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List of Publications by Year
in descending order

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85 papers	2,114 citations	236925 25 h-index	265206 42 g-index
85 all docs	85 docs citations	85 times ranked	1332 citing authors

#	Article	IF	Citations
1	The numerical solution of second-order boundary-value problems by collocation method with the Haar wavelets. Mathematical and Computer Modelling, 2010, 52, 1577-1590.	2.0	136
2	Solution of potential flow problems by the modified method of fundamental solutions: Formulations with the single layer and the double layer fundamental solutions. Engineering Analysis With Boundary Elements, 2009, 33, 1374-1382.	3.7	135
3	Meshless local radial basis function collocation method for convectiveâ€diffusive solidâ€liquid phase change problems. International Journal of Numerical Methods for Heat and Fluid Flow, 2006, 16, 617-640.	2.8	134
4	Double-flow focused liquid injector for efficient serial femtosecond crystallography. Scientific Reports, 2017, 7, 44628.	3.3	90
5	Wavelets collocation methods for the numerical solution of elliptic BV problems. Applied Mathematical Modelling, 2013, 37, 676-694.	4.2	79
6	Radial basis function collocation method for the numerical solution of the two-dimensional transient nonlinear coupled Burgersâ€™ equations. Applied Mathematical Modelling, 2012, 36, 1148-1160.	4.2	77
7	Stefan's work on solid-liquid phase changes. Engineering Analysis With Boundary Elements, 1995, 16, 83-92.	3.7	75
8	Solution of thermoâ€fluid problems by collocation with local pressure correction. International Journal of Numerical Methods for Heat and Fluid Flow, 2008, 18, 868-882.	2.8	72
9	Genetic programming prediction of the natural gas consumption in a steel plant. Energy, 2014, 66, 273-284.	8.8	52
10	A comparison of three explicit local meshless methods using radial basis functions. Engineering Analysis With Boundary Elements, 2011, 35, 600-609.	3.7	51
11	Local radial basis function collocation method for linear thermoelasticity in two dimensions. International Journal of Numerical Methods for Heat and Fluid Flow, 2015, 25, 1488-1510.	2.8	51
12	Local radial basis function collocation method for solving thermo-driven fluid-flow problems with free surface. Engineering Analysis With Boundary Elements, 2015, 57, 2-8.	3.7	51
13	Modeling of macrosegregation in direct-chill casting of aluminum alloys: Estimating the influence of casting parameters. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 413-414, 85-91.	5.6	48
14	Simulation of direct chill casting under the influence of a low-frequency electromagnetic field. Applied Mathematical Modelling, 2018, 54, 170-188.	4.2	48
15	Assessment of global and local meshless methods based on collocation with radial basis functions for parabolic partial differential equations in three dimensions. Engineering Analysis With Boundary Elements, 2012, 36, 1640-1648.	3.7	47
16	Radial basis function collocation method solution of natural convection in porous media. International Journal of Numerical Methods for Heat and Fluid Flow, 2004, 14, 187-212.	2.8	43
17	Solution of a phase-field model for dissolution of primary particles in binary aluminum alloys by an r-adaptive mesh-free method. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 413-414, 423-428.	5.6	39
18	Multi-pass hot-rolling simulation using a meshless method. Computers and Structures, 2018, 194, 1-14.	4.4	38

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19	Numerical solutions of waves-current interactions by generalized finite difference method. Engineering Analysis With Boundary Elements, 2019, 100, 150-163.	3.7	38
20	Iterative solution of systems of equations in the dual reciprocity boundary element method for the diffusion equation. International Journal for Numerical Methods in Engineering, 1998, 43, 713-732.	2.8	35
21	Towards a mesh-free computation of transport phenomena. Engineering Analysis With Boundary Elements, 2002, 26, 731-738.	3.7	33
22	Comprehensive Electric Arc Furnace Electric Energy Consumption Modeling: A Pilot Study. Energies, 2019, 12, 2142.	3.1	32
23	Application of the Genetic Programming for Increasing the Soft Annealing Productivity in Steel Industry. Materials and Manufacturing Processes, 2009, 24, 369-374.	4.7	30
24	Influence of Gas Dynamic Virtual Nozzle Geometry on Micro-Jet Characteristics. International Journal of Multiphase Flow, 2018, 104, 152-165.	3.4	29
25	Primitive variable dual reciprocity boundary element method solution of incompressible Navierâ€“Stokes equations. Engineering Analysis With Boundary Elements, 1999, 23, 443-455.	3.7	28
26	From Global to Local Radial Basis Function Collocation Method for Transport Phenomena. , 2007, , 257-282.		27
27	Phase field simulation of Rayleighâ€“Taylor instability with a meshless method. Engineering Analysis With Boundary Elements, 2018, 87, 78-89.	3.7	26
28	Hot Rolling Simulation System for Steel Based on Advanced Meshless Solution. Metals, 2019, 9, 788.	2.3	26
29	Dual reciprocity boundary element method solution of natural convection in Darcyâ€“Brinkman porous media. Engineering Analysis With Boundary Elements, 2004, 28, 23-41.	3.7	24
30	Calculating transport of water from a conduit to the porous matrix by boundary distributed source method. Engineering Analysis With Boundary Elements, 2012, 36, 1649-1659.	3.7	24
31	Solution of three-dimensional temperature and turbulent velocity field in continuously cast steel billets with electromagnetic stirring by a meshless method. Engineering Analysis With Boundary Elements, 2019, 104, 347-363.	3.7	23
32	Natural convection in porous media?dual reciprocity boundary element method solution of the Darcy model. International Journal for Numerical Methods in Fluids, 2000, 33, 279-312.	1.6	22
33	Local Collocation Approach for Solving Turbulent Combined Forced and Natural Convection Problems. Advances in Applied Mathematics and Mechanics, 2011, 3, 259-279.	1.2	22
34	Simulation of liquid micro-jet in free expanding high-speed co-flowing gas streams. Microfluidics and Nanofluidics, 2018, 22, 1.	2.2	20
35	Application of the RBF collocation method to transient coupled thermoelasticity. International Journal of Numerical Methods for Heat and Fluid Flow, 2017, 27, 1064-1077.	2.8	19
36	A cellular automaton â€“ finite volume method for the simulation of dendritic and eutectic growth in binary alloys using an adaptive mesh refinement. Journal of Computational Physics, 2017, 349, 351-375.	3.8	19

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37	Axisymmetric augmented thin plate splines. Engineering Analysis With Boundary Elements, 1998, 21, 81-85.	3.7	17
38	Thermo-Mechanical Analysis of Hot Shape Rolling of Steel by a Meshless Method. Procedia Engineering, 2011, 10, 3173-3178.	1.2	17
39	Simulation of a macrosegregation benchmark with a meshless diffuse approximate method. International Journal of Numerical Methods for Heat and Fluid Flow, 2018, 28, 361-380.	2.8	17
40	Numerical investigation on influence of focusing gas type on liquid micro-jet characteristics. International Journal of Hydromechatronics, 2018, 1, 222.	2.3	17
41	Non-singular method of fundamental solutions for elasticity problems in three-dimensions. Engineering Analysis With Boundary Elements, 2018, 96, 23-35.	3.7	16
42	Development of meshless phase field method for two-phase flow. International Journal of Multiphase Flow, 2018, 108, 169-180.	3.4	16
43	Application of the local RBF collocation method to natural convection in a 3D cavity influenced by a magnetic field. Engineering Analysis With Boundary Elements, 2020, 116, 1-13.	3.7	15
44	A Meshless Approach in Solution of Multiscale Solidification Modeling. Materials Science Forum, 0, 649, 211-216.	0.3	14
45	Reduction of discretisation-induced anisotropy in the phase-field modelling of dendritic growth by meshless approach. Computational Materials Science, 2020, 172, 109166.	3.0	14
46	Simulation of macrosegregation in direct-chill castingâ€"A model based on meshless diffuse approximate method. Engineering Analysis With Boundary Elements, 2020, 113, 191-203.	3.7	14
47	Method of regularized sources for axisymmetric Stokes flow problems. International Journal of Numerical Methods for Heat and Fluid Flow, 2016, 26, 1226-1239.	2.8	13
48	Novel multilevel techniques for convergence acceleration in the solution of systems of equations arising from RBF-FD meshless discretizations. Journal of Computational Physics, 2019, 392, 311-334.	3.8	13
49	Meshless simulation of a lid-driven cavity problem with a non-Newtonian fluid. Engineering Analysis With Boundary Elements, 2021, 131, 86-99.	3.7	12
50	Simulation of a macrosegregation benchmark in a cylindrical coordinate system with a meshless method. International Journal of Thermal Sciences, 2019, 142, 121-133.	4.9	11
51	A numerical investigation of micro-jet characteristics in different pressure environments. International Journal of Hydromechatronics, 2021, 4, 368.	2.3	11
52	Genetic Algorithm-Based Batch Filling Scheduling in the Steel Industry. Materials and Manufacturing Processes, 2011, 26, 464-474.	4.7	10
53	Method of fundamental solutions without fictitious boundary for three dimensional elasticity problems based on force-balance desingularization. Engineering Analysis With Boundary Elements, 2019, 108, 244-253.	3.7	10
54	Surface Analysis of Biodegradable Mg-Alloys after Immersion in Simulated Body Fluid. Materials, 2020, 13, 1740.	2.9	10

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55	Alternative Geometric Arrangements of the Nozzle Outlet Orifice for Liquid Micro-Jet Focusing in Gas Dynamic Virtual Nozzles. Materials, 2021, 14, 1572.	2.9	10
56	Localized method of fundamental solutions for two-dimensional anisotropic elasticity problems. Engineering Analysis With Boundary Elements, 2021, 125, 59-65.	3.7	9
57	The method of fundamental solutions for the Stokes flow with the subdomain technique. Engineering Analysis With Boundary Elements, 2021, 128, 80-89.	3.7	9
58	Axisymmetric multiquadrics. Engineering Analysis With Boundary Elements, 2006, 30, 137-142.	3.7	8
59	A numerical study on the influence of liquid properties on gas-focused micro-jets. Progress in Computational Fluid Dynamics, 2020, 20, 71.	0.2	8
60	Experimental and Numerical Investigation of Gas-Focused Liquid Micro-Jet Velocity. International Journal of Multiphase Flow, 2021, 135, 103530.	3.4	8
61	A Sensitivity Study of Grain Growth Model For Prediction of ECT and CET Transformations in Continuous Casting of Steel. Materials Science Forum, 2010, 649, 373-378.	0.3	7
62	Coupling of conductive, convective and radiative heat transfer in Czochralski crystal growth process. Computational Materials Science, 2002, 25, 570-576.	3.0	6
63	Divergence-free meshless local Petrovâ€“Galerkin method for Stokes flow. Engineering With Computers, 2022, 38, 5359-5377.	6.1	6
64	Meshless approach to the large-eddy simulation of the continuous casting process. Engineering Analysis With Boundary Elements, 2022, 138, 319-338.	3.7	6
65	Rolling simulation system for non-symmetric groove types. Procedia Manufacturing, 2018, 15, 121-128.	1.9	5
66	Equivalent-PDE based stabilization of strong-form meshless methods applied to advection-dominated problems. Engineering Analysis With Boundary Elements, 2020, 113, 315-327.	3.7	5
67	Computational modeling and simulation of gas focused liquid micro-sheets. International Journal of Multiphase Flow, 2021, 140, 103666.	3.4	5
68	Multi-Physics and Multi-Scale Meshless Simulation System for Direct-Chill Casting of Aluminium Alloys. Strojniski Vestnik/Journal of Mechanical Engineering, 2019, 65, 658-670.	1.1	5
69	RANS versus Scale Resolved Approach for Modeling Turbulent Flow in Continuous Casting of Steel. Metals, 2021, 11, 1140.	2.3	4
70	Mixture continuum formulation of convection-conduction energy transport in multiconstituent solid-liquid phase change systems for BEM solution techniques. Engineering Analysis With Boundary Elements, 1993, 11, 109-117.	3.7	3
71	Some Aspects of Nuclear Power Plant Safety under War Conditions. Nuclear Technology, 1993, 101, 193-201.	1.2	3
72	Meshless Approach to Solving Freezing with Natural Convection. Materials Science Forum, 0, 649, 205-210.	0.3	3

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73	Solid-Solid Phase Transformations in Aluminium Alloys Described by a Multiphase-Field Model. Materials Science Forum, 2006, 508, 579-584.	0.3	2
74	Simulation of Dendritic Growth in Multicomponent Aluminium Alloys by Point Automata Method. Materials Science Forum, 2014, 790-791, 115-120.	0.3	2
75	Numerical Study of the Micro-Jet Formation in Double Flow Focusing Nozzle Geometry Using Different Water-Alcohol Solutions. Materials, 2021, 14, 3614.	2.9	2
76	Developments towards a Multiscale Meshless Rolling Simulation System. Materials, 2021, 14, 4277.	2.9	2
77	A meshless model of electromagnetic braking for the continuous casting of steel. Materiali in Tehnologije, 2015, 49, 961-967.	0.5	2
78	Modified method of regularized sources for potential flow. Computers and Mathematics With Applications, 2021, 88, 110-119.	2.7	1
79	Numerical investigation on influence of focusing gas type on liquid micro-jet characteristics. International Journal of Hydromechatronics, 2018, 1, 222.	2.3	1
80	Numerical Simulation of Heat Load for Multilayer Laue Lens under Exposure to XFEL Pulse Trains. Photonics, 2022, 9, 362.	2.0	1
81	A meshless solution of the compressible viscous flow in axisymmetric tubes with varying cross-sections. Engineering Analysis With Boundary Elements, 2022, 143, 340-352.	3.7	1
82	Melt Flow and Macrosegregation in DC Casting of Binary Aluminum Alloys. Materials Science Forum, 2006, 508, 515-522.	0.3	0
83	Mesh-Free Simulation of Transport Phenomena in Continuous Castings of Aluminium Alloys. Materials Science Forum, 2006, 508, 497-502.	0.3	0
84	Non-singular method of fundamental solutions for threeâ€“dimensional isotropic elasticity problems with displacement boundary conditions. Materiali in Tehnologije, 2015, 49, 969-974.	0.5	0
85	Simulation of Casting Geometry Effect in Low-Frequency Electromagnetic Casting. Mechanisms and Machine Science, 2020, , 815-825.	0.5	0