Martyn Nash

List of Publications by Citations

176 papers	4,024 citations	34 h-index	59 g-index
202 ext. papers	4,611 ext. citations	4.1 avg, IF	5.37 L-index

#	Paper	IF	Citations
176	Computational Mechanics of the Heart **2000**, 61, 113-141		297
175	Electromechanical model of excitable tissue to study reentrant cardiac arrhythmias. *Progress in Biophysics and Molecular Biology*, **2004**, 85, 501-22	4.7	269
174	Evidence for multiple mechanisms in human ventricular fibrillation. *Circulation*, **2006**, 114, 536-42	16.7	176
173	Modelling passive diastolic mechanics with quantitative MRI of cardiac structure and function. *Medical Image Analysis*, **2009**, 13, 773-84	15.4	137
172	Coupling multi-physics models to cardiac mechanics. *Progress in Biophysics and Molecular Biology*, **2011**, 104, 77-88	4.7	130
171	Multiphysics and multiscale modelling, data-model fusion and integration of organ physiology in the clinic: ventricular cardiac mechanics. *Interface Focus*, **2016**, 6, 20150083	3.9	118
170	Phase mapping of cardiac fibrillation. *Circulation: Arrhythmia and Electrophysiology*, **2010**, 3, 105-14	6.4	113
169	Whole heart action potential duration restitution properties in cardiac patients: a combined clinical and modelling study. *Experimental Physiology*, **2006**, 91, 339-54	2.4	102
168	Supine and prone differences in regional lung density and pleural pressure gradients in the human lung with constant shape. *Journal of Applied Physiology*, **2009**, 107, 912-20	3.7	101
167	OpenCMISS: a multi-physics & multi-scale computational infrastructure for the VPH/Physiome project. *Progress in Biophysics and Molecular Biology*, **2011**, 107, 32-47	4.7	100
166	Electromechanical wavebreak in a model of the human left ventricle. *American Journal of Physiology - Heart and Circulatory Physiology*, **2010**, 299, H134-43	5.2	85
165	Drift and breakup of spiral waves in reaction-diffusion-mechanics systems. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 7922-6	11.5	82
164	Self-organized pacemakers in a coupled reaction-diffusion-mechanics system. *Physical Review Letters*, **2005**, 95, 258104	7.4	80
163	Noninvasive electrical imaging of the heart: theory and model development. *Annals of Biomedical Engineering*, **2001**, 29, 817-36	4.7	78
162	Estimating material parameters of a structurally based constitutive relation for skin mechanics. *Biomechanics and Modeling in Mechanobiology*, **2011**, 10, 767-78	3.8	76
161	Myocardial material parameter estimation-a comparative study for simple shear. *Journal of Biomechanical Engineering*, **2006**, 128, 742-50	2.1	73
160	ECG signal classification for the detection of cardiac arrhythmias using a convolutional recurrent neural network. *Physiological Measurement*, **2018**, 39, 094006	2.9	64

159	Organization of ventricular fibrillation in the human heart: experiments and models. *Experimental Physiology*, **2009**, 94, 553-62	2.4	64
158	Using Animation to Improve Recovery from Acute Coronary Syndrome: A Randomized Trial. *Annals of Behavioral Medicine*, **2016**, 50, 108-18	4.5	63
157	Verification of cardiac mechanics software: benchmark problems and solutions for testing active and passive material behaviour. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2015**, 471, 20150641	2.4	61
156	Creating individual-specific biomechanical models of the breast for medical image analysis. *Academic Radiology*, **2008**, 15, 1425-36	4.3	58
155	Effect of heterogeneous APD restitution on VF organization in a model of the human ventricles. *American Journal of Physiology - Heart and Circulatory Physiology*, **2008**, 294, H764-74	5.2	58
154	Determining the finite elasticity reference state from a loaded configuration. *International Journal for Numerical Methods in Engineering*, **2007**, 72, 1434-1451	2.4	53
153	Computational and experimental characterization of skin mechanics: identifying current challenges and future directions. *Wiley Interdisciplinary Reviews: Systems Biology and Medicine*, **2013**, 5, 539-56	6.6	52
152	A computational study of mother rotor VF in the human ventricles. *American Journal of Physiology - Heart and Circulatory Physiology*, **2009**, 296, H370-9	5.2	52
151	Myocardial material parameter estimation: a non-homogeneous finite element study from simple shear tests. *Biomechanics and Modeling in Mechanobiology*, **2008**, 7, 161-73	3.8	52
150	Mathematical modelling of the heart: cell to organ. *Chaos, Solitons and Fractals*, **2002**, 13, 1613-1621	9.3	41
149	Characterizing the ex vivo mechanical properties of synthetic polypropylene surgical mesh. *Journal of the Mechanical Behavior of Biomedical Materials*, **2014**, 37, 48-55	4.1	40
148	Modeling breast biomechanics for multi-modal image analysis--successes and challenges. *Wiley Interdisciplinary Reviews: Systems Biology and Medicine*, **2010**, 2, 293-304	6.6	40
147	Image-Based Predictive Modeling of Heart Mechanics. *Annual Review of Biomedical Engineering*, **2015**, 17, 351-83	12	39
146	A biomechanical model of mammographic compressions. *Biomechanics and Modeling in Mechanobiology*, **2008**, 7, 43-52	3.8	38
145	Imaging electrocardiographic dispersion of depolarization and repolarization during ischemia: simultaneous body surface and epicardial mapping. *Circulation*, **2003**, 107, 2257-63	16.7	35
144	Breast lesion co-localisation between X-ray and MR images using finite element modelling. *Medical Image Analysis*, **2013**, 17, 1256-64	15.4	34
143	Modelling collagen fibre orientation in porcine skin based upon confocal laser scanning microscopy. *Skin Research and Technology*, **2011**, 17, 149-59	1.9	34
142	Modeling cardiac mechano-electrical feedback using reaction-diffusion-mechanics systems. *Physica D: Nonlinear Phenomena*, **2009**, 238, 1000-1007	3.3	33

141	Suitability of recent hardware accelerators (DSPs, FPGAs, and GPUs) for computer vision and image processing algorithms. *Signal Processing: Image Communication*, **2018**, 68, 101-119	2.8	32
140	The Inverse Problem of Electrocardiography **2010**, 299-344		32
139	Modeling of the mechanical function of the human gastroesophageal junction using an anatomically realistic three-dimensional model. *Journal of Biomechanics*, **2009**, 42, 1604-9	2.9	30
138	Effect of global cardiac ischemia on human ventricular fibrillation: insights from a multi-scale mechanistic model of the human heart. *PLoS Computational Biology*, **2014**, 10, e1003891	5	29
137	Computational multiscale modeling in the IUPS Physiome Project: Modeling cardiac electromechanics. *IBM Journal of Research and Development*, **2006**, 50, 617-630	2.5	29
136	An imaging-based computational approach to model ventilation distribution and soft-tissue deformation in the ovine lung. *Academic Radiology*, **2006**, 13, 113-20	4.3	29
135	Identification of mechanical properties of heterogeneous soft bodies using gravity loading. *International Journal for Numerical Methods in Biomedical Engineering*, **2011**, 27, 391-407	2.6	28
134	Anisotropic effects of the levator ani muscle during childbirth. *Biomechanics and Modeling in Mechanobiology*, **2011**, 10, 485-94	3.8	26
133	Effects of nonlinear muscle elasticity on pelvic floor mechanics during vaginal childbirth. *Journal of Biomechanical Engineering*, **2010**, 132, 111010	2.1	26
132	Predicting lymphatic drainage patterns and primary tumour location in patients with breast cancer. *Breast Cancer Research and Treatment*, **2011**, 130, 699-705	4.4	25
131	Modeling childbirth: elucidating the mechanisms of labor. *Wiley Interdisciplinary Reviews: Systems Biology and Medicine*, **2010**, 2, 460-470	6.6	25
130	Challenges facing validation of noninvasive electrical imaging of the heart. *Annals of Noninvasive Electrocardiology*, **2005**, 10, 73-82	1.5	25
129	Pacemakers in a Reaction-Diffusion Mechanics System. *Journal of Statistical Physics*, **2007**, 128, 375-392	1.5	24
128	Predicting Tumour Location by Simulating Large Deformations of the Breast Using a 3D Finite Element Model and Nonlinear Elasticity. *Lecture Notes in Computer Science*, **2004**, 217-224	0.9	24
127	Human ventricular fibrillation during global ischemia and reperfusion: paradoxical changes in activation rate and wavefront complexity. *Circulation: Arrhythmia and Electrophysiology*, **2011**, 4, 684-91	6.4	23
126	Ventricular activation during sympathetic imbalance and its computational reconstruction. *Journal of Applied Physiology*, **2001**, 90, 287-98	3.7	23
125	Breast Image Registration by Combining Finite Elements and Free-Form Deformations. *Lecture Notes in Computer Science*, **2010**, 736-743	0.9	23
124	A discrete model to study reaction-diffusion-mechanics systems. *PLoS ONE*, **2011**, 6, e21934	3.7	21

123	Frictional contact mechanics methods for soft materials: application to tracking breast cancers. *Journal of Biomechanics*, **2008**, 41, 69-77	2.9	20
122	Left Ventricular Diastolic Myocardial Stiffness and End-Diastolic Myofibre Stress in Human Heart Failure Using Personalised Biomechanical Analysis. *Journal of Cardiovascular Translational Research*, **2018**, 11, 346-356	3.3	19
121	Model-based identification of motion sensor placement for tracking retraction and elongation of the tongue. *Biomechanics and Modeling in Mechanobiology*, **2013**, 12, 383-99	3.8	19
120	Modelling mammographic compression of the breast. *Lecture Notes in Computer Science*, **2008**, 11, 758-65	0.9	19
119	Analysis of cardiac fibrillation using phase mapping. *Cardiac Electrophysiology Clinics*, **2015**, 7, 49-58	1.4	17
118	Subpixel phase-based image registration using Savitzky□olay differentiators in gradient-correlation. *Computer Vision and Image Understanding*, **2018**, 170, 28-39	4.3	16
117	Lymphatic drainage and tumour prevalence in the breast: a statistical analysis of symmetry, gender and node field independence. *Journal of Anatomy*, **2011**, 218, 652-9	2.9	15
116	Image-Based Investigation of Human in Vivo Myofibre Strain. *IEEE Transactions on Medical Imaging*, **2016**, 35, 2486-2496	11.7	14
115	Characterizing levator-ani muscle stiffness pre- and post-childbirth in European and Polynesian women in New Zealand: a pilot study. *Acta Obstetricia Et Gynecologica Scandinavica*, **2017**, 96, 1234-1242	3.8	14
114	Comparison of the Gibbs and Suga formulations of cardiac energetics: the demise of "isoefficiency". *Journal of Applied Physiology*, **2012**, 113, 996-1003	3.7	13
113	Experiment-model interaction for analysis of epicardial activation during human ventricular fibrillation with global myocardial ischaemia. *Progress in Biophysics and Molecular Biology*, **2011**, 107, 101-11	4.7	13
112	Myocardial material parameter estimation: a comparison of invariant based orthotropic constitutive equations. *Computer Methods in Biomechanics and Biomedical Engineering*, **2009**, 12, 283-95	2.1	13
111	The effect of hoof angle variations on dorsal lamellar load in the equine hoof. *Equine Veterinary Journal*, **2011**, 43, 536-42	2.4	12
110	A computationally efficient optimization kernel for material parameter estimation procedures. *Journal of Biomechanical Engineering*, **2007**, 129, 279-83	2.1	12
109	Modelling Cardiac Tissue Growth and Remodelling. *Journal of Elasticity*, **2017**, 129, 283-305	1.5	12
108	Increased cardiac work provides a link between systemic hypertension and heart failure. *Physiological Reports*, **2017**, 5, e13104	2.6	10
107	A stabilised mixed meshfree method for incompressible media: Application to linear elasticity and Stokes flow. *Computer Methods in Applied Mechanics and Engineering*, **2018**, 329, 575-598	5.7	10
106	Myocardial Contractility and Regional Work throughout the Cardiac Cycle Using FEM and MRI. *Lecture Notes in Computer Science*, **2012**, 149-159	0.9	10

105	Image-driven constitutive modeling of myocardial fibrosis. *International Journal for Computational Methods in Engineering Science and Mechanics*, **2016**, 17, 211-221	0.7	10
104	Effects of fetal head shape variation on the second stage of labour. *Journal of Biomechanics*, **2015**, 48, 1593-9	2.9	9
103	Myocardial twitch duration and the dependence of oxygen consumption on pressure-volume area: experiments and modelling. *Journal of Physiology*, **2012**, 590, 4603-22	3.9	9
102	Finite element modelling of breast biomechanics: directly calculating the reference state. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, **2006**, 2006, 420-3		9
101	Development of a three-dimensional finite element model of breast mechanics. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, **2004**, 2004, 5080-3		9
100	An experimental model to correlate simultaneous body surface and epicardial electropotential recordings in vivo. *Chaos, Solitons and Fractals*, **2002**, 13, 1735-1742	9.3	9
99	Estimation of transversely isotropic material properties from magnetic resonance elastography using the optimised virtual fields method. *International Journal for Numerical Methods in Biomedical Engineering*, **2018**, 34, e2979	2.6	8
98	Modelling Prone to Supine Breast Deformation Under Gravity Loading Using Heterogeneous Finite Element Models **2012**, 29-38		8
97	Modelling the pelvic floor for investigating difficulties during childbirth **2008**,		8
96	A computational model of cardiac electromechanics. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, **2006**, 2006, 5311-4		8
95	The Breast Biomechanics Reference State for Multi-modal Image Analysis. *Lecture Notes in Computer Science*, **2008**, 385-392	0.9	8
94	Towards tracking breast cancer across medical images using subject-specific biomechanical models **2007**, 10, 651-8		8
93	Cardiac Active Contraction Parameters Estimated from Magnetic Resonance Imaging. *Lecture Notes in Computer Science*, **2010**, 194-203	0.9	8
92	Changes in In Vivo Myocardial Tissue Properties Due to Heart Failure. *Lecture Notes in Computer Science*, **2013**, 216-223	0.9	8
91	Constitutive relations for pressure-driven stiffening in poroelastic tissues. *Journal of Biomechanical Engineering*, **2014**, 136,	2.1	7
90	Relating components of pressure-volume area in Suga's formulation of cardiac energetics to components of the stress-time integral. *Journal of Applied Physiology*, **2012**, 113, 988-95	3.7	7
89	**2012**,		7
88	FPGA implementation of 2D cross-correlation for real-time 3D tracking of deformable surfaces **2013**,		7

87	Patient-Specific Modeling of Breast Biomechanics with Applications to Breast Cancer Detection and Treatment. *Studies in Mechanobiology, Tissue Engineering and Biomaterials*, **2011**, 379-412	0.5	7
86	M/M/Infinity Birth-Death Processes - A Quantitative Representational Framework to Summarize and Explain Phase Singularity and Wavelet Dynamics in Atrial Fibrillation. *Frontiers in Physiology*, **2020**, 11, 616866	4.6	7
85	Clinical Applications of Breast Biomechanics **2017**, 215-242		6
84	Microstructurally Motivated Constitutive Modeling of Heart Failure Mechanics. *Biophysical Journal*, **2019**, 117, 2273-2286	2.9	6
83	Passive ventricular mechanics modelling using MRI of structure and function. *Lecture Notes in Computer Science*, **2008**, 11, 814-21	0.9	6
82	Modelling childbirth: comparing athlete and non-athlete pelvic floor mechanics. *Lecture Notes in Computer Science*, **2008**, 11, 750-7	0.9	6
81	Non-contact Quantification of Jugular Venous Pulse Waveforms from Skin Displacements. *Scientific Reports*, **2018**, 8, 17236	4.9	6
80	Mapping Microcalcifications Between 2D Mammograms and 3D MRI Using a Biomechanical Model of the Breast **2010**, 17-28		6
79	Multidirectional In Vivo Characterization of Skin Using Wiener Nonlinear Stochastic System Identification Techniques. *Journal of Biomechanical Engineering*, **2017**, 139,	2.1	5
78	Head kinematics during shaking associated with abusive head trauma. *Journal of Biomechanics*, **2015**, 48, 3123-7	2.9	5
77	Efficient estimation of load-free left ventricular geometry and passive myocardial properties using principal component analysis. *International Journal for Numerical Methods in Biomedical Engineering*, **2020**, 36, e3313	2.6	5
76	The influence of loading conditions on equine hoof capsule deflections and stored energy assessed by finite element analysis. *Biosystems Engineering*, **2013**, 115, 283-290	4.8	5
75	Mapping Breast Cancer Between Clinical X-Ray and MR Images **2011**, 81-90		5
74	Subpixel Measurement of Living Skin Deformation Using Intrinsic Features **2017**, 91-99		5
73	A Quantitative Description of Pelvic Floor Muscle Fibre Organisation **2011**, 119-130		5
72	Calibration of a fully coupled electromechanical meshless computational model of the heart with experimental data. *Computer Methods in Applied Mechanics and Engineering*, **2020**, 364, 112869	5.7	4
71	Deep Learning Over Reduced Intrinsic Domains for Efficient Mechanics of the Left Ventricle. *Frontiers in Physics*, **2020**, 8,	3.9	4
70	The influence of tissue hydration on equine hoof capsule deformation and energy storage assessed using finite element methods. *Biosystems Engineering*, **2012**, 111, 175-185	4.8	4

69	Method for quantifiying conduction velocity during ventricular fibrillation. *Physical Review E*, **2007**, 75, 011914	2.4	4
68	Determining Anisotropic Myocardial Stiffness from Magnetic Resonance Elastography: A Simulation Study. *Lecture Notes in Computer Science*, **2015**, 346-354	0.9	4
67	Automated Personalised Human Left Ventricular FE Models to Investigate Heart Failure Mechanics. *Lecture Notes in Computer Science*, **2013**, 307-316	0.9	4
66	Modeling the second stage of labor. *Wiley Interdisciplinary Reviews: Systems Biology and Medicine*, **2016**, 8, 506-516	6.6	4
65	Effects of Fetal Head Motion on Pelvic Floor Mechanics **2010**, 129-137		4
64	An automated computational biomechanics workflow for improving breast cancer diagnosis and treatment. *Interface Focus*, **2019**, 9, 20190034	3.9	3
63	A Low-cost, hand-held stereoscopic device for measuring dynamic deformations of skin in vivo **2015** ,		3
62	Spatial heterogeneity of action potential duration restitution in humans. *Heart Rhythm*, **2005**, 2, S216-S2[illegible]	6.7	3
61	An image-based computational model of ovine lung mechanics and ventilation distribution **2005**, 5746, 84		3
60	Microstructural Remodelling and Mechanics of Hypertensive Heart Disease. *Lecture Notes in Computer Science*, **2015**, 382-389	0.9	3
59	Quantifying Carotid Pulse Waveforms Using Subpixel Image Registration **2019**, 83-92		3
58	Mathematical models of cardiac structure and function: mechanistic insights from models of heart failure **2011**, 241-250		3
57	Relative identifiability of anisotropic properties from magnetic resonance elastography. *NMR in Biomedicine*, **2018**, 31, e3848	4.4	3
56	Method for Validating Breast Compression Models Using Normalised Cross-Correlation **2010**, 63-71		3
55	Surface deformation tracking and modelling of soft materials. *Biomechanics and Modeling in Mechanobiology*, **2019**, 18, 1031-1045	3.8	2
54	Insights From Computational Modeling Into the Contribution of Mechano-Calcium Feedback on the Cardiac End-Systolic Force-Length Relationship. *Frontiers in Physiology*, **2020**, 11, 587	4.6	2
53	Spatio-temporal Organization During Ventricular Fibrillation in the Human Heart. *Annals of Biomedical Engineering*, **2018**, 46, 864-876	4.7	2
52	Quantifying passive myocardial stiffness and wall stress in heart failure patients using personalized ventricular mechanics. *Journal of Cardiovascular Magnetic Resonance*, **2016**, 18, O17	6.9	2

51	Relationship Between Structure and Mechanics for Membranous Tissues **2016**, 135-173		2
50	3D surface profiling using arbitrarily positioned cameras **2013**,		2
49	A finite element study of invariant-based orthotropic constitutive equations in the context of myocardial material parameter estimation. *Computer Methods in Biomechanics and Biomedical Engineering*, **2009**, 12, 691-9	2.1	2
48	Interactive biventricular modeling tools for clinical cardiac image analysis. *Journal of Cardiovascular Magnetic Resonance*, **2010**, 12,	6.9	2
47	Biomechanical modelling for breast image registration **2008**,		2
46	Modelling the mechanical properties of human skin: towards a 3D discrete fibre model. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, **2007**, 2007, 6641-4		2
45	Modelling the skin-breast tissue interface. *Journal of Biomechanics*, **2006**, 39, S638	2.9	2
44	Finite Element Modelling of Breast Biomechanics: Finding a Reference aState. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, **2005**, 2005, 3268-71		2
43	Passive myocardial mechanical properties: meaning, measurement, models. *Biophysical Reviews*, **2021**, 13, 587-610	3.7	2
42	Motion Correction Using Subpixel Image Registration. *Lecture Notes in Computer Science*, **2017**, 14-23	0.9	2
41	Estimation of In Vivo Myocardial Fibre Strain Using an Architectural Atlas of the Human Heart. *Lecture Notes in Computer Science*, **2013**, 208-215	0.9	2
40	Myocardial Laminar Organization Is Retained in Angiotensin-Converting Enzyme Inhibitor Treated SHRs. *Experimental Mechanics*, **2021**, 61, 31-40	2.6	2
39	Surface deformation tracking and modeling of soft materials. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2015**, 2015, 4411-4	0.9	1
38	Correlation of breast image alignment using biomechanical modelling **2009**,		1
37	The SARD variety of multifractality of ventricular epicardial mapping during ischemia. *Science Bulletin*, **2006**, 51, 809-814	10.6	1
36	Multifractal ECG mapping of ventricular epicardium during regional ischemia in the pig. *IEEE Transactions on Biomedical Engineering*, **2006**, 53, 1920-5	5	1
35	Non-invasive electrical imaging of the heart		1
34	Ventricular fibrillation: combined myocardial substrate and Purkinje ablation.. *European Heart Journal*, **2022**,	9.5	1

33	A governing equation for rotor and wavelet number in human clinical ventricular fibrillation: Implications for sudden cardiac death. *Heart Rhythm*, **2021**,	6.7	1
32	Quantifying optical anisotropy in soft tissue membranes using Mueller matrix imaging. *Journal of Biomedical Optics*, **2021**, 26,	3.5	1
31	Comparison of 2D Echocardiography and Cardiac Cine MRI in the Assessment of Regional Left Ventricular Wall Thickness. *Lecture Notes in Computer Science*, **2020**, 52-62	0.9	1
30	Field-Based Parameterisation of Cardiac Muscle Structure from Diffusion Tensors. *Lecture Notes in Computer Science*, **2015**, 146-154	0.9	1
29	Registration of Prone and Supine Breast MRI for Breast Cancer Treatment Planning **2017**, 123-134		1
28	Abusive Head Trauma: Developing a Computational Adult Head Model to Predict Brain Deformations under Mild Accelerations **2017**, 147-157		1
27	Three-Dimensional Quantification of Myocardial Collagen Morphology from Confocal Images. *Lecture Notes in Computer Science*, **2017**, 3-12	0.9	1
26	Probabilistic description of infant head kinematics in abusive head trauma. *Computer Methods in Biomechanics and Biomedical Engineering*, **2017**, 20, 1633-1642	2.1	1
25	Automatic Landmark Detection Using Statistical Shape Modelling and Template Matching **2015**, 75-82		1
24	Identification of Transversely Isotropic Properties from Magnetic Resonance Elastography Using the Optimised Virtual Fields Method. *Lecture Notes in Computer Science*, **2017**, 421-431	0.9	1
23	Interactive Cardiac Image Analysis for Biventricular Function of the Human Heart. *Lecture Notes in Computer Science*, **2010**, 144-153	0.9	1
22	The effect of camera settings on image noise and accuracy of subpixel image registration. *Machine Vision and Applications*, **2021**, 32, 1	2.8	1
21	Sensitivity of Myocardial Stiffness Estimates to Inter-observer Variability in LV Geometric Modelling. *Lecture Notes in Computer Science*, **2021**, 287-295	0.9	1
20	Systematic Comparison of Left Ventricular Geometry Between 3D-Echocardiography and Cardiac Magnetic Resonance Imaging. *Frontiers in Cardiovascular Medicine*, **2021**, 8, 728205	5.4	1
19	Effects of Levator Ani Muscle Morphology on the Mechanics of Vaginal Childbirth **2012**, 63-75		1
18	Identification of Tongue Muscle Fibre Group Contraction from MR Images **2013**, 185-196		1
17	Insight from modelling can address controversial observations. *Equine Veterinary Journal*, **2012**, 44, 499-500	1.4	0
16	Detailed hoof morphometry is sparsely documented. *Equine Veterinary Journal*, **2012**, 44, 500-500	2.4	0

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15	Parameterisation of Multi-directional Diffusion Weighted Magnetic Resonance Images of the Heart. *Lecture Notes in Computer Science*, **2016**, 60-68	0.9
14	Comparison of system identification techniques in the analysis of a phantom for studying shaken-baby syndrome. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2011**, 2011, 1363-6	0.9
13	Myocardial material parameter estimation: the influences of constitutive relation and experiental protocol. *Journal of Biomechanics*, **2006**, 39, S277-S278	2.9
12	Pipeline for 3D Reconstruction of Lung Surfaces Using Intrinsic Features Under Pressure-Controlled Ventilation **2020**, 123-134	
11	Efficient Ventricular Parameter Estimation Using AI-Surrogate Models. *Frontiers in Physiology*, **2021**, 12, 732351	4.6
10	Modelling Cardiac Tissue Growth and Remodelling **2018**, 283-305	
9	Removing Drift from Carotid Arterial Pulse Waveforms: A Comparison of Motion Correction and High-Pass Filtering **2020**, 111-119	
8	Identifying Myocardial Mechanical Properties from MRI Using an Orthotropic Constitutive Model. *Lecture Notes in Computer Science*, **2015**, 135-144	0.9
7	Model-Based Interpretation of Skin Microstructural and Mechanical Measurements **2015**, 1-20	
6	Robust Landmark Identification for Generating Subject Specific Models for Biomechanics **2016**, 39-49	
5	Model-Based Interpretation of Skin Microstructural and Mechanical Measurements **2017**, 1019-1037	
4	Investigating Heart Failure Using Ventricular Imaging and Modelling. *Lecture Notes in Computer Science*, **2010**, 164-173	0.9
3	The Inverse Problem of Electrocardiography **2012**, 299-344	
2	Characterising the Soft Tissue Mechanical Properties of the Lower Limb of a Below-Knee Amputee: A Review **2021**, 99-111	
1	In Vivo Pressure-Volume Loops and Chamber Stiffness Estimation Using Real-Time 3D Echocardiography and Left Ventricular Catheterization Application to Post-heart Transplant Patients. *Lecture Notes in Computer Science*, **2021**, 396-405	0.9