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List of Publications by Year
in descending order

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82 papers	1,809 citations	430874 18 h-index	276875 41 g-index
83 all docs	83 docs citations	83 times ranked	1198 citing authors

#	Article	IF	Citations
1	A high-order finite volume method for systems of conservation lawsâ€"Multi-dimensional Optimal Order Detection (MOOD). Journal of Computational Physics, 2011, 230, 4028-4050.	3.8	480
2	Improved detection criteria for the Multi-dimensional Optimal Order Detection (MOOD) on unstructured meshes with very high-order polynomials. Computers and Fluids, 2012, 64, 43-63.	2.5	137
3	Numerical modeling in induction heating for axisymmetric geometries. IEEE Transactions on Magnetics, 1997, 33, 739-745.	2.1	110
4	The Multidimensional Optimal Order Detection method in the threeâ€dimensional case: very highâ€order finite volume method for hyperbolic systems. International Journal for Numerical Methods in Fluids, 2013, 73, 362-392.	1.6	96
5	Sedimentary responses to the Pleistocene climatic variations recorded in the South China Sea. Quaternary Research, 2007, 68, 162-172.	1.7	81
6	NUMERICAL MODELING OF INDUCTION HEATING FOR TWO-DIMENSIONAL GEOMETRIES. Mathematical Models and Methods in Applied Sciences, 1993, 03, 805-822.	3.3	74
7	Monoslope and multislope MUSCL methods for unstructured meshes. Journal of Computational Physics, 2010, 229, 3745-3776.	3.8	70
8	Numerical modelling of induction heating of long workpieces. IEEE Transactions on Magnetics, 1994, 30, 5028-5037.	2.1	46
9	A well-balanced scheme for the shallow-water equations with topography. Computers and Mathematics With Applications, 2016, 72, 568-593.	2.7	39
10	Transport coefficients in thermal plasma. Applications to Mars and Titan atmospheres. European Physical Journal D, 2010, 57, 227-234.	1.3	36
11	High-accurate SPH method with Multidimensional Optimal Order Detection limiting. Computer Methods in Applied Mechanics and Engineering, 2016, 310, 134-155.	6.6	34
12	Numerical solution of the free boundary Bernoulli problem using a level set formulation. Computer Methods in Applied Mechanics and Engineering, 2005, 194, 3934-3948.	6.6	32
13	A sixth-order finite volume method for multidomain convectionâ€"diffusion problem with discontinuous coefficients. Computer Methods in Applied Mechanics and Engineering, 2013, 267, 43-64.	6.6	32
14	First- and second-order finite volume methods for the one-dimensional nonconservative Euler system. Journal of Computational Physics, 2009, 228, 8214-8248.	3.8	29
15	A multislope MUSCL method on unstructured meshes applied to compressible Euler equations for axisymmetric swirling flows. Journal of Computational Physics, 2010, 229, 4884-4906.	3.8	29
16	Solution of a two-dimensional stationary induction heating problem without boundedness of the coefficients. ESAIM: Mathematical Modelling and Numerical Analysis, 1997, 31, 845-870.	1.9	28
17	A well-balanced scheme for the shallow-water equations with topography or Manning friction. Journal of Computational Physics, 2017, 335, 115-154.	3.8	27
18	Numerical modelling of thermal ablation phenomena due to a cathodic spot. Journal Physics D: Applied Physics, 2000, 33, 2079-2086.	2.8	22

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19	Mathematical model and simulation of gas flow through a porous medium in high breaking capacity fuses. International Journal of Heat and Fluid Flow, 2004, 25, 115-126.	2.4	18
20	A Two-dimensional Stationary Induction Heating Problem. Mathematical Methods in the Applied Sciences, 1997, 20, 759-766.	2.3	17
21	L â^ž stability of the MUSCL methods. Numerische Mathematik, 2010, 116, 31-64.	1.9	16
22	Unsteady compressible flow in ducts with varying cross-section: Comparison between the nonconservative Euler system and the axisymmetric flow model. Computers and Fluids, 2012, 53, 53-78.	2.5	16
23	The MOOD method for the non-conservative shallow-water system. Computers and Fluids, 2017, 145, 99-128.	2.5	16
24	Very highâ€order accurate finite volume scheme for the convectionâ€diffusion equation with general boundary conditions on arbitrary curved boundaries. International Journal for Numerical Methods in Engineering, 2019, 117, 188-220.	2.8	16
25	Multi-dimensional modelling of electrostatic force distance curve over dielectric surface: Influence of tip geometry and correlation with experiment. Journal of Applied Physics, 2014, 116, 084106.	2.5	15
26	Very high-order accurate finite volume scheme on curved boundaries for the two-dimensional steady-state convectionâ€“diffusion equation with Dirichlet condition. Applied Mathematical Modelling, 2018, 54, 752-767.	4.2	15
27	Very high-order accurate polygonal mesh finite volume scheme for conjugate heat transfer problems with curved interfaces and imperfect contacts. Computer Methods in Applied Mechanics and Engineering, 2019, 357, 112560.	6.6	15
28	Very high-order method on immersed curved domains for finite difference schemes with regular Cartesian grids. Computer Methods in Applied Mechanics and Engineering, 2020, 360, 112782.	6.6	15
29	3D modeling of electrostatic interaction between atomic force microscopy probe and dielectric surface: Impact of tip shape and cantilever contribution. IEEE Transactions on Dielectrics and Electrical Insulation, 2016, 23, 705-712.	2.9	14
30	The modelling of the cathode sheath of an electrical arc in vacuum. Journal Physics D: Applied Physics, 2003, 36, 1495-1503.	2.8	13
31	Secondâ€order finite volume with hydrostatic reconstruction for tsunami simulation. Journal of Advances in Modeling Earth Systems, 2016, 8, 1691-1713.	3.8	13
32	Pressure drop measurements for woven metal mesh screens used in electrical safety switchgears. International Journal of Heat and Fluid Flow, 2017, 65, 60-72.	2.4	13
33	Numerical scheme to complete a compressible gas flow in variable porosity media. International Journal of Computational Fluid Dynamics, 2005, 19, 299-309.	1.2	12
34	Numerical Investigations on the Pressure Wave Absorption and the Gas Cooling Interacting in a Porous Filter, During an Internal arc Fault in a Medium-Voltage Cell. IEEE Transactions on Power Delivery, 2008, 23, 203-212.	4.3	12
35	Two-dimensional computation of gas flow in a porous bed characterized by a porosity jump. Journal of Computational Physics, 2006, 219, 104-119.	3.8	11
36	Local heat transfer of compressible fluid in porous media: application to the HBC fuse. International Journal of Heat and Fluid Flow, 2005, 26, 322-333.	2.4	10

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37	Porous Filter Optimization to Improve the Safety of the Medium-Voltage Electrical Installations During an Internal Arc Fault. IEEE Transactions on Power Delivery, 2010, 25, 2464-2471.	4.3	9
38	A very high-order finite volume method for the time-dependent convectionâ€“diffusion problem with Butcher Tableau extension. Computers and Mathematics With Applications, 2014, 68, 1292-1311.	2.7	9
39	A sixth-order finite volume method for diffusion problem with curved boundaries. Applied Mathematical Modelling, 2017, 42, 401-422.	4.2	9
40	Numerical Simulation of Darcy and Forchheimer Force Distribution in a HBC Fuse. Transport in Porous Media, 2003, 53, 25-37.	2.6	8
41	New cellâ€“vertex reconstruction for finite volume scheme: Application to the convectionâ€“diffusionâ€“reaction equation. Computers and Mathematics With Applications, 2014, 68, 1229-1249.	2.7	8
42	A novel heat transfer coefficient identification methodology for the profile extrusion calibration stage. Applied Thermal Engineering, 2016, 103, 102-111.	6.0	7
43	Comparison between MUSCL and MOOD techniques in a finite volume well-balanced code to solve SWE. The Tohoku-Oki, 2011 example. Geophysical Journal International, 2019, 216, 958-983.	2.4	7
44	Very high-order Cartesian-grid finite difference method on arbitrary geometries. Journal of Computational Physics, 2021, 434, 110217.	3.8	7
45	Efficient very high-order accurate polyhedral mesh finite volume scheme for 3D conjugate heat transfer problems in curved domains. Journal of Computational Physics, 2021, 445, 110604.	3.8	7
46	Two-dimensional modelling of internal arc effects in an enclosed MV cell provided with a protection porous filter. Journal Physics D: Applied Physics, 2007, 40, 3137-3144.	2.8	6
47	Modelling electroluminescence in insulating polymers under ac stress: effect of voltage offset and pre-stressing. Journal Physics D: Applied Physics, 2012, 45, 325303.	2.8	6
48	a posteriori stabilized sixth-order finite volume scheme for one-dimensional steady-state hyperbolic equations. Advances in Computational Mathematics, 2018, 44, 571-607.	1.6	6
49	FINITE ELEMENT APPROXIMATIONS FOR THE LAPLACE OPERATOR WITH A RIGHT-HAND SIDE MEASURE. Mathematical Models and Methods in Applied Sciences, 1996, 06, 713-719.	3.3	5
50	A new energy conservation scheme for the numeric study of the heat transfer in profile extrusion calibration. Heat and Mass Transfer, 2017, 53, 2901-2913.	2.1	4
51	A sixth-order finite volume scheme for the steady-state incompressible Stokes equations on staggered unstructured meshes. Journal of Computational Physics, 2017, 349, 501-527.	3.8	4
52	A two-dimensional high-order well-balanced scheme for the shallow water equations with topography and Manning friction. Computers and Fluids, 2021, 230, 105152.	2.5	4
53	Highâ€order accurate conjugate heat transfer solutions with a finite volume method in anisotropic meshes with application in polymer processing. International Journal for Numerical Methods in Engineering, 2022, 123, 1146-1185.	2.8	4
54	Finite Volume Maximum Principle for Hyperbolic Scalar Problems. SIAM Journal on Numerical Analysis, 2013, 51, 467-490.	2.3	3

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55	A Very High-Order Accurate Staggered Finite Volume Scheme for the Stationary Incompressible Navierâ€“Stokes and Euler Equations on Unstructured Meshes. Journal of Scientific Computing, 2017, 71, 1375-1411.	2.3	3
56	Finite Volume Scheme Based on Cell-Vertex Reconstructions for Anisotropic Diffusion Problems with Discontinuous Coefficients. Lecture Notes in Computer Science, 2014, , 87-102.	1.3	3
57	Multi-dimensional Optimal Order Detection (MOOD) â€" a Very High-Order Finite Volume Scheme for Conservation Laws on Unstructured Meshes. Springer Proceedings in Mathematics, 2011, , 263-271.	0.5	3
58	A comparative study of the behaviour of silver, copper and nickel submitted to a constant high power flux density. EPJ Applied Physics, 2005, 31, 45-51.	0.7	3
59	Experimentally validated numerical models to assess tsunami hydrodynamic force on an elevated structure. Engineering Structures, 2021, 249, 113280.	5.3	3
60	A new stabilised scheme for the Richardsâ€™ equation with evapotranspiration. Groundwater for Sustainable Development, 2022, 17, 100736.	4.6	3
61	Very high-order accurate finite volume scheme for the steady-state incompressible Navierâ€“Stokes equations with polygonal meshes on arbitrary curved boundaries. Computer Methods in Applied Mechanics and Engineering, 2022, 396, 115064.	6.6	3
62	Chemical Attack in Free Boundary Domains. Journal of Applied Analysis, 1999, 5, 35-58.	0.5	2
63	A sixth-order finite volume method for the 1D biharmonic operator: Application to intramedullary nail simulation. International Journal of Applied Mathematics and Computer Science, 2015, 25, 529-537.	1.5	2
64	Foreword to the Special Focus on Advances in Symbolic and Numeric Computation II. Mathematics in Computer Science, 2018, 12, 107-109.	0.4	2
65	A MOOD-MUSCL Hybrid Formulation for the Non-conservative Shallow-Water System. Journal of Scientific Computing, 2021, 88, 1.	2.3	2
66	Cascade earthquake and tsunami hazard assessment: A deterministic perspective for engineering purposes. International Journal of Disaster Risk Reduction, 2022, 75, 102952.	3.9	2
67	Numerical simulation of the porous filter properties for the internal arc mollifying effects. Electric Power Systems Research, 2011, 81, 66-73.	3.6	1
68	Multi-dimensional modelling of electrostatic forces between atomic force microscopy tip and dielectric surface. , 2013, , .		1
69	Numerical Study of the Impact of Filters Located in the Exhaust Duct of a Low-Voltage Circuit Breaker. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2015, 5, 49-56.	2.5	1
70	Numerical simulation of breast reduction with a new knitting condition. International Journal for Numerical Methods in Biomedical Engineering, 2017, 33, e02796.	2.1	1
71	On the solution of the slope beach problem in the context of shallow-water code benchmarking: Why non-linearization of the initial waveforms is essential. Advances in Water Resources, 2020, 145, 103751.	3.8	1
72	A Posteriori Stabilized Sixth-Order Finite Volume Scheme with Adaptive Stencil Construction: Basics for the 1D Steady-State Hyperbolic Equations. Communications on Applied Mathematics and Computation, 0, , 1.	1.7	1

#	Article	IF	Citations
73	Theoretical elements about cathode arc root. , 0, , .		0
74	Influence of the material nature (Ag, Cu, Al, W, C) on the arc root characteristics at the cathode. , 0, , .		0
75	Chemical attack simulations using a level set formulation. Computational Materials Science, 2004, 29, 76-88.	3.0	0
76	Capillarityâ€“dissolution system for a two-dimensional geometry. Journal of Colloid and Interface Science, 2005, 292, 517-536.	9.4	0
77	Correction to â€œPorous Filter Optimization to Improve the Safety of the Medium-Voltage Electrical Installations During an Internal Arc Faultâ€•[Oct 10 2464-2471]. IEEE Transactions on Power Delivery, 2011, 26, 486-487.	4.3	0
78	Voltage Excitation in Coil Rings Using Magnetically Coupled Inductor/Load For Axisymmetric Geometry. IEEE Transactions on Power Delivery, 2014, 29, 118-125.	4.3	0
79	An interactive web-based tool for breast reduction surgery simulation. , 2015, , .		0
80	A THEORETICAL EVOLUTION ANALYSIS OF THE DIFFERENT ANODE AND CATHODE ELECTRIC ARC MATERIALS. High Temperature Material Processes, 2006, 10, 1-24.	0.6	0
81	CATHODE SPOT EMERGENCE ON COPPER AND CHROMIUM ALLOY USED IN VACUUM BREAKERS. High Temperature Material Processes, 2010, 14, 271-284.	0.6	0
82	An a posteriori strategy for adaptive schemes in time for one-dimensional advection-diffusion transport equations. Computers and Mathematics With Applications, 2021, 103, 65-81.	2.7	0