.	0.7	26

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37	How successful is successful? Aortic arch shape after successful aortic coarctation repair correlates with left ventricular function. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 2017, 153, 418-427.	0.4	61
38	Performance of a thrombectomy device for aspiration of thrombus with various sizes based on a computational fluid dynamic modeling. <i>Biomedizinische Technik</i> , 2016, 61, 337-344.	0.9	2
39	Hemodynamic analysis of outflow grafting positions of a ventricular assist device using closed-loop multiscale CFD simulations: Preliminary results. <i>Journal of Biomechanics</i> , 2016, 49, 2718-2725.	0.9	25
40	Data assimilation and modelling of patient-specific single-ventricle physiology with and without valve regurgitation. <i>Journal of Biomechanics</i> , 2016, 49, 2162-2173.	0.9	35
41	A Computational Approach for the Prediction of Fatigue Behaviour in Peripheral Stents: Application to a Clinical Case. <i>Annals of Biomedical Engineering</i> , 2016, 44, 536-547.	1.3	30
42	Fluid-Structure Interaction Model of a Percutaneous Aortic Valve: Comparison with an In Vitro Test and Feasibility Study in a Patient-Specific Case. <i>Annals of Biomedical Engineering</i> , 2016, 44, 590-603.	1.3	66
43	Computational Modeling to Predict Fatigue Behavior of NiTi Stents: What Do We Need?. <i>Journal of Functional Biomaterials</i> , 2015, 6, 299-317.	1.8	32
44	Using 4D Cardiovascular Magnetic Resonance Imaging to Validate Computational Fluid Dynamics: A Case Study. <i>Frontiers in Pediatrics</i> , 2015, 3, 107.	0.9	42
45	Pulmonary Hemodynamics Simulations Before Stage 2 Single Ventricle Surgery: Patient-Specific Parameter Identification and Clinical Data Assessment. <i>Cardiovascular Engineering and Technology</i> , 2015, 6, 268-280.	0.7	16
46	A multiscale model for the study of cardiac biomechanics in single-ventricle surgeries: a clinical case. <i>Interface Focus</i> , 2015, 5, 20140079.	1.5	16
47	Hemodynamic effects of left pulmonary artery stenosis after superior cavopulmonary connection: A patient-specific multiscale modeling study. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 2015, 149, 689-696.e3.	0.4	34
48	Integration of Clinical Data Collected at Different Times for Virtual Surgery in Single Ventricle Patients: A Case Study. <i>Annals of Biomedical Engineering</i> , 2015, 43, 1310-1320.	1.3	15
49	Computational Modeling of Pathophysiologic Responses to Exercise in Fontan Patients. <i>Annals of Biomedical Engineering</i> , 2015, 43, 1335-1347.	1.3	14
50	Computational Models of Aortic Coarctation in Hypoplastic Left Heart Syndrome: Considerations on Validation of a Detailed 3D model. <i>International Journal of Artificial Organs</i> , 2014, 37, 371-381.	0.7	7
51	A Simulation Protocol for Exercise Physiology in Fontan Patients Using a Closed Loop Lumped-Parameter Model. <i>Journal of Biomechanical Engineering</i> , 2014, 136, .	0.6	50
52	Computational Modeling of Passive Furrowed Channel Micromixers for Lab-on-a-chip Applications. <i>Journal of Applied Biomaterials and Functional Materials</i> , 2014, 12, 278-285.	0.7	1
53	Geometrical and Stress Analysis of Factors Associated With Stent Fracture After Melody Percutaneous Pulmonary Valve Implantation. <i>Circulation: Cardiovascular Interventions</i> , 2014, 7, 510-517.	1.4	17
54	Control of Respiration-Driven Retrograde Flow in the Subdiaphragmatic Venous Return of the Fontan Circulation. <i>ASAIO Journal</i> , 2014, 60, 391-399.	0.9	22

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55	Possible Benefits of Catheters With Lateral Holes in Coronary Thrombus Aspiration: A Computational Study for Different Clot Viscosities and Vacuum Pressures. <i>Artificial Organs</i> , 2014, 38, 845-855.	1.0	10
56	Numerical blood flow simulation in surgical corrections: what do we need for an accurate analysis?. <i>Journal of Surgical Research</i> , 2014, 186, 44-55.	0.8	27
57	An integrated approach to patient-specific predictive modeling for single ventricle heart palliation. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2014, 17, 1572-1589.	0.9	55
58	Computational Study of Axial Fatigue for Peripheral Nitinol Stents. <i>Journal of Materials Engineering and Performance</i> , 2014, 23, 2606-2613.	1.2	15
59	Influence of plaque calcifications on coronary stent fracture: A numerical fatigue life analysis including cardiac wall movement. <i>Journal of Biomechanics</i> , 2014, 47, 899-907.	0.9	55
60	Fatigue behaviour of Nitinol peripheral stents: The role of plaque shape studied with computational structural analyses. <i>Medical Engineering and Physics</i> , 2014, 36, 842-849.	0.8	55
61	Evaluation of the Wharton's jelly poroelastic parameters through compressive tests on placental and foetal ends of human umbilical cords. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2014, 35, 51-58.	1.5	10
62	The Effect of Modified Blalock-Taussig Shunt Size and Coarctation Severity on Coronary Perfusion After the Norwood Operation. <i>Annals of Thoracic Surgery</i> , 2014, 98, 648-654.	0.7	11
63	Effects of pulmonary artery banding and retrograde aortic arch obstruction on the hybrid palliation of hypoplastic left heart syndrome. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 2013, 146, 1341-1348.	0.4	37
64	How Do Cord Compressions Affect the Umbilical Venous Flow Resistance? An In Vitro Investigation of the Biomechanical Mechanisms. <i>Cardiovascular Engineering and Technology</i> , 2013, 4, 267-275.	0.7	5
65	Real time prediction of the fatigue behavior of peripheral stents. , 2013, , .		1
66	Predictive modeling of the virtual Hemi-Fontan operation for second stage single ventricle palliation: Two patient-specific cases. <i>Journal of Biomechanics</i> , 2013, 46, 423-429.	0.9	71
67	Computational Modelling of In Vitro Set-Ups for Peripheral Self-Expanding Nitinol Stents: The Importance of Stent-Wall Interaction in the Assessment of the Fatigue Resistance. <i>Cardiovascular Engineering and Technology</i> , 2013, 4, 474-484.	0.7	18
68	An Automated Simulation Protocol for Exercise Physiology in Fontan Patients Using a Closed-Loop Lumped-Parameter Model. , 2013, , .		0
69	Mock Circulatory System of the Fontan Circulation to Study Respiration Effects on Venous Flow Behavior. <i>ASAIO Journal</i> , 2013, 59, 253-260.	0.9	25
70	Computational fluid dynamics models and congenital heart diseases. <i>Frontiers in Pediatrics</i> , 2013, 1, 4.	0.9	37
71	Deployment of self-expandable stents in aneurysmatic cerebral vessels: comparison of different computational approaches for interventional planning. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2012, 15, 303-311.	0.9	28
72	FATIGUE BEHAVIOR CHARACTERIZATION OF NITINOL FOR PERIPHERAL STENTS. <i>Functional Materials Letters</i> , 2012, 05, 1250012.	0.7	30

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73	Respiratory effects on hemodynamics in patient-specific CFD models of the Fontan circulation under exercise conditions. <i>European Journal of Mechanics, B/Fluids</i> , 2012, 35, 61-69.	1.2	27
74	FATIGUE BEHAVIOUR OF NITINOL PERIPHERAL STENTS: COMPUTATIONAL SIMULATIONS OF IN VITRO SET-UPS. <i>Journal of Biomechanics</i> , 2012, 45, S640.	0.9	2
75	Design of a $\hat{\omega}$ -driven cylinder <sup>TM</sup> viscometer for bone cement rheological characterization. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2011, 225, 353-363.	1.0	0
76	Virtual surgeries in patients with congenital heart disease: a multi-scale modelling test case. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2011, 369, 4316-4330.	1.6	76
77	Mechanical Properties of Open-Cell, Self-Expandable Shape Memory Alloy Carotid Stents. <i>Artificial Organs</i> , 2011, 35, 74-80.	1.0	30
78	Failure of silicone gel breast implants: Is the mechanical weakening due to shell swelling a significant cause of prostheses rupture?. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2011, 4, 2002-2008.	1.5	36
79	Uterine artery blood flow volume in pregnant women with an abnormal pulsatility index of the uterine arteries delivering normal or intrauterine growth restricted newborns. <i>Placenta</i> , 2011, 32, 487-492.	0.7	47
80	Mechanical behaviour of lime based mortars after surface consolidation. <i>Construction and Building Materials</i> , 2011, 25, 1553-1559.	3.2	33
81	Design of microfluidic devices for drug screening on in-vitro cells for osteoporosis therapies. <i>Microelectronic Engineering</i> , 2011, 88, 1801-1806.	1.1	11
82	Multiscale models of the hybrid palliation for hypoplastic left heart syndrome. <i>Journal of Biomechanics</i> , 2011, 44, 767-770.	0.9	29
83	Influence of different computational approaches for stent deployment on cerebral aneurysm haemodynamics. <i>Interface Focus</i> , 2011, 1, 338-348.	1.5	37
84	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. <i>Interface Focus</i> , 2011, 1, 297-307.	1.5	31
85	Use of Mathematical Modeling to Compare and Predict Hemodynamic Effects Between Hybrid and Surgical Norwood Palliations for Hypoplastic Left Heart Syndrome. <i>Circulation</i> , 2011, 124, S204-10.	1.6	70
86	Sequential Structural and Fluid Dynamic Numerical Simulations of a Stented Bifurcated Coronary Artery. <i>Journal of Biomechanical Engineering</i> , 2011, 133, 121010.	0.6	60
87	Trends in biomedical engineering: focus on Patient Specific Modeling and Life Support Systems. <i>Journal of Applied Biomaterials and Biomechanics</i> , 2011, 9, 109-117.	0.4	1
88	Predicting fatigue life of a PMMA based knee spacer using a multiaxial fatigue criterion. <i>Journal of Applied Biomaterials and Biomechanics</i> , 2011, 9, 185-192.	0.4	2
89	Blood flow volume of uterine arteries in human pregnancies determined using 3D and bi-dimensional imaging, angio-Doppler, and fluid-dynamic modeling. <i>Placenta</i> , 2010, 31, 37-43.	0.7	41
90	Modeling of systemic-to-pulmonary shunts in newborns with a univentricular circulation: State of the art and future directions. <i>Progress in Pediatric Cardiology</i> , 2010, 30, 23-29.	0.2	22

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91	Numerical Simulation of Thrombus Aspiration in Two Realistic Models of Catheter Tips. <i>Artificial Organs</i> , 2010, 34, 301-310.	1.0	21
92	EXPERIMENTAL EVALUATION OF THE TESTING CONDITIONS INFLUENCE ON SHOULDER PROSTHESES SUBLUXATION AND EDGE DISPLACEMENT DURING ASTM F2028-05 TESTING. <i>Journal of Mechanics in Medicine and Biology</i> , 2010, 10, 341-352.	0.3	0
93	Computational models to predict stenosis growth in carotid arteries: Which is the role of boundary conditions?. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2009, 12, 113-123.	0.9	40
94	Isometric elbow flexion efforts and related effort perception. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2009, 12, 113-114.	0.9	24
95	Pulmonary regurgitation: The effects of varying pulmonary artery compliance, and of increased resistance proximal or distal to the compliance. <i>International Journal of Cardiology</i> , 2009, 133, 157-166.	0.8	62
96	Management of a Stenotic Right Ventricle-Pulmonary Artery Shunt Early After the Norwood Procedure. <i>Annals of Thoracic Surgery</i> , 2009, 88, 830-838.	0.7	25
97	Computational Patient-Specific Models Based on 3-D Ultrasound Data to Quantify Uterine Arterial Flow During Pregnancy. <i>IEEE Transactions on Medical Imaging</i> , 2008, 27, 1715-1722.	5.4	10
98	Use of mathematic modeling to compare and predict hemodynamic effects of the modified Blalock-Taussig and right ventricle pulmonary artery shunts for hypoplastic left heart syndrome. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 2008, 136, 312-320.e2.	0.4	85
99	An anisotropic model for tissue growth and remodeling during early development of cerebral aneurysms. <i>Computational Materials Science</i> , 2008, 43, 565-577.	1.4	14
100	Modeling and mechanobiology of cerebral aneurysms. <i>Journal of Applied Biomaterials and Biomechanics</i> , 2008, 6, 63-71.	0.4	5
101	Effect of geometrical imperfections in confined compression tests on parameter evaluation of hydrated soft tissues. <i>Journal of Biomechanics</i> , 2007, 40, 3041-3044.	0.9	5
102	Re: Ductus venosus shunting in growth-restricted fetuses and the effect of umbilical circulatory compromise. <i>Ultrasound in Obstetrics and Gynecology</i> , 2007, 29, 100-101.	0.9	2
103	An Axisymmetric Computational Model of Skin Expansion and Growth. <i>Biomechanics and Modeling in Mechanobiology</i> , 2007, 6, 177-188.	1.4	35
104	Multiscale modelling in biofluidynamics: Application to reconstructive paediatric cardiac surgery. <i>Journal of Biomechanics</i> , 2006, 39, 1010-1020.	0.9	164
105	OP13.11: Uterine artery blood flow volume: ranges in uncomplicated human pregnancies. <i>Ultrasound in Obstetrics and Gynecology</i> , 2006, 28, 491-492.	0.9	0
106	P07.04: Uterine artery blood flow volume is reduced in human pregnancies with increase utero-placental downstream impedance. <i>Ultrasound in Obstetrics and Gynecology</i> , 2006, 28, 569-569.	0.9	0
107	P07.05: Uterine artery blood flow volume growth rate in uncomplicated human pregnancies. <i>Ultrasound in Obstetrics and Gynecology</i> , 2006, 28, 570-570.	0.9	1
108	Poroelastic numerical modelling of natural and engineered cartilage based on in vitro tests. <i>Biorheology</i> , 2006, 43, 235-47.	1.2	10



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109	Computational fluid dynamics in a model of the total cavopulmonary connection reconstructed using magnetic resonance images. <i>Cardiology in the Young</i> , 2005, 15, 61-67.	0.4	14
110	Multiscale modeling of the cardiovascular system: application to the study of pulmonary and coronary perfusions in the univentricular circulation. <i>Journal of Biomechanics</i> , 2005, 38, 1129-1141.	0.9	134
111	a study of mathematical modelling of the competitions of flow in the cavopulmonary anastomosis with persistent forward flow. <i>Cardiology in the Young</i> , 2004, 14, 32-37.	0.4	2
112	ten years of modelling to achieve haemodynamic optimisation of the total cavopulmonary connection. <i>Cardiology in the Young</i> , 2004, 14, 48-52.	0.4	8
113	global mathematical modelling of the norwood circulation: a multiscale approach for the study of the pulmonary and coronary arterial perfusions. <i>Cardiology in the Young</i> , 2004, 14, 71-76.	0.4	11
114	the effect of the position of an additional systemic-to-pulmonary shunt on the fluid dynamics of the bidirectional cavo-pulmonary anastomosis. <i>Cardiology in the Young</i> , 2004, 14, 38-43.	0.4	6
115	assessment by computational and in vitro studies of the blood flow rate through modified blalock-taussig shunts. <i>Cardiology in the Young</i> , 2004, 14, 24-29.	0.4	4
116	Mathematical Modeling of Fluid Dynamics in Pulsatile Cardiopulmonary Bypass. <i>Artificial Organs</i> , 2004, 28, 196-209.	1.0	15
117	Simultaneous measurements of umbilical venous, fetal hepatic, and ductus venosus blood flow in growth-restricted human fetuses. <i>American Journal of Obstetrics and Gynecology</i> , 2004, 190, 1347-1358.	0.7	173
118	P09.14: In search of a novel methodology to measure uterine arteries blood flow in pregnancy. <i>Ultrasound in Obstetrics and Gynecology</i> , 2004, 24, 320-320.	0.9	1
119	Spatial velocity profile changes along the cord in normal human fetuses: can these affect Doppler measurements of venous umbilical blood flow?. <i>Ultrasound in Obstetrics and Gynecology</i> , 2004, 23, 131-137.	0.9	29
120	Computational fluid dynamic study of flow optimization in realistic models of the total cavopulmonary connections. <i>Journal of Surgical Research</i> , 2004, 116, 305-313.	0.8	67
121	Biomechanical properties of human articular cartilage under compressive loads. <i>Biorheology</i> , 2004, 41, 159-66.	1.2	77
122	Umbilical flow distribution to the liver and the ductus venosus in human fetuses during gestation: an anatomy-based mathematical modeling. <i>Medical Engineering and Physics</i> , 2003, 25, 229-238.	0.8	23
123	Influence of specimen molding technique on fatigue properties of a bone cement. <i>Journal of Applied Biomaterials and Biomechanics</i> , 2003, 1, 148-53.	0.4	0
124	Pressure Drops in a Distensible Model of End-to-side Anastomosis in Systemic-to-pulmonary Shunts. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2002, 5, 243-248.	0.9	17
125	Fluid Dynamics at Connections in Paediatric Cardiac Surgery*. <i>Meccanica</i> , 2002, 37, 453-463.	1.2	4
126	SIMULATION OF HEMODYNAMICS IN PULSATILE EXTRACORPO-REAL CIRCULATION. <i>ASAIO Journal</i> , 2002, 48, 154.	0.9	0



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127	Multiscale modelling as a tool to prescribe realistic boundary conditions for the study of surgical procedures. <i>Biorheology</i> , 2002, 39, 359-64.	1.2	67
128	Modeling of the Norwood circulation: effects of shunt size, vascular resistances, and heart rate. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2001, 280, H2076-H2086.	1.5	174
129	Doppler Investigation in Intrauterine Growth Restriction"From Qualitative Indices to Flow Measurements. <i>Annals of the New York Academy of Sciences</i> , 2001, 943, 316-325.	1.8	30
130	In vitro steady-flow analysis of systemic-to-pulmonary shunt haemodynamics. <i>Journal of Biomechanics</i> , 2001, 34, 23-30.	0.9	33
131	Biomechanical properties of the human umbilical cord. <i>Biorheology</i> , 2001, 38, 355-66.	1.2	40
132	Computational model of the fluid dynamics in systemic-to-pulmonary shunts. <i>Journal of Biomechanics</i> , 2000, 33, 549-557.	0.9	55
133	Calculating blood flow from Doppler measurements in the systemic-to-pulmonary artery shunt after the Norwood operation: a method based on computational fluid dynamics. <i>Ultrasound in Medicine and Biology</i> , 2000, 26, 209-219.	0.7	38
134	Scaling Approach to Study the Changes Through the Gestation of Human Fetal Cardiac and Circulatory Behaviors. <i>Annals of Biomedical Engineering</i> , 2000, 28, 442-452.	1.3	40
135	Role of ductus venosus in distribution of umbilical blood flow in human fetuses during second half of pregnancy. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2000, 279, H1256-H1263.	1.5	102
136	Use of Mathematical Model to Predict Hemodynamics in Cavopulmonary Anastomosis with Persistent Forward Flow. <i>Journal of Surgical Research</i> , 2000, 89, 43-52.	0.8	24
137	The hemodynamic effects of double-orifice valve repair for mitral regurgitation: a 3D computational model. <i>European Journal of Cardio-thoracic Surgery</i> , 1999, 15, 419-425.	0.6	85
138	Computational fluid dynamic and magnetic resonance analyses of flow distribution between the lungs after total cavopulmonary connection. <i>IEEE Transactions on Biomedical Engineering</i> , 1999, 46, 393-399.	2.5	40
139	Blood Flow Through the Ductus Venosus in Human Fetus: Calculation Using Doppler Velocimetry and Computational Findings. <i>Ultrasound in Medicine and Biology</i> , 1998, 24, 477-487.	0.7	42
140	Dilatation of the ductus venosus in human fetuses: ultrasonographic evidence and mathematical modeling. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 1998, 275, H1759-H1767.	1.5	32
141	Mass transfer efficiency of a commercial hollow fibre oxygenator during six-hour in vitro perfusion with steady and with pulsatile blood flow. <i>International Journal of Artificial Organs</i> , 1998, 21, 97-106.	0.7	6
142	Effects of blood flow pulse frequency on mass transfer efficiency of a commercial hollow fibre oxygenator. <i>International Journal of Artificial Organs</i> , 1998, 21, 535-41.	0.7	2
143	Factors affecting the respiratory ratio during cardiopulmonary by-pass. <i>International Journal of Artificial Organs</i> , 1998, 21, 802-8.	0.7	2
144	Influence of Membrane Oxygenators on the Pulsatile flow in Extracorporeal Circuits: An Experimental Analysis. <i>International Journal of Artificial Organs</i> , 1997, 20, 455-462.	0.7	8

#	ARTICLE	IF	CITATIONS
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