Mostafa Safdari Shadloo

List of Publications by Year
in descending order

110 papers	5,532 citations	61857 43 h-index	88477 70 g-index
112 all docs	112 docs citations	112 times ranked	3404 citing authors

#	Article	IF	Citations
1	Smoothed particle hydrodynamics method for fluid flows, towards industrial applications: Motivations, current state, and challenges. Computers and Fluids, 2016, 136, 11-34.	1.3	304
2	A review of melting and freezing processes of PCM/nano-PCM and their application in energy storage. Energy, 2020, 211, 118698.	4.5	271
3	Applications of nanofluids containing carbon nanotubes in solar energy systems: A review. Journal of Molecular Liquids, 2020, 313, 113476.	2.3	190
4	Non-uniform heat source/sink and Soret effects on MHD non-Darcian convective flow past a stretching sheet in a micropolar fluid with radiation. International Journal of Heat and Mass Transfer, 2016, 93, 674-682.	2.5	162
5	The effects of different nano particles of Al 2 O 3 and Ag on the MHD nano fluid flow and heat transfer in a microchannel including slip velocity and temperature jump. Physica E: Low-Dimensional Systems and Nanostructures, 2017, 86, 146-153.	1.3	151
6	A robust weakly compressible SPH method and its comparison with an incompressible SPH. International Journal for Numerical Methods in Engineering, 2012, 89, 939-956.	1.5	149
7	Synthesized CuFe2O4/SiO2 nanocomposites added to water/EG: Evaluation of the thermophysical properties beside sensitivity analysis & EANN. International Journal of Heat and Mass Transfer, 2018, 127, 1169-1179.	2.5	135
8	Thermal conductivity prediction of nanofluids containing CuO nanoparticles by using correlation and artificial neural network. Journal of Thermal Analysis and Calorimetry, 2020, 139, 2679-2689.	2.0	131
9	Entropy Generation in a Circular Tube Heat Exchanger Using Nanofluids: Effects of Different Modeling Approaches. Heat Transfer Engineering, 2017, 38, 853-866.	1.2	120
10	A review on the properties, preparation, models and stability of hybrid nanofluids to optimize energy consumption. Journal of Thermal Analysis and Calorimetry, 2021, 144, 1959-1983.	2.0	118
11	Numerical investigation of Newtonian and non-Newtonian multiphase flows using ISPH method. Computer Methods in Applied Mechanics and Engineering, 2013, 254, 99-113.	3.4	114
12	A smoothed particle hydrodynamics approach for numerical simulation of nano-fluid flows. Journal of Thermal Analysis and Calorimetry, 2019, 135, 1733-1741.	2.0	111
13	Improved Incompressible Smoothed Particle Hydrodynamics method for simulating flow around bluff bodies. Computer Methods in Applied Mechanics and Engineering, 2011, 200, 1008-1020.	3.4	101
14	A survey on experimental and numerical studies of convection heat transfer of nanofluids inside closed conduits. Advances in Mechanical Engineering, 2016, 8, 168781401667356.	0.8	101
15	Three-dimensional lattice Boltzmann simulations of high density ratio two-phase flows in porous media. Computers and Mathematics With Applications, 2018, 75, 2445-2465.	1.4	99
16	Prediction of viscosity of biodiesel blends using various artificial model and comparison with empirical correlations. Renewable Energy, 2020, 153, 1296-1306.	4.3	99
17	Energy and exergy analyses of a nanofluid based solar cooling and hydrogen production combined system. Renewable Energy, 2019, 141, 1013-1025.	4.3	96
18	Optimization of operating parameters of a polymer exchange membrane electrolyzer. International Journal of Hydrogen Energy, 2019, 44, 6403-6414.	3.8	95

#	Article	IF	Citations
19	Study of Two-Phase Newtonian Nanofluid Flow Hybrid with Hafnium Particles under the Effects of Slip. Inventions, 2020, 5, 6.	1.3	91
20	Estimation of Pressure Drop of Two-Phase Flow in Horizontal Long Pipes Using Artificial Neural Networks. Journal of Energy Resources Technology, Transactions of the ASME, 2020, 142, .	1.4	90
21	Effects of assembly pressure on PEM fuel cell performance by taking into accounts electrical and thermal contact resistances. Energy, 2019, 179, 490-501.	4.5	87
22	Numerical simulation of compressible flows by lattice Boltzmann method. Numerical Heat Transfer; Part A: Applications, 2019, 75, 167-182.	1.2	86
23	Simulation of single mode Rayleighâ€"Taylor instability by SPH method. Computational Mechanics, 2013, 51, 699-715.	2.2	81
24	A Review on the Control Parameters of Natural Convection in Different Shaped Cavities with and without Nanofluid. Processes, 2020, 8, 1011.	1.3	80
25	A Smoothed Particle Hydrodynamics approach for thermo-capillary flows. Computers and Fluids, 2018, 176, 1-19.	1.3	78
26	Thermal conductivity modeling of nanofluids with ZnO particles by using approaches based on artificial neural network and MARS. Journal of Thermal Analysis and Calorimetry, 2021, 143, 4261-4272.	2.0	74
27	Heat Transfer and Pressure Drop in Fully Developed Turbulent Flows of Graphene Nanoplateletsâ€"Silver/Water Nanofluids. Fluids, 2016, 1, 20.	0.8	73
28	Enhancement of heat transfer in peristaltic flow in a permeable channel under induced magnetic field using different CNTs. Journal of Thermal Analysis and Calorimetry, 2020, 140, 1277-1291.	2.0	73
29	Numerical Investigation of Forced Convective Heat Transfer and Performance Evaluation Criterion of Al2O3/Water Nanofluid Flow inside an Axisymmetric Microchannel. Symmetry, 2020, 12, 120.	1.1	71
30	An artificial intelligence approach to optimization of an off-grid hybrid wind/hydrogen system. International Journal of Hydrogen Energy, 2021, 46, 12725-12738.	3.8	66
31	Viscous fingering phenomena in the early stage of polymer membrane formation. Journal of Fluid Mechanics, 2019, 864, 97-140.	1.4	65
32	Statistical behavior of supersonic turbulent boundary layers with heat transfer at<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si11.gif" overflow="scroll"><mml:mrow><mml:msub><mml:mrow><mml:mi>M</mml:mi></mml:mrow><mml:mrow><mml:mi>â^ž</mml:mi></m International Journal of Heat and Fluid Flow, 2015, 53, 113-134.	1.1	64
33	A three-dimensional lattice Boltzmann model for numerical investigation of bubble growth in pool boiling. International Communications in Heat and Mass Transfer, 2016, 79, 58-66.	2.9	64
34	Thermal Conductivity Modeling of Nanofluids Contain MgO Particles by Employing Different Approaches. Symmetry, 2020, 12, 206.	1.1	60
35	Effect of wall temperature in supersonic turbulent boundary layers: A numerical study. International Journal of Heat and Mass Transfer, 2015, 81, 426-438.	2.5	59
36	Performance Evaluation of Nanofluids in an Inclined Ribbed Microchannel for Electronic Cooling Applications. , 0, , .		58

#	Article	IF	Citations
37	Numerical study on the application of biodiesel and bioethanol in a multiple injection diesel engine. Renewable Energy, 2020, 150, 1019-1029.	4.3	57
38	Three-dimensional numerical investigation of film boiling by the lattice Boltzmann method. Numerical Heat Transfer; Part A: Applications, 2017, 71, 560-574.	1.2	56
39	Numerical modeling of Kelvinâ€“Helmholtz instability using smoothed particle hydrodynamics. International Journal for Numerical Methods in Engineering, 2011, 87, 988-1006.	1.5	53
40	Effect of injection angle, density ratio, and viscosity on droplet formation in a microfluidic T-junction. Theoretical and Applied Mechanics Letters, 2017, 7, 243-251.	1.3	50
41	Perturbation threshold and hysteresis associated with the transition to turbulence in sudden expansion pipe flow. International Journal of Heat and Fluid Flow, 2019, 76, 187-196.	1.1	50
42	A smoothed particle hydrodynamics study on the electrohydrodynamic deformation of a droplet suspended in a neutrally buoyant Newtonian fluid. Computational Mechanics, 2013, 52, 693-707.	2.2	47
43	Exergy Optimization of a Solar Collector in Flat Plate Shape Equipped with Elliptical Pipes Filled with Turbulent Nanofluid Flow: A Study for Thermal Management. Water (Switzerland), 2020, 12, 2294.	1.2	47
44	Thermodynamic analysis of a solar-driven high-temperature steam electrolyzer for clean hydrogen production. Applied Thermal Engineering, 2020, 172, 115152.	3.0	47
45	Application of support vector machines for accurate prediction of convection heat transfer coefficient of nanofluids through circular pipes. International Journal of Numerical Methods for Heat and Fluid Flow, 2021, 31, 2660-2679.	1.6	47
46	Numerical simulation of wall bounded and electrically excited Rayleighâ€“Taylor instability using incompressible smoothed particle hydrodynamics. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2014, 460, 60-70.	2.3	44
47	Significance of Bioconvective and Thermally Dissipation Flow of Viscoelastic Nanoparticles with Activation Energy Features: Novel Biofuels Significance. Symmetry, 2020, 12, 214.	1.1	44
48	Direct Numerical Simulation of flow instabilities over Savonius style wind turbine blades. Renewable Energy, 2017, 105, 374-385.	4.3	42
49	Numerical Investigation of the Savonius Vertical Axis Wind Turbine and Evaluation of the Effect of the Overlap Parameter in Both Horizontal and Vertical Directions on Its Performance. Symmetry, 2019, 11, 821.	1.1	42
50	Assessment of subgrid-scale modeling for large-eddy simulation of a spatially-evolving compressible turbulent boundary layer. Computers and Fluids, 2017, 151, 144-158.	1.3	40
51	Laminar-turbulent transition in supersonic boundary layers with surface heat transfer: A numerical study. Numerical Heat Transfer; Part A: Applications, 2017, 72, 40-53.	1.2	39
52	A parallel high-order compressible flows solver with domain decomposition method in the generalized curvilinear coordinates system. International Journal of Numerical Methods for Heat and Fluid Flow, 2019, 30, 2-38.	1.6	39
53	Numerical simulations of multi-phase electro-hydrodynamics flows using a simple incompressible smoothed particle hydrodynamics method. Computers and Mathematics With Applications, 2021, 81, 772-785.	1.4	37
54	Applications of intelligent methods in various types of heat exchangers: a review. Journal of Thermal Analysis and Calorimetry, 2021, 145, 1837-1848.	2.0	37

#	Article	IF	Citations
55	The effect of alcoholâ€“gasoline fuel blends on the enginesâ€™ performances and emissions. Fuel, 2020, 276, 117977.	3.4	37
56	Control of oblique-type breakdown in a supersonic boundary layer employing streaks. Journal of Fluid Mechanics, 2019, 873, 1072-1089.	1.4	36
57	A new and efficient mechanism for spark ignition engines. Energy Conversion and Management, 2015, 96, 418-429.	4.4	33
58	A new mechanism for periodic bursting of the recirculation region in the flow through a sudden expansion in a circular pipe. Physics of Fluids, 2018, 30, .	1.6	33
59	Direct numerical simulations of laminar and transitional flows in diverging pipes. International Journal of Numerical Methods for Heat and Fluid Flow, 2019, 30, 75-92.	1.6	33
60	Parameters affecting thermal risk through a kinetic model under adiabatic condition: Application to liquid-liquid reaction system. Thermochimica Acta, 2018, 666, 10-17.	1.2	32
61	Boundary layer transition over a concave surface caused by centrifugal instabilities. Computers and Fluids, 2018, 171, 135-153.	1.3	30
62	Two-phase flow boiling in a microfluidic channel at high mass flux. Physics of Fluids, 2020, 32, .	1.6	30
63	Screening of native hyper-lipid producing microalgae strains for biomass and lipid production. Renewable Energy, 2020, 160, 1295-1307.	4.3	29
64	Application of homotopy perturbation method to find an analytical solution for magnetohydrodynamic flows of viscoelastic fluids in converging/diverging channels. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2011, 225, 347-353.	1.1	27
65	Feasibility study of wave energy harvesting along the southern coast and islands of Iran. Renewable Energy, 2019, 135, 502-514.	4.3	27
66	Numerical investigation of the natural convection film boiling around elliptical tubes. Numerical Heat Transfer; Part A: Applications, 2016, 70, 707-722.	1.2	26
67	Density-based smoothed particle hydrodynamics methods for incompressible flows. Computers and Fluids, 2019, 185, 22-33.	1.3	26
68	Modeling of Subcooled Flow Boiling with Nanoparticles under the Influence of a Magnetic Field. Symmetry, 2019, 11, 1275.	1.1	26
69	An empirical evaluation of the sea depth effects for various wave characteristics on the performance of a point absorber wave energy converter. Ocean Engineering, 2017, 137, 13-21.	1.9	25
70	Effects of Nanoparticle Enhanced Lubricant Films in Thermal Design of Plain Journal Bearings at High Reynolds Numbers. Symmetry, 2019, 11, 1353.	1.1	25
71	Study of horizontal axis tidal turbine performance and investigation on the optimum fixed pitch angle using CFD. International Journal of Numerical Methods for Heat and Fluid Flow, 2019, 30, 206-227.	1.6	23
72	Convective Bubbly Flow of Water in an Annular Pipe: Role of Total Dissolved Solids on Heat Transfer Characteristics and Bubble Formation. Water (Switzerland), 2019, 11, 1566.	1.2	21

#	ARTICLE	IF	CITATIONS
73	The effect of alkanolamine mixtures on CO2 absorption efficiency in T-Shaped microchannel. Environmental Technology and Innovation, 2021, 24, 102006.	3.0	21
74	Series solution for heat transfer of continuous stretching sheet immersed in a micropolar fluid in the existence of radiation. International Journal of Numerical Methods for Heat and Fluid Flow, 2013, 23, 289-304.	1.6	20
75	On the onset of postshock flow instabilities over concave surfaces. Physics of Fluids, 2014, 26, 076101.	1.6	20
76	Photo-catalytic pretreatment of biomass for anaerobic digestion using visible light and Nickle oxide (NiOx) nanoparticles prepared by sol gel method. Renewable Energy, 2020, 154, 128-135.	4.3	20
77	Application of Artificial Neural Networks for Producing an Estimation of High-Density Polyethylene. Polymers, 2020, 12, 2319.	2.0	17
78	Experimental assessment of a 100ÂW prototype horizontal axis tidal turbine by towing tank tests. Renewable Energy, 2020, 155, 172-180.	4.3	17
79	Laminar-to-turbulent transition in supersonic boundary layer: Effects of initial perturbation and wall heat transfer. Numerical Heat Transfer; Part A: Applications, 2018, 73, 583-603.	1.2	15
80	Using Committee Neural Network for Prediction of Pressure Drop in Two-Phase Microchannels. Applied Sciences (Switzerland), 2020, 10, 5384.	1.3	14
81	Numerical study on the performance of a homogeneous charge compression ignition engine fueled with different blends of biodiesel. Journal of Thermal Analysis and Calorimetry, 2021, 143, 2695-2705.	2.0	14
82	Numerical investigation of two-phase secondary Kelvinâ€"Helmholtz instability. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2014, 228, 1913-1924.	1.1	13
83	Adiabatic partition effect on natural convection heat transfer inside a square cavity: experimental and numerical studies. Heat and Mass Transfer, 2018, 54, 291-304.	1.2	13
84	Heat-transfer analysis of a transitional boundary layer over a concave surface with GÃ¶rtler vortices by means of direct numerical simulations. Physics of Fluids, 2020, 32, .	1.6	13
85	Effects of Homogeneous and Heterogeneous Chemical Features on Oldroyd-B Fluid Flow between Stretching Disks with Velocity and Temperature Boundary Assumptions. Mathematical Problems in Engineering, 2020, 2020, 1-13.	0.6	13
86	PORE-SCALE VISUALIZATION ON POLYMER FLOODING: APPLICATION OF SINGULAR VALUE DECOMPOSITION-BASED IMAGE ANALYSIS METHOD. Journal of Porous Media, 2020, 23, 531-543.	1.0	12
87	Large-eddy simulation of a spatially-evolving supersonic turbulent boundary layer atMâˆž=2. European Journal of Mechanics, B/Fluids, 2018, 67, 185-197.	1.2	11
88	Turbulent flow topology in supersonic boundary layer with wall heat transfer. International Journal of Heat and Fluid Flow, 2019, 78, 108430.	1.1	10
89	A 3D Simulation of Single-Channel High-Temperature Polymer Exchange Membrane Fuel Cell Performances. Applied Sciences (Switzerland), 2019, 9, 3633.	1.3	9
90	Recent Advances in Heat and Mass Transfer. Journal of Thermal Analysis and Calorimetry, 2019, 135, 1611-1615.	2.0	9

#	ARTICLE	IF	CITATIONS
91	Numerical Investigation on Forced Hybrid Nanofluid Flow and Heat Transfer Inside a Three-Dimensional Annulus Equipped with Hot and Cold Rods: Using Symmetry Simulation. Symmetry, 2020, 12, 1873.	1.1	9
92	Effect of thermo-mechanical non-equilibrium on the onset of transition in supersonic boundary layers. Heat and Mass Transfer, 2019, 55, 1849-1861.	1.2	8
93	Fundamental and engineering thermal aspects of energy and environment. Journal of Thermal Analysis and Calorimetry, 2020, 139, 2395-2398.	2.0	8
94	Forced convection heat transfer of nanofluids from a horizontal plate with convective boundary condition and a line heat source embedded in porous media. Journal of Thermal Analysis and Calorimetry, 2020, 141, 2081-2094.	2.0	8
95	Temperature-Invariant Scaling for Compressible Turbulent Boundary Layers with Wall Heat Transfer. Heat Transfer Engineering, 2018, 39, 923-932.	1.2	6
96	Maximum Obtainable Energy Harvesting Power from Galloping-Based Piezoelectrics. Mathematical Problems in Engineering, 2020, 2020, 1-8.	0.6	5
97	A review on heat transfer characteristics of cryogenic heat pipes. Journal of Thermal Analysis and Calorimetry, 2022, 147, 5533-5547.	2.0	5
98	A fully explicit incompressible Smoothed Particle Hydrodynamics method for multiphase flow problems. Engineering Analysis With Boundary Elements, 2022, 143, 501-524.	2.0	4
99	High-performance computing and machine learning applied in thermal systems analysis. Journal of Thermal Analysis and Calorimetry, 2021, 145, 1733-1737.	2.0	3
100	Coupled Electrohydrodynamic and Thermocapillary Instability of Multi-Phase Flows Using an Incompressible Smoothed Particle Hydrodynamics Method. Energies, 2022, 15, 2576.	1.6	3
101	Special Issue on Multiphase and Turbulent Flows in Energy Engineering Applications. Journal of Energy Resources Technology, Transactions of the ASME, 2020, 142, .	1.4	2
102	Effect of streak employing control of oblique-breakdown in a supersonic boundary layer with weak wall heating/cooling. Physical Review Fluids, 2022, 7, .	1.0	2
103	Bluff-Body Simulation by SPH Method With Relatively High Reynolds Number in Laminar Flow Regime. , 2010, , .		1
104	Simulation of Rayleigh-Taylor instability by Smoothed Particle Hydrodynamics: Advantages and limitations. , 2012, , .		1
105	Direct Numerical Simulation of Nonlinear Secondary Instabilities on the Pressure Side of a Savonius Style Wind Turbine. , 2016, , .		1
106	Special topic on turbulent and multiphase flows. Physics of Fluids, 2021, 33, 090401.	1.6	1
107	Fluid-Structure Interaction Simulation by Smoothed Particle Hydrodynamics. , 2010, , .		0
108	Editorial on the special issue of Heat and Mass Transfer (Springer) after the 3rd Iranian Conference on Heat and Mass Transfer. Heat and Mass Transfer, 2019, 55, 1847-1847.	1.2	0

#	Article	IF	Citations
109	Acknowledgement to Reviewers of Fluids in 2018. Fluids, 2019, 4, 9.	0.8	0
110	A transient study on two phase adiabatic flow over micro circular pin heat sinks. Computers and Mathematics With Applications, 2021, 81, 811-822.	1.4	0