Giovanni Biglino

List of Publications by Year
in descending order

92 papers	1,788 citations	279778 23 h-index	302107 39 g-index
96 all docs	96 docs citations	96 times ranked	2027 citing authors

#	Article	IF	Citations
1	3D-manufactured patient-specific models of congenital heart defects for communication in clinical practice: feasibility and acceptability. BMJ Open, 2015, 5, e007165-e007165.	1.9	176
2	Prognostic Role of CMR andÂConventional Risk Factors inÂMyocardial Infarction With Nonobstructed Coronary Arteries. JACC: Cardiovascular Imaging, 2019, 12, 1973-1982.	5.3	148
3	Rapid prototyping compliant arterial phantoms for in-vitro studies and device testing. Journal of Cardiovascular Magnetic Resonance, 2013, 15, 2.	3.3	130
4	Piloting the Use of Patient-Specific Cardiac Models as a Novel Tool to Facilitate Communication During Cinical Consultations. Pediatric Cardiology, 2017, 38, 813-818.	1.3	88
5	Use of 3D models of congenital heart disease as an education tool for cardiac nurses. Congenital Heart Disease, 2017, 12, 113-118.	0.2	82
6	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.	2.1	71
7	A statistical shape modelling framework to extract 3D shape biomarkers from medical imaging data: assessing arch morphology of repaired coarctation of the aorta. BMC Medical Imaging, 2016, 16, 40.	2.7	65
8	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.	0.8	61
9	An integrated approach to patient-specific predictive modeling for single ventricle heart palliation. Computer Methods in Biomechanics and Biomedical Engineering, 2014, 17, 1572-1589.	1.6	55
10	Computational modelling for congenital heart disease: how far are we from clinical translation?. Heart, 2017, 103, 98-103.	2.9	55
11	Robust Revascularization in Models of Limb Ischemia Using a Clinically Translatable Human Stem Cell-Derived Endothelial Cell Product. Molecular Therapy, 2018, 26, 1669-1684.	8.2	48
12	A non-invasive clinical application of wave intensity analysis based on ultrahigh temporal resolution phase-contrast cardiovascular magnetic resonance. Journal of Cardiovascular Magnetic Resonance, 2012, 14, 65.	3.3	45
13	Using 4D Cardiovascular Magnetic Resonance Imaging to Validate Computational Fluid Dynamics: A Case Study. Frontiers in Pediatrics, 2015, 3, 107.	1.9	42
14	A Mock Circulatory System With Physiological Distribution of Terminal Resistance and Compliance: Application for Testing the Intraâ€Aortic Balloon Pump. Artificial Organs, 2012, 36, E62-70.	1.9	40
15	Involving patients, families and medical staff in the evaluation of 3D printing models of congenital heart disease. Communication and Medicine, 2016, 12, 157-69.	0.2	35
16	Aortic arch shape is not associated with hypertensive response to exercise in patients with repaired congenital heart diseases. Journal of Cardiovascular Magnetic Resonance, 2013, 15, 101.	3.3	32
17	In Vitro Study of the Norwood Palliation. ASAIO Journal, 2012, 58, 25-31.	1.6	31
18	A Mock Circulatory System Incorporating a Compliant 3Dâ€Printed Anatomical Model to Investigate Pulmonary Hemodynamics. Artificial Organs, 2017, 41, 637-646.	1.9	31

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19	Current and future applications of 3D printing in congenital cardiology and cardiac surgery. British Journal of Radiology, 2019, 92, 20180389.	2.2	30
20	The Perception of a Three-Dimensional-Printed Heart Model from the Perspective of Different Stakeholders: A Complex Case of Truncus Arteriosus. Frontiers in Pediatrics, 2017, 5, 209.	1.9	29
21	Ventriculoarterial coupling in palliated hypoplastic left heart syndrome: Noninvasive assessment of the effects of surgical arch reconstruction and shunt type. Journal of Thoracic and Cardiovascular Surgery, 2014, 148, 1526-1533.	0.8	27
22	Aortic morphological variability in patients with bicuspid aortic valve and aortic coarctation. European Journal of Cardio-thoracic Surgery, 2019, 55, 704-713.	1.4	27
23	Looks Do Matter! Aortic Arch Shape After Hypoplastic Left Heart Syndrome Palliation Correlates With Cavopulmonary Outcomes. Annals of Thoracic Surgery, 2017, 103, 645-654.	1.3	26
24	Magnetic Resonance Imaging to DetectÂCardiovascular Effects of CancerÂTherapy. JACC: CardioOncology, 2020, 2, 270-292.	4.0	26
25	In vitro simulation and validation of the circulation with congenital heart defects. Progress in Pediatric Cardiology, 2010, 30, 71-80.	0.4	25
26	Evaluating 3D-printed models of coronary anomalies: a survey among clinicians and researchers at a university hospital in the UK. BMJ Open, 2019, 9, e025227.	1.9	23
27	Virtual and real bench testing of a new percutaneous valve device: a case study. EuroIntervention, 2012, 8, 120-128.	3.2	20
28	Three-Dimensional Printing of Fetal Models of Congenital Heart Disease Derived From Microfocus Computed Tomography: A Case Series. Frontiers in Pediatrics, 2019, 7, 567.	1.9	18
29	Finite Element Strategies to Satisfy Clinical and Engineering Requirements in the Field of Percutaneous Valves. Annals of Biomedical Engineering, 2012, 40, 2663-2673.	2.5	17
30	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.	2.5	15
31	Enlightening the Association between Bicuspid Aortic Valve and Aortopathy. Journal of Cardiovascular Development and Disease, 2018, 5, 21.	1.6	15
32	The use of 3D-printed models in patient communication: a scoping review. Journal of 3D Printing in Medicine, 2022, 6, 13-23.	2.0	15
33	Peak Troponin and CMR to Guide Management in Suspected ACS and Nonobstructive Coronary Arteries. JACC: Cardiovascular Imaging, 2022, 15, 1578-1587.	5.3	15
34	Modeling single ventricle physiology: review of engineering tools to study first stage palliation of hypoplastic left heart syndrome. Frontiers in Pediatrics, 2013, 1, 31.	1.9	14
35	Use of 3D Models in the Surgical Decision-Making Process in a Case of Double-Outlet Right Ventricle With Multiple Ventricular Septal Defects. Frontiers in Pediatrics, 2019, 7, 330.	1.9	14
36	MicroRNAs as potential biomarkers in congenital heart surgery. Journal of Thoracic and Cardiovascular Surgery, 2020, 159, 1532-1540.e7.	0.8	12

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37	Educational attainment in patients with congenital heart disease: a comprehensive systematic review and meta-analysis. BMC Cardiovascular Disorders, 2021, 21, 549.	1.7	12
38	Ventriculovascular interactions late after atrial and arterial repair of transposition of the great arteries. Journal of Thoracic and Cardiovascular Surgery, 2014, 148, 2627-2633.	0.8	11
39	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.	1.3	11
40	Utility of Cardiovascular Magnetic Resonance-Derived Wave Intensity Analysis As a Marker of Ventricular Function in Children with Heart Failure and Normal Ejection Fraction. Frontiers in Pediatrics, 2017, 5, 65.	1.9	10
41	Three-dimensional printing in congenital heart disease: Considerations on training and clinical implementation from a teaching session. International Journal of Artificial Organs, 2019, 42, 595-599.	1.4	10
42	Can finite element models of ballooning procedures yield mechanical response of the cardiovascular site to overexpansion?. Journal of Biomechanics, 2016, 49, 2778-2784.	2.1	9
43	A Non-parametric Statistical Shape Model for Assessment of the Surgically Repaired Aortic Arch in Coarctation of the Aorta: How Normal is Abnormal?. Lecture Notes in Computer Science, 2016, , 21-29.	1.3	9
44	Implementing the Sano Modification in an Experimental Model of First-stage Palliation of Hypoplastic Left Heart Syndrome. ASAIO Journal, 2013, 59, 86-89.	1.6	8
45	Cardiovascular magnetic resonance characterisation of anthracycline cardiotoxicity in adults with normal left ventricular ejection fraction. International Journal of Cardiology, 2021, 343, 180-186.	1.7	8
46	Feasibility of a longitudinal statistical atlas model to study aortic growth in congenital heart disease. Computers in Biology and Medicine, 2022, 144, 105326.	7.0	8
47	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.	1.4	7
48	Long term cardiovascular magnetic resonance phenotyping of anthracycline cardiomyopathy. International Journal of Cardiology, 2019, 292, 248-252.	1.7	7
49	Exploring the uniqueness of congenital heart disease: An interdisciplinary conversation. Journal of Applied Arts and Health, 2016, 7, 77-91.	0.4	7
50	In Vitro Validation of a Multiscale Patient-Specific Norwood Palliation Model. ASAIO Journal, 2016, 62, 317-324.	1.6	6
51	Numerical model of a valvuloplasty balloon: in vitro validation in a rapid-prototyped phantom. BioMedical Engineering OnLine, 2016, 15, 37.	2.7	6
52	Fortune favours the brave: composite first-person narrative of adolescents with congenital heart disease. BMJ Paediatrics Open, 2017, 1, e000186.	1.4	6
53	Rapid Prototyping Flexible Aortic Models Aids Sizing of Valve Leaflets and Planning the Ozaki Repair. JACC: Case Reports, 2020, 2, 1137-1140.	0.6	6
54	CMR-based 3D statistical shape modelling reveals left ventricular morphological differences between healthy controls and arterial switch operation survivors. Journal of Cardiovascular Magnetic Resonance, 2016, 18, Q2.	3.3	5

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55	Role of 3D printing technology in paediatric teaching and training: a systematic review. BMJ Paediatrics Open, 2021, 5, e001050.	1.4	5
56	Beyond Heart Symbolism: Artistic Representation of Narratives of Congenital Heart Disease. JAMA - Journal of the American Medical Association, 2017, 318, 1740.	7.4	4
57	Beyond apical ballooning: computational modelling reveals morphological features of Takotsubo cardiomyopathy. Computer Methods in Biomechanics and Biomedical Engineering, 2019, 22, 1103-1106.	1.6	4
58	â€˜Making the Invisible Visibleâ€™: an audience response to an art installation representing the complexity of congenital heart disease and heart transplantation. Medical Humanities, 2019, 45, 399-405.	1.2	4
59	Towards a narrative cardiology: exploring, holding and re-presenting narratives of heart disease. Cardiovascular Diagnosis and Therapy, 2019, 9, 73-77.	1.7	3
60	Determinants of aortic growth rate in patients with bicuspid aortic valve by cardiovascular magnetic resonance. Open Heart, 2019, 6, e001095.	2.3	3
61	Wave Reflection and Ventriculo-Arterial Coupling in Bicuspid Aortic Valve Patients With Repaired Aortic Coarctation. Frontiers in Pediatrics, 2021, 9, 770754.	1.9	3
62	3D Printing Cardiovascular Anatomy: A Single-Centre Experience. , 0, , .		2
63	Case of placental insufficiency and premature delivery in a Fontan pregnancy: physiological insights and considerations on risk stratification. Open Heart, 2021, 8, e001211.	2.3	2
64	Isolating the Effect of Arch Architecture on Aortic Hemodynamics Late After Coarctation Repair: A Computational Study. Frontiers in Cardiovascular Medicine, 0, 9, .	2.4	2
65	Letter by Giardini et al Regarding Article, â€œMaladaptive Aortic Properties in Children After Palliation of Hypoplastic Left Heart Syndrome Assessed by Cardiovascular Magnetic Resonance Imagingâ€. Circulation, 2011, 123, e594; author reply e595.	1.6	1
66	Abnormalities in aortic arch geometry do not lead to reduced exercise performance: a comparison study between patients with transposition of the great arteries repaired by arterial switch operation and normal controls. Journal of Cardiovascular Magnetic Resonance, 2013, 15, P291.	3.3	1
67	A method to implement the reservoir-wave hypothesis using phase-contrast magnetic resonance imaging. MethodsX, 2016, 3, 508-512.	1.6	1
68	The landscape of congenital heart disease. Cardiovascular Diagnosis and Therapy, 2017, 67, S55-S56.	1.7	1
69	My Core: conveying the everyday normality of living with congenital heart disease. Cardiovascular Diagnosis and Therapy, 2021, 11, 1436-1438.	1.7	1
70	Whatâ€™s Important: Narrative Reflections After Orthopaedic Surgery. Journal of Bone and Joint Surgery - Series A, 2021, 103, 1565-1566.	3.0	1
71	PRESSURE AND WAVE INTENSITY DISTRIBUTION ALONG THE INTRA-AORTIC BALLOON: AN IN VITRO STUDY. ASAIO Journal, 2006, 52, 45A.	1.6	0
72	Implementing the Sano Modification in an Experimental Model of the Norwood Circulation. , 2012, , .		0

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73	Mechanical and morphological properties of the aortic root and arch late after arterial switch operation for transposition of the great arteries. Journal of Cardiovascular Magnetic Resonance, 2012, 14, .	3.3	0
74	Non-invasive single slice estimate of aortic distensibility from phase-contrast MRI: application to hypoplastic left heart syndrome. Journal of Cardiovascular Magnetic Resonance, 2012, 14, .	3.3	0
75	Use of CMR-based wave intensity analysis to demonstrate abnormalities in the aorta, the ventricle and ventriculo-arterial coupling: Comparison between patients with complete transposition of the great arteries (TGA), following palliation with atrial switch and arterial switch operations, and normals. Journal of Cardiovascular Magnetic Resonance, 2013, 15, P293.	3.3	0
76	Patient-Specific Simulations in Interventional Cardiology Practice: Early Results From a Clinical/Engineering Centre. , 2013, , .		0
77	Patient-Specific Simulations in Interventional Cardiology Practice: Early Results From a Clinical/Engineering Center. Journal of Medical Devices, Transactions of the ASME, 2013, 7, .	0.7	0
78	13.8 VENTRICULO-VASCULAR INTERACTIONS AND THE ARTERIAL WINDKESSEL: NEW INSIGHTS FROM CARDIOVASCULAR MAGNETIC RESONANCE IMAGING BEFORE AND AFTER RENAL DENERVATION. Artery Research, 2016, 16, 81.	0.6	0
79	The Engineering Perspective. , 2016, , 197-202.		0
80	New insights in ventriculo-arterial coupling and ventricular shape in repaired tetralogy of Fallot: a retrospective cohort study. Journal of Cardiovascular Magnetic Resonance, 2016, 18, O118.	3.3	0
81	3.3 ASSESSMENT OF AORTIC MORPHOLOGY IN A BICUSPID AORTIC VALVE POPULATION. Artery Research, 2017, 20, 53.	0.6	0
82	2.5 NON-INVASIVE WAVE INTENSITY ANALYSIS IN THE AORTA AND INTERNAL CAROTID USING PHASE-CONTRAST MR ANGIOGRAPHY: THE EFFECT OF HYPERTENSION. Artery Research, 2017, 20, 51.	0.6	0
83	When We Meet in a Clearing: Making Research Accessible to Patients and Patient Experience Accessible to Clinicians. Journal of Patient Experience, 2019, 6, 333-335.	0.9	0
84	A Non-Invasive Study Using MR-Derived Wave Intensity Analysis to Highlight the Effect of Surgical Arch Reconstruction on Ventriculo-Arterial Coupling in Patients With Hypoplastic Left Heart Syndrome. , 2012, , .		0
85	Different Finite Element Strategies to Satisfy Clinical and Engineering Requirements in Modeling a Novel Percutaneous Device. , 2012, , .		0
86	Imaging-Based Wave Intensity Analysis: Applications in Congenital Heart Disease. , 2013, , .		0
87	Combining 4D MR Flow Experimental Data and Computational Fluid Dynamics to Study the Neoaorta in Patients With Repaired Transposition of the Great Arteries. , 2013, , .		0
88	A Hemi Fontan Operation Performed by an Engineer: Considerations on Virtual Surgery. , 2013, , .		0
89	Cross-sectional imaging/modelling. , 2018, , 756-760.		0
90	Imaging the carotid atherosclerotic plaque. Vascular Biology (Bristol, England), 2019, 1, H53-H58.	3.2	0

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91	Commentary: On the road toward routine use of 3-dimensional techniques in complex congenital surgery. JTCVS Techniques, 2020, 1, 88-89.	0.4	0
92	Artistâ€™s Statement: Home is where the Heart is. Academic Medicine, 2020, 95, 1657-1657.	1.6	0