

Perumal Nithiarasu

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161
papers

3,726
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31
h-index

55
g-index

185
ext. papers

4,215
ext. citations

3.2
avg, IF

5.65
L-index

#	Paper	IF	Citations
161	Natural convective heat transfer in a fluid saturated variable porosity medium. <i>International Journal of Heat and Mass Transfer</i> , 1997 , 40, 3955-3967	4.9	410
160	2004 ,		287
159	A 1D arterial blood flow model incorporating ventricular pressure, aortic valve and regional coronary flow using the locally conservative Galerkin (LCG) method. <i>Communications in Numerical Methods in Engineering</i> , 2008 , 24, 367-417		158
158	The characteristic-based-split procedure: an efficient and accurate algorithm for fluid problems. <i>International Journal for Numerical Methods in Fluids</i> , 1999 , 31, 359-392	1.9	149
157	An efficient artificial compressibility (AC) scheme based on the characteristic based split (CBS) method for incompressible flows. <i>International Journal for Numerical Methods in Engineering</i> , 2003 , 56, 1815-1845	2.4	145
156	A benchmark study of numerical schemes for one-dimensional arterial blood flow modelling. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2015 , 31, e02732	2.6	107
155	The Characteristic-Based Split (CBS) scheme— unified approach to fluid dynamics. <i>International Journal for Numerical Methods in Engineering</i> , 2006 , 66, 1514-1546	2.4	99
154	An improved unsteady, unstructured, artificial compressibility, finite volume scheme for viscous incompressible flows: Part I. Theory and implementation. <i>International Journal for Numerical Methods in Engineering</i> , 2002 , 54, 695-714	2.4	97
153	DOUBLE-DIFFUSIVE NATURAL CONVECTION IN AN ENCLOSURE FILLED WITH FLUID-SATURATED POROUS MEDIUM: A GENERALIZED NON-DARCY APPROACH. <i>Numerical Heat Transfer; Part A: Applications</i> , 1996 , 30, 413-426	2.3	82
152	Characteristic-based-split (CBS) algorithm for incompressible flow problems with heat transfer. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 1998 , 8, 969-990	4.5	71
151	Three-dimensional incompressible flow calculations using the characteristic based split (CBS) scheme. <i>International Journal for Numerical Methods in Fluids</i> , 2004 , 44, 1207-1229	1.9	61
150	A new semi-implicit time stepping procedure for buoyancy driven flow in a fluid saturated porous medium. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1998 , 165, 147-154	5.7	58
149	An arbitrary Lagrangian Eulerian (ALE) formulation for free surface flows using the characteristic-based split (CBS) scheme. <i>International Journal for Numerical Methods in Fluids</i> , 2005 , 48, 1415-1428	1.9	57
148	Analysis of an explicit and matrix free fractional step method for incompressible flows. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2006 , 195, 5537-5551	5.7	49
147	Explicit and semi-implicit CBS procedures for incompressible viscous flows. <i>International Journal for Numerical Methods in Engineering</i> , 2006 , 66, 1618-1640	2.4	48
146	An artificial compressibility based characteristic based split (CBS) scheme for steady and unsteady turbulent incompressible flows. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2006 , 195, 2961-2982	5.7	48
145	Experimental investigation of the performance of a counter-flow, packed-bed mechanical cooling tower. <i>Energy</i> , 1998 , 23, 943-947	7.9	47

144	Steady flow through a realistic human upper airway geometry. <i>International Journal for Numerical Methods in Fluids</i> , 2008 , 57, 631-651	1.9	47
143	An improved unsteady, unstructured, artificial compressibility, finite volume scheme for viscous incompressible flows: Part II. Application. <i>International Journal for Numerical Methods in Engineering</i> , 2002 , 54, 715-729	2.4	47
142	Natural convection in porous medium-fluid interface problems - A finite element analysis by using the CBS procedure. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2001 , 11, 473-490	4.5	43
141	Estimating the accuracy of a reduced-order model for the calculation of fractional flow reserve (FFR). <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2018 , 34, e2908	2.6	38
140	Adaptive mesh generation for fluid mechanics problems. <i>International Journal for Numerical Methods in Engineering</i> , 2000 , 47, 629-662	2.4	37
139	A fully explicit characteristic based split (CBS) scheme for viscoelastic flow calculations. <i>International Journal for Numerical Methods in Engineering</i> , 2004 , 60, 949-978	2.4	35
138	Effect of porosity on natural convective heat transfer in a fluid saturated porous medium. <i>International Journal of Heat and Fluid Flow</i> , 1998 , 19, 56-58	2.4	34
137	Finite element modelling of flow, heat and mass transfer in fluid saturated porous media. <i>Archives of Computational Methods in Engineering</i> , 2002 , 9, 3-42	7.8	34
136	Non-Darcy natural convection in a hydrodynamically and thermally anisotropic porous medium. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2000 , 188, 413-430	5.7	34
135	Double-diffusive natural convection in a fluid saturated porous cavity with a freely convecting wall. <i>International Communications in Heat and Mass Transfer</i> , 1997 , 24, 1121-1130	5.8	33
134	Microscopic and macroscopic approach for natural convection in enclosures filled with fluid saturated porous medium. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2003 , 13, 862-886	4.5	33
133	Shock capturing viscosities for the general fluid mechanics algorithm 1998 , 28, 1325-1353		32
132	Convective heat transfer in axisymmetric porous bodies. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 1995 , 5, 829-837	4.5	32
131	Modelling pipeline for subject-specific arterial blood flow—a review. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2011 , 27, 1868-1910	2.6	31
130	Laminar and turbulent flow calculations through a model human upper airway using unstructured meshes. <i>Communications in Numerical Methods in Engineering</i> , 2006 , 23, 1057-1069		31
129	Finite element analysis of transient natural convection in an odd-shaped enclosure. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 1998 , 8, 199-216	4.5	31
128	Non-Darcy double-diffusive natural convection in axisymmetric fluid saturated porous cavities. <i>Heat and Mass Transfer</i> , 1997 , 32, 427-433	2.2	29
127	Numerical investigation of buoyancy driven flow in a fluid saturated non-Darcian porous medium. <i>International Journal of Heat and Mass Transfer</i> , 1999 , 42, 1205-1215	4.9	29

126	A hierarchical mesh refinement technique for global 3-D spherical mantle convection modelling. <i>Geoscientific Model Development</i> , 2013 , 6, 1095-1107	6.3	28
125	Biofluid Dynamics 2014 , 451-484		27
124	An improved baseline model for a human arterial network to study the impact of aneurysms on pressure-flow waveforms. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2012 , 28, 1224-46	2.6	27
123	Investigations into the applicability of adaptive finite element methods to two-dimensional infinite Prandtl number thermal and thermochemical convection. <i>Geochemistry, Geophysics, Geosystems</i> , 2007 , 8, n/a-n/a	3.6	27
122	On stabilization of the CBS algorithm: Internal and external time steps. <i>International Journal for Numerical Methods in Engineering</i> , 2000 , 48, 875-880	2.4	25
121	Artificial compressibility based CBS solutions for double diffusive natural convection in cavities. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2013 , 23, 205-225	4.5	24
120	A robust model and numerical approach for solving solid oxide fuel cell (SOFC) problems. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2008 , 18, 811-834	4.5	24
119	On boundary conditions of the characteristic based split (CBS) algorithm for fluid dynamics. <i>International Journal for Numerical Methods in Engineering</i> , 2002 , 54, 523-536	2.4	24
118	Steady and unsteady incompressible flow in a double driven cavity using the artificial compressibility (AC)-based characteristic-based split (CBS) scheme. <i>International Journal for Numerical Methods in Engineering</i> , 2005 , 63, 380-397	2.4	24
117	What does not kill a tumour may make it stronger: In silico insights into chemotherapeutic drug resistance. <i>Journal of Theoretical Biology</i> , 2018 , 454, 253-267	2.3	23
116	Geometrically induced force interaction for three-dimensional deformable models. <i>IEEE Transactions on Image Processing</i> , 2011 , 20, 1373-87	8.7	23
115	A novel method for non-invasively detecting the severity and location of aortic aneurysms. <i>Biomechanics and Modeling in Mechanobiology</i> , 2017 , 16, 1225-1242	3.8	22
114	Application of a locally conservative Galerkin (LCG) method for modelling blood flow through a patient-specific carotid bifurcation. <i>International Journal for Numerical Methods in Fluids</i> , 2010 , 64, 1274-1295	1.9	21
113	Numerical comparison of CBS and SGS as stabilization techniques for the incompressible Navier-Stokes equations. <i>International Journal for Numerical Methods in Engineering</i> , 2006 , 66, 1672-1689	2.4	21
112	A SIMPLE LOCALLY CONSERVATIVE GALERKIN (LCG) FINITE-ELEMENT METHOD FOR TRANSIENT CONSERVATION EQUATIONS. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2004 , 46, 357-370	1.3	21
111	A semi-active human digital twin model for detecting severity of carotid stenoses from head vibration-A coupled computational mechanics and computer vision method. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2019 , 35, e3180	2.6	21
110	Non-invasive coronary CT angiography-derived fractional flow reserve: A benchmark study comparing the diagnostic performance of four different computational methodologies. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2019 , 35, e3235	2.6	20
109	A comparative study of fractional step method in its quasi-implicit, semi-implicit and fully-explicit forms for incompressible flows. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2016 , 26, 595-623	4.5	20

108	Artificial Compressibility-Based CBS Scheme for the Solution of the Generalized Porous Medium Model. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2009 , 55, 196-218	1.3	19
107	Towards enabling a cardiovascular digital twin for human systemic circulation using inverse analysis. <i>Biomechanics and Modeling in Mechanobiology</i> , 2021 , 20, 449-465	3.8	19
106	The locally conservative Galerkin (LCG) method for solving the incompressible Navier-Stokes equations. <i>International Journal for Numerical Methods in Fluids</i> , 2008 , 57, 1771-1792	1.9	18
105	An advanced computational bioheat transfer model for a human body with an embedded systemic circulation. <i>Biomechanics and Modeling in Mechanobiology</i> , 2016 , 15, 1173-90	3.8	17
104	An element-wise, locally conservative Galerkin (LCG) method for solving diffusion and convection-diffusion problems. <i>International Journal for Numerical Methods in Engineering</i> , 2008 , 73, 642-664	2.4	17
103	Modelling electro-osmotic flow in porous media: a review. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2018 , 28, 472-497	4.5	16
102	Segmentation of biomedical images using active contour model with robust image feature and shape prior. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2014 , 30, 232-48	2.6	16
101	An experimental study on an electro-osmotic flow-based silicon heat spreader. <i>Microfluidics and Nanofluidics</i> , 2010 , 9, 787-795	2.8	16
100	Adaptive finite element methods in geodynamics. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2008 , 18, 1015-1035	4.5	16
99	Semi-automatic surface and volume mesh generation for subject-specific biomedical geometries. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2012 , 28, 133-57	2.6	15
98	A novel single domain approach for numerical modelling solid oxide fuel cells. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2010 , 20, 587-612	4.5	15
97	Computational flow studies in a subject-specific human upper airway using a one-equation turbulence model. Influence of the nasal cavity. <i>International Journal for Numerical Methods in Engineering</i> , 2011 , 87, 96-114	2.4	14
96	A Matrix Free Fractional Step Method for Static and Dynamic Incompressible Solid Mechanics. <i>International Journal for Computational Methods in Engineering Science and Mechanics</i> , 2006 , 7, 369-380	0.7	14
95	Influences of element size and variable smoothing on inviscid compressible flow solution. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2005 , 15, 420-428	4.5	14
94	Buoyancy driven flow in a non-Darcian, fluid-saturated porous enclosure subjected to uniform heat flux numerical study. <i>Communications in Numerical Methods in Engineering</i> , 1999 , 15, 765-776		14
93	Data-driven inverse modelling through neural network (deep learning) and computational heat transfer. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2020 , 369, 113217	5.7	13
92	Forced convection heat transfer from solder balls on a printed circuit board using the characteristic based split (CBS) scheme. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2005 , 15, 73-95	4.5	13
91	A multidimensional dynamic quantification tool for the mitral valve. <i>Interactive Cardiovascular and Thoracic Surgery</i> , 2015 , 21, 481-7	1.8	12

90	Accelerating incompressible flow calculations using a quasi-implicit scheme: local and dual time stepping approaches. <i>Computational Mechanics</i> , 2012 , 50, 687-693	4	12
89	Patient-specific blood flow simulation through an aneurysmal thoracic aorta with a folded proximal neck. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2011 , 27, 1167-1184	2.6	12
88	Forced convection heat transfer within a moderately-stenosed, patient-specific carotid bifurcation. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2012 , 22, 1120-1134	4.5	12
87	The characteristic-based split (CBS) scheme for viscoelastic flow past a circular cylinder. <i>International Journal for Numerical Methods in Fluids</i> , 2008 , 57, 157-176	1.9	12
86	A Robust Finite Element Modeling Approach to Conjugate Heat Transfer in Flexible Elastic Tubes and Tube Networks. <i>Numerical Heat Transfer; Part A: Applications</i> , 2015 , 67, 513-530	2.3	11
85	Influence of ageing on human body blood flow and heat transfer: A detailed computational modelling study. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2018 , 34, e3120	2.6	11
84	Finite element modelling of electro-osmotic flows on unstructured meshes. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2008 , 18, 67-82	4.5	11
83	Computational instantaneous wave-free ratio (IFR) for patient-specific coronary artery stenoses using 1D network models. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2019 , 35, e3255	2.6	10
82	A unified fractional step method for compressible and incompressible flows, heat transfer and incompressible solid mechanics. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2008 , 18, 111-130	4.5	10
81	An implicit-explicit solution method for electro-osmotic flow through three-dimensional micro-channels. <i>International Journal for Numerical Methods in Engineering</i> , 2008 , 73, 1137-1152	2.4	10
80	Finite element modeling of a leaking third component migration from a heat source buried into a fluid saturated porous medium. <i>Mathematical and Computer Modelling</i> , 1999 , 29, 27-39		10
79	Three-dimensional transverse vibration of microtubules. <i>Journal of Applied Physics</i> , 2017 , 121, 234301	2.5	9
78	An artificial compressibility based fractional step method for solving time dependent incompressible flow equations. Temporal accuracy and similarity with a monolithic method. <i>Computational Mechanics</i> , 2013 , 51, 255-260	4	9
77	Non-Newtonian blood flow study in a model cavopulmonary vascular system. <i>International Journal for Numerical Methods in Fluids</i> , 2011 , 66, 269-283	1.9	9
76	Wall distance calculation using the Eikonal/Hamilton-Jacobi equations on unstructured meshes. <i>Engineering Computations</i> , 2010 , 27, 645-657	1.4	9
75	A comparative study on the performance of two time stepping schemes for convection in a fluid saturated porous medium. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2001 , 11, 308-328	4.5	9
74	An adaptive finite element procedure for solidification problems. <i>Heat and Mass Transfer</i> , 2000 , 36, 223-229		9
73	One-Dimensional Modelling of the Coronary Circulation. Application to Noninvasive Quantification of Fractional Flow Reserve (FFR). <i>Lecture Notes in Computational Vision and Biomechanics</i> , 2015 , 137-155 ^{0.3}		8

72	Perspectives on Sharing Models and Related Resources in Computational Biomechanics Research. <i>Journal of Biomechanical Engineering</i> , 2018 , 140,	2.1	8
71	Flow-induced ATP release in patient-specific arterial geometries--a comparative study of computational models. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2013 , 29, 1038-56	2.6	8
70	Transient analysis of a cylindrical solar water heater. <i>Energy Conversion and Management</i> , 1997 , 38, 1833-1840	1.8	8
69	A short note on Joule heating in electro-osmotic flows. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2008 , 18, 919-931	4.5	8
68	Electro-osmotic flow in microchannels. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2008 , 222, 753-759	1.3	8
67	Geometric Potential Force for the Deformable Model 2009 ,		8
66	Numerical evaluation of additively manufactured lattice architectures for heat sink applications. <i>International Journal of Thermal Sciences</i> , 2021 , 159, 106607	4.1	8
65	A novel porous media-based approach to outflow boundary resistances of 1D arterial blood flow models. <i>Biomechanics and Modeling in Mechanobiology</i> , 2019 , 18, 939-951	3.8	7
64	Synergy Between Intercellular Communication and Intracellular Ca(2+) Handling in Arrhythmogenesis. <i>Annals of Biomedical Engineering</i> , 2015 , 43, 1614-25	4.7	7
63	A generalised porous medium approach to study thermo-fluid dynamics in human eyes. <i>Medical and Biological Engineering and Computing</i> , 2018 , 56, 1823-1839	3.1	7
62	A numerical study of vortex shedding from a circular cylinder vibrating in the in-line direction. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2013 , 23, 1449-1462	4.5	7
61	Numerical Prediction of Heat Transfer Patterns in a Subject-Specific Human Upper Airway. <i>Journal of Heat Transfer</i> , 2012 , 134,	1.8	7
60	Numerical Investigation of an Electroosmotic Flow (EOF)Based Microcooling System. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2009 , 56, 275-292	1.3	7
59	Structure-property relation and relevance of beam theories for microtubules: a coupled molecular and continuum mechanics study. <i>Biomechanics and Modeling in Mechanobiology</i> , 2018 , 17, 339-349	3.8	7
58	Modelling accidental hypothermia effects on a human body under different pathophysiological conditions. <i>Medical and Biological Engineering and Computing</i> , 2017 , 55, 2155-2167	3.1	6
57	A multiscale active structural model of the arterial wall accounting for smooth muscle dynamics. <i>Journal of the Royal Society Interface</i> , 2018 , 15,	4.1	6
56	Level set segmentation with robust image gradient energy and statistical shape prior 2011 ,		6
55	Finite element analysis of pollutant transport in water-saturated soil. <i>Communications in Numerical Methods in Engineering</i> , 1998 , 14, 241-251		6

54	A novel numerical modelling approach for keratoplasty eye procedure. <i>Biomechanics and Modeling in Mechanobiology</i> , 2019 , 18, 1429-1442	3.8	5
53	Suprachoroidal shunts for treatment of glaucoma. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2018 , 28, 297-314	4.5	5
52	Effects of the cross-linkers on the buckling of microtubules in cells. <i>Journal of Biomechanics</i> , 2018 , 72, 167-172	2.9	5
51	Influences of domain extensions to a moderately stenosed patient-specific carotid bifurcation. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2011 , 21, 952-979	4.5	5
50	An investigation of pulsatile flow in a model cavo-pulmonary vascular system. <i>Communications in Numerical Methods in Engineering</i> , 2009 , 25, 1061-1083		5
49	Automatic IVUS media-adventitia border extraction using double interface graph cut segmentation 2011 ,		5
48	An artificial-dissipation-based fractional step scheme for upper-convected Maxwell (UCM) fluid flow past a circular cylinder. <i>International Journal for Numerical Methods in Fluids</i> , 2008 , 57, 1171-1187	1.9	5
47	An adaptive remeshing technique for laminar natural convection problems. <i>Heat and Mass Transfer</i> , 2002 , 38, 243-250	2.2	5
46	Electromechanical vibration of microtubules and its application in biosensors. <i>Journal of the Royal Society Interface</i> , 2019 , 16, 20180826	4.1	4
45	A novel, FFT-based one-dimensional blood flow solution method for arterial network. <i>Biomechanics and Modeling in Mechanobiology</i> , 2019 , 18, 1311-1334	3.8	4
44	Simulations on an undamped electromechanical vibration of microtubules in cytosol. <i>Applied Physics Letters</i> , 2019 , 114, 253702	3.4	4
43	Artificial intelligence approaches to predict coronary stenosis severity using non-invasive fractional flow reserve. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2020 , 234, 1337-1350	1.7	4
42	A physiologically realistic virtual patient database for the study of arterial haemodynamics. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2021 , 37, e3497	2.6	4
41	Novel semi-implicit, locally conservative Galerkin (SILCG) methods: Application to blood flow in a systemic circulation. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2018 , 332, 217-233	5.7	3
40	Effectiveness of flow obstructions in enhancing electro-osmotic flow. <i>Microfluidics and Nanofluidics</i> , 2017 , 21, 1	2.8	3
39	Introduction to the Equations of Fluid Dynamics and the Finite Element Approximation 2014 , 1-29		3
38	Hybrid LES [Review and assessment. <i>Sadhana - Academy Proceedings in Engineering Sciences</i> , 2007 , 32, 501-511	1	3
37	Machine learning for detection of stenoses and aneurysms: application in a physiologically realistic virtual patient database. <i>Biomechanics and Modeling in Mechanobiology</i> , 2021 , 20, 2097-2146	3.8	3

36	Biomechanics of cells and subcellular components: A comprehensive review of computational models and applications. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2021 , e3520	2.6	3
35	A dual time stepping approach to eliminate first order error in fractional step methods for incompressible flows. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2016 , 26, 556-570	4.5	2
34	A novel modelling approach to energy transport in a respiratory system. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2017 , 33, e2854	2.6	2
33	Turbulent Flows 2014 , 283-308		2
32	An Extended Computational Framework to Study Arterial Vasomotion and Its Links to Vascular Disease. <i>Lecture Notes in Applied and Computational Mechanics</i> , 2015 , 129-144	0.3	2
31	Atomistic Modeling of F-Actin Mechanical Responses and Determination of Mechanical Properties. <i>ACS Biomaterials Science and Engineering</i> , 2018 , 4, 2794-2803	5.5	2
30	A proof of concept study for machine learning application to stenosis detection. <i>Medical and Biological Engineering and Computing</i> , 2021 , 59, 2085-2114	3.1	2
29	An improved method of computing geometrical potential force (GPF) employed in the segmentation of 3D and 4D medical images. <i>Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization</i> , 2017 , 5, 287-296	0.9	1
28	Heat and fluid flow in electro-osmotically driven systems. <i>Energy Procedia</i> , 2017 , 126, 91-98	2.3	1
27	Incompressible Non-Newtonian Flows 2014 , 163-194		1
26	Incompressible Newtonian Laminar Flows 2014 , 127-161		1
25	Free Surface and Buoyancy Driven Flows 2014 , 195-224		1
24	Image Gradient Based Level Set Methods in 2D and 3D. <i>Lecture Notes in Computational Vision and Biomechanics</i> , 2013 , 101-120	0.3	1
23	Aortic Aneurysms: OSR, EVAR, Stent-Grafts, Migration and Endoleak: Current State of the Art and Analysis. <i>Studies in Mechanobiology, Tissue Engineering and Biomaterials</i> , 2013 , 63-92	0.5	1
22	Electro-osmotic Flow Based Cooling System For Microprocessors 2007 ,		1
21	Automating Fractional Flow Reserve (FFR) calculation from CT scans: A rapid workflow using unsupervised learning and computational fluid dynamics. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2021 , e3559	2.6	1
20	Convection in Porous Media 2005 , 240-264		0
19	Diagnostic performance of virtual fractional flow reserve derived from routine coronary angiography using segmentation free reduced order (1-dimensional) flow modelling. <i>JRSM Cardiovascular Disease</i> , 2020 , 9, 2048004020967578	1.1	0

18	On the poro-elastic models for microvascular blood flow resistance: An in vitro validation. <i>Journal of Biomechanics</i> , 2021 , 117, 110241	2.9	○
17	A generalised model for electro-osmotic flow in porous media. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2019 , 29, 4895-4924	4.5	○
16	Deep learning or interpolation for inverse modelling of heat and fluid flow problems?. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2021 , 31, 3036-3046	4.5	○
15	High performance, microarchitected, compact heat exchanger enabled by 3D printing. <i>Applied Thermal Engineering</i> , 2022 , 210, 118339	5.8	○
14	Mathematical Techniques for Circulatory Systems 2019 , 79-94		
13	Short Waves 2014 , 389-421		
12	Compressible High-Speed Gas Flow 2014 , 225-281		
11	Generalized Flow and Heat Transfer in Porous Media 2014 , 309-326		
10	Convection-Dominated Problems: Finite Element Approximations to the Convection-Diffusion-Reaction Equation 2014 , 31-85		
9	The Characteristic-Based Split (CBS) Algorithm: A General Procedure for Compressible and Incompressible Flow 2014 , 87-125		
8	Scan-Based Flow Modelling in Human Upper Airways. <i>Studies in Mechanobiology, Tissue Engineering and Biomaterials</i> , 2011 , 241-280	0.5	
7	A Numerical Model for Solid Oxide Fuel Cells 2006 , 293		
6	Convection Heat Transfer 2005 , 173-239		
5	Some Examples of Fluid Flow and Heat Transfer Problems 2005 , 265-298		
4	The Finite Element Method 2005 , 38-101		
3	The Characteristic-Based-Split Method for 3D Incompressible Flows on Unstructured Grids 2003 , 381-386		
2	Segmenting Carotid in CT Using Geometric Potential Field Deformable Model. <i>Springer Proceedings in Mathematics and Statistics</i> , 2013 , 149-162	0.2	
1	Efficient Geometrical Potential Force Computation for Deformable Model Segmentation. <i>Lecture Notes in Computer Science</i> , 2013 , 104-113	0.9	

