Perumal Nithiarasu

List of Publications by Year
in descending order

171	4,743	136740	138251
papers	citations	32 h-index	58 g-index

186	186	186	2905
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Natural convective heat transfer in a fluid saturated variable porosity medium. International Journal of Heat and Mass Transfer, 1997, 40, 3955-3967.	2.5	488
2	A 1D arterial blood flow model incorporating ventricular pressure, aortic valve and regional coronary flow using the locally conservative Galerkin (LCG) method. Communications in Numerical Methods in Engineering, 2008, 24, 367-417.	1.3	183
3	The characteristic-based-split procedure: an efficient and accurate algorithm for fluid problems. International Journal for Numerical Methods in Fluids, 1999, 31, 359-392.	0.9	167
4	An efficient artificial compressibility (AC) scheme based on the characteristic based split (CBS) method for incompressible flows. International Journal for Numerical Methods in Engineering, 2003, 56, 1815-1845.	1.5	163
5	A benchmark study of numerical schemes for oneâ€dimensional arterial blood flow modelling. International Journal for Numerical Methods in Biomedical Engineering, 2015, 31, e02732.	1.0	144
6	The Characteristic-Based Split (CBS) schemeâ€"a unified approach to fluid dynamics. International Journal for Numerical Methods in Engineering, 2006, 66, 1514-1546.	1.5	112
7	An improved unsteady, unstructured, artificial compressibility, finite volume scheme for viscous incompressible flows: Part I. Theory and implementation. International Journal for Numerical Methods in Engineering, 2002, 54, 695-714.	1.5	104
8	DOUBLE-DIFFUSIVE NATURAL CONVECTION IN AN ENCLOSURE FILLED WITH FLUID-SATURATED POROUS MEDIUM: A GENERALIZED NON-DARCY APPROACH. Numerical Heat Transfer; Part A: Applications, 1996, 30, 413-426.	1.2	99
9	Characteristicâ€basedâ€split (CBS) algorithm for incompressible flow problems with heat transfer. International Journal of Numerical Methods for Heat and Fluid Flow, 1998, 8, 969-990.	1.6	85
10	A new semi-implicit time stepping procedure for buoyancy driven flow in a fluid saturated porous medium. Computer Methods in Applied Mechanics and Engineering, 1998, 165, 147-154.	3.4	66
11	Three-dimensional incompressible flow calculations using the characteristic based split(CBS) scheme. International Journal for Numerical Methods in Fluids, 2004, 44, 1207-1229.	0.9	65
12	An arbitrary Lagrangian Eulerian (ALE) formulation for free surface flows using the characteristic-based split (CBS) scheme. International Journal for Numerical Methods in Fluids, 2005, 48, 1415-1428.	0.9	64
13	High performance, microarchitected, compact heat exchanger enabled by 3D printing. Applied Thermal Engineering, 2022, 210, 118339.	3.0	59
14	Experimental investigation of the performance of a counter-flow, packed-bed mechanical cooling tower. Energy, 1998, 23, 943-947.	4.5	58
15	Analysis of an explicit and matrix free fractional step method for incompressible flows. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 5537-5551.	3.4	58
16	An artificial compressibility based characteristic based split (CBS) scheme for steady and unsteady turbulent incompressible flows. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 2961-2982.	3.4	57
17	Explicit and semi-implicit CBS procedures for incompressible viscous flows. International Journal for Numerical Methods in Engineering, 2006, 66, 1618-1640.	1.5	55
18	Steady flow through a realistic human upper airway geometry. International Journal for Numerical Methods in Fluids, 2008, 57, 631-651.	0.9	54

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19	Estimating the accuracy of a reducedâ€order model for the calculation of fractional flow reserve (FFR). International Journal for Numerical Methods in Biomedical Engineering, 2018, 34, e2908.	1.0	54
20	An improved unsteady, unstructured, artificial compressibility, finite volume scheme for viscous incompressible flows: Part II. Application. International Journal for Numerical Methods in Engineering, 2002, 54, 715-729.	1.5	52
21	Convective heat transfer in axisymmetric porous bodies. International Journal of Numerical Methods for Heat and Fluid Flow, 1995, 5, 829-837.	1.6	51
22	Towards enabling a cardiovascular digital twin for human systemic circulation using inverse analysis. Biomechanics and Modeling in Mechanobiology, 2021, 20, 449-465.	1.4	51
23	A semiâ€active human digital twin model for detecting severity of carotid stenoses from head vibrationâ€"A coupled computational mechanics and computer vision method. International Journal for Numerical Methods in Biomedical Engineering, 2019, 35, e3180.	1.0	48
24	Natural convection in porous mediumâ€fluid interface problems â€•A finite element analysis by using the CBS procedure. International Journal of Numerical Methods for Heat and Fluid Flow, 2001, 11, 473-490.	1.6	47
25	Adaptive mesh generation for fluid mechanics problems. International Journal for Numerical Methods in Engineering, 2000, 47, 629-662.	1.5	46
26	Biofluid Dynamics. , 2014, , 451-484.		46
27	Double-diffusive natural convection in a fluid saturated porous cavity with a freely convecting wall. International Communications in Heat and Mass Transfer, 1997, 24, 1121-1130.	2.9	42
28	Shock capturing viscosities for the general fluid mechanics algorithm. , 1998, 28, 1325-1353.		42
29	Effect of porosity on natural convective heat transfer in a fluid saturated porous medium. International Journal of Heat and Fluid Flow, 1998, 19, 56-58.	1.1	42
30	Finite element modelling of flow, heat and mass transfer in fluid saturated porous media. Archives of Computational Methods in Engineering, 2002, 9, 3-42.	6.0	41
31	A fully explicit characteristic based split(CBS) scheme for viscoelastic flow calculations. International Journal for Numerical Methods in Engineering, 2004, 60, 949-978.	1.5	41
32	Microscopic and macroscopic approach for natural convection in enclosures filled with fluid saturated porous medium. International Journal of Numerical Methods for Heat and Fluid Flow, 2003, 13, 862-886.	1.6	39
33	Data-driven inverse modelling through neural network (deep learning) and computational heat transfer. Computer Methods in Applied Mechanics and Engineering, 2020, 369, 113217.	3.4	38
34	Non-Darcy natural convection in a hydrodynamically and thermally anisotropic porous medium. Computer Methods in Applied Mechanics and Engineering, 2000, 188, 413-430.	3.4	37
35	What does not kill a tumour may make it stronger: In silico insights into chemotherapeutic drug resistance. Journal of Theoretical Biology, 2018, 454, 253-267.	0.8	37
36	A hierarchical mesh refinement technique for global 3-D spherical mantle convection modelling. Geoscientific Model Development, 2013, 6, 1095-1107.	1.3	36

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37	Nonâ€invasive coronary CT angiographyâ€derived fractional flow reserve: A benchmark study comparing the diagnostic performance of four different computational methodologies. International Journal for Numerical Methods in Biomedical Engineering, 2019, 35, e3235.	1.0	35
38	Modelling pipeline for subjectâ€specific arterial blood flowâ€"A review. International Journal for Numerical Methods in Biomedical Engineering, 2011, 27, 1868-1910.	1.0	34
39	On stabilization of the CBS algorithm: Internal and external time steps. International Journal for Numerical Methods in Engineering, 2000, 48, 875-880.	1.5	33
40	Laminar and turbulent flow calculations through a model human upper airway using unstructured meshes. Communications in Numerical Methods in Engineering, 2006, 23, 1057-1069.	1.3	33
41	Non-Darcy double-diffusive natural convection in axisymmetric fluid saturated porous cavities. Heat and Mass Transfer, 1997, 32, 427-433.	1.2	32
42	Finite element analysis of transient natural convection in an oddâ€shaped enclosure. International Journal of Numerical Methods for Heat and Fluid Flow, 1998, 8, 199-216.	1.6	32
43	Investigations into the applicability of adaptive finite element methods to two-dimensional infinite Prandtl number thermal and thermochemical convection. Geochemistry, Geophysics, Geosystems, 2007, 8, n/a-n/a.	1.0	31
44	Numerical investigation of buoyancy driven flow in a fluid saturated non-Darcian porous medium. International Journal of Heat and Mass Transfer, 1999, 42, 1205-1215.	2.5	30
45	An improved baseline model for a human arterial network to study the impact of aneurysms on pressureâ€flow waveforms. International Journal for Numerical Methods in Biomedical Engineering, 2012, 28, 1224-1246.	1.0	30
46	Numerical evaluation of additively manufactured lattice architectures for heat sink applications. International Journal of Thermal Sciences, 2021, 159, 106607.	2.6	30
47	Artificial compressibility based CBS solutions for double diffusive natural convection in cavities. International Journal of Numerical Methods for Heat and Fluid Flow, 2013, 23, 205-225.	1.6	29
48	A novel method for non-invasively detecting the severity and location of aortic aneurysms. Biomechanics and Modeling in Mechanobiology, 2017, 16, 1225-1242.	1.4	28
49	Steady and unsteady incompressible flow in a double driven cavity using the artificial compressibility (AC)-based characteristic-based split (CBS) scheme. International Journal for Numerical Methods in Engineering, 2005, 63, 380-397.	1.5	27
50	A robust model and numerical approach for solving solid oxide fuel cell (SOFC) problems. International Journal of Numerical Methods for Heat and Fluid Flow, 2008, 18, 811-834.	1.6	27
51	Geometrically Induced Force Interaction for Three-Dimensional Deformable Models. IEEE Transactions on Image Processing, 2011, 20, 1373-1387.	6.0	27
52	On boundary conditions of the characteristic based split (CBS) algorithm for fluid dynamics. International Journal for Numerical Methods in Engineering, 2002, 54, 523-536.	1.5	24
53	A SIMPLE LOCALLY CONSERVATIVE GALERKIN (LCG) FINITE-ELEMENT METHOD FOR TRANSIENT CONSERVATION EQUATIONS. Numerical Heat Transfer, Part B: Fundamentals, 2004, 46, 357-370.	0.6	24
54	Segmentation of biomedical images using active contour model with robust image feature and shape prior. International Journal for Numerical Methods in Biomedical Engineering, 2014, 30, 232-248.	1.0	23

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55	A comparative study of fractional step method in its quasi-implicit, semi-implicit and fully-explicit forms for incompressible flows. International Journal of Numerical Methods for Heat and Fluid Flow, 2016, 26, 595-623.	1.6	23
56	An advanced computational bioheat transfer model for a human body with an embedded systemic circulation. Biomechanics and Modeling in Mechanobiology, 2016, 15, 1173-1190.	1.4	23
57	Modelling electro-osmotic flow in porous media: a review. International Journal of Numerical Methods for Heat and Fluid Flow, 2018, 28, 472-497.	1.6	23
58	Numerical comparison of CBS and SGS as stabilization techniques for the incompressible Navierâ€“Stokes equations. International Journal for Numerical Methods in Engineering, 2006, 66, 1672-1689.	1.5	22
59	Application of a locally conservative Galerkin (LCG) method for modelling blood flow through a patientâ€specific carotid bifurcation. International Journal for Numerical Methods in Fluids, 2010, 64, 1274-1295.	0.9	21
60	Semiâ€automatic surface and volume mesh generation for subjectâ€specific biomedical geometries. International Journal for Numerical Methods in Biomedical Engineering, 2012, 28, 133-157.	1.0	21
61	The locally conservative Galerkin (LCG) method for solving the incompressible Navierâ€“Stokes equations. International Journal for Numerical Methods in Fluids, 2008, 57, 1771-1792.	0.9	20
62	Artificial Compressibility-Based CBS Scheme for the Solution of the Generalized Porous Medium Model. Numerical Heat Transfer, Part B: Fundamentals, 2009, 55, 196-218.	0.6	20
63	Computational instantaneous waveâ€free ratio (IFR) for patientâ€specific coronary artery stenoses using 1D network models. International Journal for Numerical Methods in Biomedical Engineering, 2019, 35, e3255.	1.0	20
64	A novel single domain approach for numerical modelling solid oxide fuel cells. International Journal of Numerical Methods for Heat and Fluid Flow, 2010, 20, 587-612.	1.6	19
65	Influence of ageing on human body blood flow and heat transfer: A detailed computational modelling study. International Journal for Numerical Methods in Biomedical Engineering, 2018, 34, e3120.	1.0	19
66	Forced convection heat transfer from solder balls on a printed circuit board using the characteristic based split (CBS) scheme. International Journal of Numerical Methods for Heat and Fluid Flow, 2005, 15, 73-95.	1.6	18
67	Adaptive finite element methods in geodynamics. International Journal of Numerical Methods for Heat and Fluid Flow, 2008, 18, 1015-1035.	1.6	18
68	Machine learning for detection of stenoses and aneurysms: application in a physiologically realistic virtual patient database. Biomechanics and Modeling in Mechanobiology, 2021, 20, 2097-2146.	1.4	18
69	Influences of element size and variable smoothing on inviscid compressible flow solution. International Journal of Numerical Methods for Heat and Fluid Flow, 2005, 15, 420-428.	1.6	17
70	An element-wise, locally conservative Galerkin (LCG) method for solving diffusion and convectionâ€“diffusion problems. International Journal for Numerical Methods in Engineering, 2008, 73, 642-664.	1.5	17
71	An experimental study on an electro-osmotic flow-based silicon heat spreader. Microfluidics and Nanofluidics, 2010, 9, 787-795.	1.0	17
72	A novel porous media-based approach to outflow boundary resistances of 1D arterial blood flow models. Biomechanics and Modeling in Mechanobiology, 2019, 18, 939-951.	1.4	17

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73	A Matrix Free Fractional Step Method for Static and Dynamic Incompressible Solid Mechanics. International Journal for Computational Methods in Engineering Science and Mechanics, 2006, 7, 369-380.	1.4	16
74	Computational flow studies in a subjectâ€specific human upper airway using a oneâ€equation turbulence model. Influence of the nasal cavity. International Journal for Numerical Methods in Engineering, 2011, 87, 96-114.	1.5	16
75	Forced convection heat transfer within a moderatelyâ€stenosed, patientâ€specific carotid bifurcation. International Journal of Numerical Methods for Heat and Fluid Flow, 2012, 22, 1120-1134.	1.6	16
76	Perspectives on Sharing Models and Related Resources in Computational Biomechanics Research. Journal of Biomechanical Engineering, 2018, 140, .	0.6	16
77	Buoyancy driven flow in a non-Darcian, fluid-saturated porous enclosure subjected to uniform heat flux-a numerical study. Communications in Numerical Methods in Engineering, 1999, 15, 765-776.	1.3	14
78	Patient-specific blood flow simulation through an aneurysmal thoracic aorta with a folded proximal neck. International Journal for Numerical Methods in Biomedical Engineering, 2011, 27, 1167-1184.	1.0	14
79	Accelerating incompressible flow calculations using a quasi-implicit scheme: local and dual time stepping approaches. Computational Mechanics, 2012, 50, 687-693.	2.2	14
80	The characteristicâ€based split (CBS) scheme for viscoelastic flow past a circular cylinder. International Journal for Numerical Methods in Fluids, 2008, 57, 157-176.	0.9	13
81	Flowâ€induced ATP release in patientâ€specific arterial geometries â€“ a comparative study of computational models. International Journal for Numerical Methods in Biomedical Engineering, 2013, 29, 1038-1056.	1.0	13
82	A multiscale active structural model of the arterial wall accounting for smooth muscle dynamics. Journal of the Royal Society Interface, 2018, 15, 20170732.	1.5	13
83	A generalised porous medium approach to study thermo-fluid dynamics in human eyes. Medical and Biological Engineering and Computing, 2018, 56, 1823-1839.	1.6	13
84	An adaptive finite element procedure for solidification problems. Heat and Mass Transfer, 2000, 36, 223-229.	1.2	12
85	Finite element modelling of electroâ€osmotic flows on unstructured meshes. International Journal of Numerical Methods for Heat and Fluid Flow, 2008, 18, 67-82.	1.6	12
86	A multidimensional dynamic quantification tool for the mitral valve. Interactive Cardiovascular and Thoracic Surgery, 2015, 21, 481-487.	0.5	12
87	A Robust Finite Element Modeling Approach to Conjugate Heat Transfer in Flexible Elastic Tubes and Tube Networks. Numerical Heat Transfer; Part A: Applications, 2015, 67, 513-530.	1.2	12
88	Nonâ€Newtonian blood flow study in a model cavopulmonary vascular system. International Journal for Numerical Methods in Fluids, 2011, 66, 269-283.	0.9	11
89	Level set segmentation with robust image gradient energy and statistical shape prior. , 2011, , .		11
90	One-Dimensional Modelling of the Coronary Circulation. Application to Noninvasive Quantification of Fractional Flow Reserve (FFR). Lecture Notes in Computational Vision and Biomechanics, 2015, , 137-155.	0.5	11

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91	A physiologically realistic virtual patient database for the study of arterial haemodynamics. International Journal for Numerical Methods in Biomedical Engineering, 2021, 37, e3497.	1.0	11
92	Transient analysis of a cylindrical solar water heater. Energy Conversion and Management, 1997, 38, 1833-1840.	4.4	10
93	Finite element modeling of a leaking third component migration from a heat source buried into a fluid saturated porous medium. Mathematical and Computer Modelling, 1999, 29, 27-39.	2.0	10
94	A comparative study on the performance of two time stepping schemes for convection in a fluid saturated porous medium. International Journal of Numerical Methods for Heat and Fluid Flow, 2001, 11, 308-328.	1.6	10
95	An implicitâ€“explicit solution method for electro-osmotic flow through three-dimensional micro-channels. International Journal for Numerical Methods in Engineering, 2008, 73, 1137-1152.	1.5	10
96	A unified fractional step method for compressible and incompressible flows, heat transfer and incompressible solid mechanics. International Journal of Numerical Methods for Heat and Fluid Flow, 2008, 18, 111-130.	1.6	10
97	Wall distance calculation using the Eikonal/Hamiltonâ€Jacobi equations on unstructured meshes. Engineering Computations, 2010, 27, 645-657.	0.7	10
98	A novel numerical modelling approach for keratoplasty eye procedure. Biomechanics and Modeling in Mechanobiology, 2019, 18, 1429-1442.	1.4	10
99	Biomechanics of cells and subcellular components: A comprehensive review of computational models and applications. International Journal for Numerical Methods in Biomedical Engineering, 2021, 37, e3520.	1.0	10
100	A short note on Joule heating in electroâ€osmotic flows. International Journal of Numerical Methods for Heat and Fluid Flow, 2008, 18, 919-931.	1.6	9
101	Electro-osmotic flow in microchannels. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2008, 222, 753-759.	1.1	9
102	An artificial compressibility based fractional step method for solving time dependent incompressible flow equations. Temporal accuracy and similarity with a monolithic method. Computational Mechanics, 2013, 51, 255-260.	2.2	9
103	Synergy Between Intercellular Communication and Intracellular Ca2+ Handling in Arrhythmogenesis. Annals of Biomedical Engineering, 2015, 43, 1614-1625.	1.3	9
104	Three-dimensional transverse vibration of microtubules. Journal of Applied Physics, 2017, 121, .	1.1	9
105	Artificial intelligence approaches to predict coronary stenosis severity using non-invasive fractional flow reserve. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2020, 234, 1337-1350.	1.0	9
106	Deep learning or interpolation for inverse modelling of heat and fluid flow problems?. International Journal of Numerical Methods for Heat and Fluid Flow, 2021, 31, 3036-3046.	1.6	9
107	Geometric Potential Force for the Deformable Model. , 2009, , .		9
108	Hybrid LES â€” Review and assessment. Sadhana - Academy Proceedings in Engineering Sciences, 2007, 32, 501-511.	0.8	8

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109	Numerical Investigation of an Electroosmotic Flow (EOF)â€“Based Microcooling System. Numerical Heat Transfer, Part B: Fundamentals, 2009, 56, 275-292.	0.6	8
110	Numerical Prediction of Heat Transfer Patterns in a Subject-Specific Human Upper Airway. Journal of Heat Transfer, 2012, 134, .	1.2	8
111	Modelling accidental hypothermia effects on a human body under different pathophysiological conditions. Medical and Biological Engineering and Computing, 2017, 55, 2155-2167.	1.6	8
112	Electromechanical vibration of microtubules and its application in biosensors. Journal of the Royal Society Interface, 2019, 16, 20180826.	1.5	8
113	A novel, FFT-based one-dimensional blood flow solution method for arterial network. Biomechanics and Modeling in Mechanobiology, 2019, 18, 1311-1334.	1.4	8
114	A proof of concept study for machine learning application to stenosis detection. Medical and Biological Engineering and Computing, 2021, 59, 2085-2114.	1.6	8
115	An artificialâ€dissipationâ€based fractional step scheme for upperâ€convected Maxwell (UCM) fluid flow past a circular cylinder. International Journal for Numerical Methods in Fluids, 2008, 57, 1171-1187.	0.9	7
116	Influences of domain extensions to a moderately stenosed patientâ€specific carotid bifurcation. International Journal of Numerical Methods for Heat and Fluid Flow, 2011, 21, 952-979.	1.6	7
117	Automatic IVUS media-adventitia border extraction using double interface graph cut segmentation. , 2011, , .		7
118	A numerical study of vortex shedding from a circular cylinder vibrating in the in-line direction. International Journal of Numerical Methods for Heat and Fluid Flow, 2013, 23, 1449-1462.	1.6	7
119	Structureâ€“property relation and relevance of beam theories for microtubules: a coupled molecular and continuum mechanics study. Biomechanics and Modeling in Mechanobiology, 2018, 17, 339-349.	1.4	7
120	Modelling ozone disinfection process for creating COVID-19 secure spaces. International Journal of Numerical Methods for Heat and Fluid Flow, 2022, 32, 353-363.	1.6	7
121	Finite element analysis of pollutant transport in water-saturated soil. Communications in Numerical Methods in Engineering, 1998, 14, 241-251.	1.3	6
122	An adaptive remeshing technique for laminar natural convection problems. Heat and Mass Transfer, 2002, 38, 243-250.	1.2	6
123	An investigation of pulsatile flow in a model cavoâ€pulmonary vascular system. Communications in Numerical Methods in Engineering, 2009, 25, 1061-1083.	1.3	6
124	Effects of the cross-linkers on the buckling of microtubules in cells. Journal of Biomechanics, 2018, 72, 167-172.	0.9	6
125	Special issue on patient-specific computational modelling. International Journal for Numerical Methods in Biomedical Engineering, 2010, 26, 1-2.	1.0	5
126	Introduction to the Equations of Fluid Dynamics and the Finite Element Approximation. , 2014, , 1-29.		5

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127	Effectiveness of flow obstructions in enhancing electro-osmotic flow. Microfluidics and Nanofluidics, 2017, 21, 1.	1.0	5
128	Suprachoroidal shunts for treatment of glaucoma. International Journal of Numerical Methods for Heat and Fluid Flow, 2018, 28, 297-314.	1.6	5
129	Atomistic Modeling of F-Actin Mechanical Responses and Determination of Mechanical Properties. ACS Biomaterials Science and Engineering, 2018, 4, 2794-2803.	2.6	5
130	Novel semi-implicit, locally conservative Galerkin (SILCG) methods: Application to blood flow in a systemic circulation. Computer Methods in Applied Mechanics and Engineering, 2018, 332, 217-233.	3.4	4
131	Simulations on an undamped electromechanical vibration of microtubules in cytosol. Applied Physics Letters, 2019, 114, .	1.5	4
132	Electro-osmotic Flow Based Cooling System For Microprocessors. , 2007, , .		3
133	Aortic Aneurysms: OSR, EVAR, Stent-Grafts, Migration and Endoleakâ€"Current State of the Art and Analysis. Studies in Mechanobiology, Tissue Engineering and Biomaterials, 2013, , 63-92.	0.7	3
134	A novel modelling approach to energy transport in a respiratory system. International Journal for Numerical Methods in Biomedical Engineering, 2017, 33, e2854.	1.0	3
135	An Extended Computational Framework to Study Arterial Vasomotion and Its Links to Vascular Disease. Lecture Notes in Applied and Computational Mechanics, 2015, , 129-144.	2.0	3
136	Automating fractional flow reserve (FFR) calculation from CT scans: A rapid workflow using unsupervised learning and computational fluid dynamics. International Journal for Numerical Methods in Biomedical Engineering, 2022, 38, e3559.	1.0	3
137	Turbulent Flows. , 2014, , 283-308.		2
138	A dual time stepping approach to eliminate first order error in fractional step methods for incompressible flows. International Journal of Numerical Methods for Heat and Fluid Flow, 2016, 26, 556-570.	1.6	2
139	Mathematical Techniques for Circulatory Systems. , 2019, , 79-94.		2
140	Diagnostic performance of virtual fractional flow reserve derived from routine coronary angiography using segmentation free reduced order (1-dimensional) flow modelling. JRSM Cardiovascular Disease, 2020, 9, 204800402096757.	0.4	2
141	On the poro-elastic models for microvascular blood flow resistance: An in vitro validation. Journal of Biomechanics, 2021, 117, 110241.	0.9	2
142	Predicting the airborne microbial transmission via human breath particles using a gated recurrent units neural network. International Journal of Numerical Methods for Heat and Fluid Flow, 2022, 32, 2964-2981.	1.6	2
143	Image Gradient Based Level Set Methods in 2D and 3D. Lecture Notes in Computational Vision and Biomechanics, 2013, , 101-120.	0.5	1
144	Incompressible Non-Newtonian Flows. , 2014, , 163-194.		1

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145	Incompressible Newtonian Laminar Flows. , 2014, , 127-161.		1
146	Free Surface and Buoyancy Driven Flows. , 2014, , 195-224.		1
147	Convection-Dominated Problems: Finite Element Approximations to the Convection-Diffusion-Reaction Equation. , 2014, , 31-85.		1
148	An improved method of computing geometrical potential force (GPF) employed in the segmentation of 3D and 4D medical images. Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization, 2017, 5, 287-296.	1.3	1
149	Heat and fluid flow in electro-osmotically driven systems. Energy Procedia, 2017, 126, 91-98.	1.8	1
150	A generalised model for electro-osmotic flow in porous media. International Journal of Numerical Methods for Heat and Fluid Flow, 2019, 29, 4895-4924.	1.6	1
151	Patient-Specific Modelling of Cardiovascular and Respiratory Flow Problems â€“ Challenges. , 2010, , 3-3.		1
152	Postprocessing. , 2005, , 392-394.		0
153	A Numerical Model for Solid Oxide Fuel Cells. , 2006, , 293.		0
154	Special issue on biofluid dynamics. International Journal for Numerical Methods in Fluids, 2008, 57, 473-474.	0.9	0
155	Strategies for Modeling Turbulent Flows in Electronics. IEEE Semiconductor Thermal Measurement and Management Symposium, 2008, , .	0.0	0
156	Unsteady CFD modelling of turbulent flows for electronics. , 2008, , .		0
157	The Finite Element Method for Microchannel Flow and Heat Transfer Calculations. , 2010, , .		0
158	Scan-Based Flow Modelling in Human Upper Airways. Studies in Mechanobiology, Tissue Engineering and Biomaterials, 2011, , 241-280.	0.7	0
159	Extracting 3D Structures from Biomedical Data. , 2011, , .		0
160	Special issue on patient specific modelling (PSM). International Journal for Numerical Methods in Biomedical Engineering, 2013, 29, 147-149.	1.0	0
161	Short Waves. , 2014, , 389-421.		0
162	Compressible High-Speed Gas Flow. , 2014, , 225-281.		0

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163	Generalized Flow and Heat Transfer in Porous Media. , 2014, , 309-326.		0
164	The Characteristic-Based Split (CBS) Algorithm: A General Procedure for Compressible and Incompressible Flow. , 2014, , 87-125.		0
165	Red blood cell (RBC) aggregation and its influence on non-Newtonian nature of blood in microvasculature. Journal of Modeling in Mechanics and Materials, 2017, 1, .	1.8	0
166	The Characteristic-Based-Split Method for 3D Incompressible Flows on Unstructured Grids. , 2003, , 381-386.		0
167	Selected papers from ThermaCOMP09, First International Conference on Computational Methods for Thermal Problems, 8-10 September 2009, Napoli, Italy - Part I. International Journal of Numerical Methods for Heat and Fluid Flow, 2010, 20, .	1.6	0
168	Real-time Interactive Steerable Scientific Visualisation of Free Surface Flow in the Context of Synthetic Vision. Defence Science Journal, 2011, 61, 299-305.	0.5	0
169	Segmenting Carotid in CT Using Geometric Potential Field Deformable Model. Springer Proceedings in Mathematics and Statistics, 2013, , 149-162.	0.1	0
170	Efficient Geometrical Potential Force Computation for Deformable Model Segmentation. Lecture Notes in Computer Science, 2013, , 104-113.	1.0	0
171	Editorial: Professor Kannahalli Narasimha Shastri Seetharamu â€“ a tribute to an outstanding computational heat transfer expert. International Journal of Numerical Methods for Heat and Fluid Flow, 2022, 32, 1417-1420.	1.6	0