Georgios Bourantas

List of Publications by Year
in descending order

34 papers	756 citations	687363 13 h-index	526287 27 g-index
36 all docs	36 docs citations	36 times ranked	823 citing authors

#	ARTICLE	IF	CITATIONS
1	Automatic vessel lumen segmentation and stent strut detection in intravascular optical coherence tomography. Medical Physics, 2011, 39, 503-513.	3.0	96
2	MHD natural-convection flow in an inclined square enclosure filled with a micropolar-nanofluid. International Journal of Heat and Mass Transfer, 2014, 79, 930-944.	4.8	92
3	Modeling the natural convective flow of micropolar nanofluids. International Journal of Heat and Mass Transfer, 2014, 68, 35-41.	4.8	86
4	A Predictive 3D Multi-Scale Model of Biliary Fluid Dynamics in the Liver Lobule. Cell Systems, 2017, 4, 277-290.e9.	6.2	79
5	Suite of meshless algorithms for accurate computation of soft tissue deformation for surgical simulation. Medical Image Analysis, 2019, 56, 152-171.	11.6	52
6	Computational representation and hemodynamic characterization of in vivo acquired severe stenotic renal artery geometries using turbulence modeling. Medical Engineering and Physics, 2008, 30, 647-660.	1.7	36
7	An accurate, stable and efficient domain-type meshless method for the solution of MHD flow problems. Journal of Computational Physics, 2009, 228, 8135-8160.	3.8	35
8	Using DC PSE operator discretization in Eulerian meshless collocation methods improves their robustness in complex geometries. Computers and Fluids, 2016, 136, 285-300.	2.5	28
9	Localized meshless point collocation method for time-dependent magnetohydrodynamics flow through pipes under a variety of wall conductivity conditions. Computational Mechanics, 2011, 47, 137-159.	4.0	27
10	Truly meshless localized type techniques for the steady-state heat conduction problems for isotropic and functionally graded materials. Engineering Analysis With Boundary Elements, 2011, 35, 452-464.	3.7	26
11	A meshless scheme for incompressible fluid flow using a velocity–pressure correction method. Computers and Fluids, 2013, 88, 189-199.	2.5	20
12	Real-time tumor ablation simulation based on the dynamic mode decomposition method. Medical Physics, 2014, 41, 053301.	3.0	20
13	Strong-form approach to elasticity: Hybrid finite difference-meshless collocation method (FDMCM). Applied Mathematical Modelling, 2018, 57, 316-338.	4.2	16
14	Meshless point collocation for the numerical solution of Navier–Stokes flow equations inside an evaporating sessile droplet. Engineering Analysis With Boundary Elements, 2012, 36, 240-247.	3.7	13
15	A hybrid particle-mesh method for incompressible active polar viscous gels. Journal of Computational Physics, 2015, 291, 334-361.	3.8	13
16	Transient thermal conduction with variable conductivity using the Meshless Local Petrov–Galerkin method. Applied Mathematics and Computation, 2016, 272, 676-686.	2.2	13
17	Natural convection of nanofluids flow with "nanofluid"-oriented"models of thermal conductivity and dynamic viscosity in the presence of heat source. International Journal of Numerical Methods for Heat and Fluid Flow, 2013, 23, 248-274.	2.8	12
18	An implicit potential method along with a meshless technique for incompressible fluid flows for regular and irregular geometries in 2D and 3D. Engineering Analysis With Boundary Elements, 2017, 77, 97-111.	3.7	11

#	Article	IF	Citations
19	Two-Phase Biofluid Flow Model for Magnetic Drug Targeting. Symmetry, 2020, 12, 1083.	2.2	11
20	An implicit meshless scheme for the solution of transient non-linear Poisson-type equations. Engineering Analysis With Boundary Elements, 2013, 37, 1117-1126.	3.7	10
21	Modeling the Natural Convection Flow in a Square Porous Enclosure Filled with a Micropolar Nanofluid under Magnetohydrodynamic Conditions. Applied Sciences (Switzerland), 2020, 10, 1633.	2.5	10
22	An Explicit Meshless Point Collocation Solver for Incompressible Navier-Stokes Equations. Fluids, 2019, 4, 164.	1.7	9
23	Cellâ€based maximum entropy approximants for threeâ€dimensional domains: Application in large strain elastodynamics using the meshless total Lagrangian explicit dynamics method. International Journal for Numerical Methods in Engineering, 2020, 121, 477-491.	2.8	8
24	Latticeâ€Boltzmann and meshless point collocation solvers for fluid flow and conjugate heat transfer. International Journal for Numerical Methods in Fluids, 2012, 70, 1428-1442.	1.6	7
25	Numerical solution of the incompressible Navierâ€"Stokes equations in primitive variables and velocityâ€"vorticity formulation. Applied Mathematics and Computation, 2013, 222, 575-588.	2.2	6
26	An explicit meshless point collocation method for electrically driven magnetohydrodynamics (MHD) flow. Applied Mathematics and Computation, 2019, 348, 215-233.	2.2	6
27	Computer simulation of tumour <scp>resectionâ€induced</scp> brain deformation by a meshless approach. International Journal for Numerical Methods in Biomedical Engineering, 2022, 38, e3539.	2.1	4
28	Modeling Proteolytically Driven Tumor Lymphangiogenesis. Advances in Experimental Medicine and Biology, 2016, 936, 107-136.	1.6	3
29	Numerical simulation of the unsteady non-linear heat transfer problems. Application on nanosecond laser annealing of Si. Applied Surface Science, 2012, 258, 7266-7273.	6.1	2
30	Efficiency of the meshless local Petrov-Galerkin method with moving least squares approximation for thermal conduction applications. , 2013, , .		2
31	Micropolar Blood Flow in a Magnetic Field. Fluids, 2021, 6, 133.	1.7	1
32	Hemodynamics of anterior circulation intracranial aneurysms with daughter blebs: investigating the multidirectionality of blood flow fields. Computer Methods in Biomechanics and Biomedical Engineering, 2023, 26, 113-125.	1.6	1
33	Simulation of intracranial hemodynamics by an efficient and accurate immersed boundary scheme. International Journal for Numerical Methods in Biomedical Engineering, 2021, , e3524.	2.1	0
34	SU-FF-I-91: Computational Representation of In-Vivo Acquired Stenotic Renal Artery Geometries Using Turbulence Modeling. Medical Physics, 2006, 33, 2017-2018.	3.0	0