Mostafa Safdari Shadloo

List of Publications by Year in Descending Order

104 papers	4,036 citations	39 h-index	60 g-index
112 ext. papers	4,876 ext. citations	3.8 avg, IF	6.76 L-index

#	Paper	IF	Citations
104	Coupled Electrohydrodynamic and Thermocapillary Instability of Multi-Phase Flows Using an Incompressible Smoothed Particle Hydrodynamics Method. *Energies*, **2022**, 15, 2576	3.1	1
103	The effect of alkanolamine mixtures on CO2 absorption efficiency in T-Shaped microchannel. *Environmental Technology and Innovation*, **2021**, 24, 102006	7	4
102	An artificial intelligence approach to optimization of an off-grid hybrid wind/hydrogen system. *International Journal of Hydrogen Energy*, **2021**, 46, 12725-12738	6.7	27
101	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	4.1	14
100	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	4.1	56
99	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	4.1	50
98	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	4.5	35
97	A transient study on two phase adiabatic flow over micro circular pin heat sinks. *Computers and Mathematics With Applications*, **2021**, 81, 811-822	2.7	
96	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	2.7	27
95	Applications of intelligent methods in various types of heat exchangers: a review. *Journal of Thermal Analysis and Calorimetry*, **2021**, 145, 1837-1848	4.1	20
94	High-performance computing and machine learning applied in thermal systems analysis. *Journal of Thermal Analysis and Calorimetry*, **2021**, 145, 1733-1737	4.1	2
93	Application of Artificial Neural Networks for Producing an Estimation of High-Density Polyethylene. *Polymers*, **2020**, 12,	4.5	14
92	Applications of nanofluids containing carbon nanotubes in solar energy systems: A review. *Journal of Molecular Liquids*, **2020**, 313, 113476	6	120
91	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	8.1	12
90	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	4.1	4
89	Thermodynamic analysis of a solar-driven high-temperature steam electrolyzer for clean hydrogen production. *Applied Thermal Engineering*, **2020**, 172, 115152	5.8	30
88	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	1.1	5

87	Significance of Bioconvective and Thermally Dissipation Flow of Viscoelastic Nanoparticles with Activation Energy Features: Novel Biofuels Significance. *Symmetry*, **2020**, 12, 214	2.7	36
86	Prediction of viscosity of biodiesel blends using various artificial model and comparison with empirical correlations. *Renewable Energy*, **2020**, 153, 1296-1306	8.1	59
85	Study of Two-Phase Newtonian Nanofluid Flow Hybrid with Hafnium Particles under the Effects of Slip. *Inventions*, **2020**, 5, 6	2.9	69
84	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,	2.6	50
83	Special Issue on Multiphase and Turbulent Flows in Energy Engineering Applications. *Journal of Energy Resources Technology, Transactions of the ASME*, **2020**, 142,	2.6	2
82	PORE-SCALE VISUALIZATION ON POLYMER FLOODING: APPLICATION OF SINGULAR VALUE DECOMPOSITION-BASED IMAGE ANALYSIS METHOD. *Journal of Porous Media*, **2020**, 23, 531-543	2.9	5
81	Numerical Investigation of Forced Convective Heat Transfer and Performance Evaluation Criterion of Al2O3/Water Nanofluid Flow inside an Axisymmetric Microchannel. *Symmetry*, **2020**, 12, 120	2.7	56
80	Thermal Conductivity Modeling of Nanofluids Contain MgO Particles by Employing Different Approaches. *Symmetry*, **2020**, 12, 206	2.7	47
79	The effect of alcohol□gasoline fuel blends on the engines□performances and emissions. *Fuel*, **2020**, 276, 117977	7.1	25
78	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	4.1	54
77	Numerical study on the application of biodiesel and bioethanol in a multiple injection diesel engine. *Renewable Energy*, **2020**, 150, 1019-1029	8.1	40
76	Fundamental and engineering thermal aspects of energy and environment. *Journal of Thermal Analysis and Calorimetry*, **2020**, 139, 2395-2398	4.1	6
75	Maximum Obtainable Energy Harvesting Power from Galloping-Based Piezoelectrics. *Mathematical Problems in Engineering*, **2020**, 2020, 1-8	1.1	4
74	A review of melting and freezing processes of PCM/nano-PCM and their application in energy storage. *Energy*, **2020**, 211, 118698	7.9	124
73	Screening of native hyper-lipid producing microalgae strains for biomass and lipid production. *Renewable Energy*, **2020**, 160, 1295-1307	8.1	12
72	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	2.7	4
71	Heat-transfer analysis of a transitional boundary layer over a concave surface with G□rtler vortices by means of direct numerical simulations. *Physics of Fluids*, **2020**, 32, 074111	4.4	8
70	Two-phase flow boiling in a microfluidic channel at high mass flux. *Physics of Fluids*, **2020**, 32, 093309	4.4	14

69	Using Committee Neural Network for Prediction of Pressure Drop in Two-Phase Microchannels. *Applied Sciences (Switzerland)*, **2020**, 10, 5384	2.6	14
68	A Review on the Control Parameters of Natural Convection in Different Shaped Cavities with and without Nanofluid. *Processes*, **2020**, 8, 1011	2.9	41
67	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	3	20
66	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	4.1	101
65	Experimental assessment of a 100 kW prototype horizontal axis tidal turbine by towing tank tests. *Renewable Energy*, **2020**, 155, 172-180	8.1	11
64	Viscous fingering phenomena in the early stage of polymer membrane formation. *Journal of Fluid Mechanics*, **2019**, 864, 97-140	3.7	51
63	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	4.5	36
62	Effects of assembly pressure on PEM fuel cell performance by taking into accounts electrical and thermal contact resistances. *Energy*, **2019**, 179, 490-501	7.9	52
61	Energy and exergy analyses of a nanofluid based solar cooling and hydrogen production combined system. *Renewable Energy*, **2019**, 141, 1013-1025	8.1	69
60	Numerical simulation of compressible flows by lattice Boltzmann method. *Numerical Heat Transfer; Part A: Applications*, **2019**, 75, 167-182	2.3	72
59	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	2.4	38
58	Effect of thermo-mechanical non-equilibrium on the onset of transition in supersonic boundary layers. *Heat and Mass Transfer*, **2019**, 55, 1849-1861	2.2	7
57	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	3	18
56	Turbulent flow topology in supersonic boundary layer with wall heat transfer. *International Journal of Heat and Fluid Flow*, **2019**, 78, 108430	2.4	6
55	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	2.7	25
54	Control of oblique-type breakdown in a supersonic boundary layer employing streaks. *Journal of Fluid Mechanics*, **2019**, 873, 1072-1089	3.7	22
53	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	2.2	
52	A 3D Simulation of Single-Channel High-Temperature Polymer Exchange Membrane Fuel Cell Performances. *Applied Sciences (Switzerland)*, **2019**, 9, 3633	2.6	7

51	Density-based smoothed particle hydrodynamics methods for incompressible flows. *Computers and Fluids*, **2019**, 185, 22-33	2.8	17
50	Optimization of operating parameters of a polymer exchange membrane electrolyzer. *International Journal of Hydrogen Energy*, **2019**, 44, 6403-6414	6.7	41
49	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	4.5	16
48	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	4.5	26
47	Modeling of Subcooled Flow Boiling with Nanoparticles under the Influence of a Magnetic Field. *Symmetry*, **2019**, 11, 1275	2.7	25
46	Effects of Nanoparticle Enhanced Lubricant Films in Thermal Design of Plain Journal Bearings at High Reynolds Numbers. *Symmetry*, **2019**, 11, 1353	2.7	18
45	Recent Advances in Heat and Mass Transfer. *Journal of Thermal Analysis and Calorimetry*, **2019**, 135, 1611-1615	4.1	9
44	Feasibility study of wave energy harvesting along the southern coast and islands of Iran. *Renewable Energy*, **2019**, 135, 502-514	8.1	20
43	A smoothed particle hydrodynamics approach for numerical simulation of nano-fluid flows. *Journal of Thermal Analysis and Calorimetry*, **2019**, 135, 1733-1741	4.1	92
42	Three-dimensional lattice Boltzmann simulations of high density ratio two-phase flows in porous media. *Computers and Mathematics With Applications*, **2018**, 75, 2445-2465	2.7	79
41	Large-eddy simulation of a spatially-evolving supersonic turbulent boundary layer at M=2. *European Journal of Mechanics, B/Fluids*, **2018**, 67, 185-197	2.4	8
40	Temperature-Invariant Scaling for Compressible Turbulent Boundary Layers with Wall Heat Transfer. *Heat Transfer Engineering*, **2018**, 39, 923-932	1.7	3
39	Boundary layer transition over a concave surface caused by centrifugal instabilities. *Computers and Fluids*, **2018**, 171, 135-153	2.8	27
38	Parameters affecting thermal risk through a kinetic model under adiabatic condition: Application to liquid-liquid reaction system. *Thermochimica Acta*, **2018**, 666, 10-17	2.9	18
37	Adiabatic partition effect on natural convection heat transfer inside a square cavity: experimental and numerical studies. *Heat and Mass Transfer*, **2018**, 54, 291-304	2.2	10
36	A Smoothed Particle Hydrodynamics approach for thermo-capillary flows. *Computers and Fluids*, **2018**, 176, 1-19	2.8	65
35	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	4.9	117
34	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	2.3	10

33	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, 031701	4.4	28
32	Three-dimensional numerical investigation of film boiling by the lattice Boltzmann method. *Numerical Heat Transfer; Part A: Applications*, **2017**, 71, 560-574	2.3	46
31	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	3.9	18
30	Direct Numerical Simulation of flow instabilities over Savonius style wind turbine blades. *Renewable Energy*, **2017**, 105, 374-385	8.1	34
29	Laminar-turbulent transition in supersonic boundary layers with surface heat transfer: A numerical study. *Numerical Heat Transfer; Part A: Applications*, **2017**, 72, 40-53	2.3	32
28	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	1.8	34
27	The effects of different nano particles of Al2O3 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	3	133
26	Entropy Generation in a Circular Tube Heat Exchanger Using Nanofluids: Effects of Different Modeling Approaches. *Heat Transfer Engineering*, **2017**, 38, 853-866	1.7	102
25	Assessment of subgrid-scale modeling for large-eddy simulation of a spatially-evolving compressible turbulent boundary layer. *Computers and Fluids*, **2017**, 151, 144-158	2.8	33
24	Numerical investigation of the natural convection film boiling around elliptical tubes. *Numerical Heat Transfer; Part A: Applications*, **2016**, 70, 707-722	2.3	21
23	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	5.8	49
22	Smoothed particle hydrodynamics method for fluid flows, towards industrial applications: Motivations, current state, and challenges. *Computers and Fluids*, **2016**, 136, 11-34	2.8	231
21	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	4.9	131
20	Performance Evaluation of Nanofluids in an Inclined Ribbed Microchannel for Electronic Cooling Applications **2016**,		54
19	Heat Transfer and Pressure Drop in Fully Developed Turbulent Flows of Graphene NanoplateletsSilver/Water Nanofluids. *Fluids*, **2016**, 1, 20	1.6	69
18	A survey on experimental and numerical studies of convection heat transfer of nanofluids inside closed conduits. *Advances in Mechanical Engineering*, **2016**, 8, 168781401667356	1.2	94
17	A new and efficient mechanism for spark ignition engines. *Energy Conversion and Management*, **2015**, 96, 418-429	10.6	28
16	Statistical behavior of supersonic turbulent boundary layers with heat transfer atM2. *International Journal of Heat and Fluid Flow*, **2015**, 53, 113-134	2.4	45

15	Effect of wall temperature in supersonic turbulent boundary layers: A numerical study. *International Journal of Heat and Mass Transfer*, **2015**, 81, 426-438	4.9	36
14	Numerical simulation of wall bounded and electrically excited Rayleigh–Taylor instability using incompressible smoothed particle hydrodynamics. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2014**, 460, 60-70	5.1	40
13	On the onset of postshock flow instabilities over concave surfaces. *Physics of Fluids*, **2014**, 26, 076101	4.4	18
12	Numerical investigation of two-phase secondary Kelvin–Helmholtz instability. *Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science*, **2014**, 228, 1913-1924	1.3	10
11	Simulation of single mode Rayleigh–Taylor instability by SPH method. *Computational Mechanics*, **2013**, 51, 699-715	4	75
10	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	4	44
9	Numerical investigation of Newtonian and non-Newtonian multiphase flows using ISPH method. *Computer Methods in Applied Mechanics and Engineering*, **2013**, 254, 99-113	5.7	98
8	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	4.5	19
7	A robust weakly compressible SPH method and its comparison with an incompressible SPH. *International Journal for Numerical Methods in Engineering*, **2012**, 89, 939-956	2.4	118
6	Simulation of Rayleigh-Taylor instability by Smoothed Particle Hydrodynamics: Advantages and limitations **2012**,		1
5	Improved Incompressible Smoothed Particle Hydrodynamics method for simulating flow around bluff bodies. *Computer Methods in Applied Mechanics and Engineering*, **2011**, 200, 1008-1020	5.7	93
4	Numerical modeling of Kelvin–Helmholtz instability using smoothed particle hydrodynamics. *International Journal for Numerical Methods in Engineering*, **2011**, 87, 988-1006	2.4	47
3	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	1.3	24
2	Bluff-Body Simulation by SPH Method With Relatively High Reynolds Number in Laminar Flow Regime **2010**,		1
1	A review on heat transfer characteristics of cryogenic heat pipes. *Journal of Thermal Analysis and Calorimetry*,1	4.1	2