

Majid Siavashi

List of Publications by Year in descending order

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Version: 2024-02-01

80
papers

4,557
citations

76294

40
h-index

106281

65
g-index

82
all docs

82
docs citations

82
times ranked

2240
citing authors

#	ARTICLE	IF	CITATIONS
1	Whole-time scenario optimization of steam-assisted gravity drainage (SAGD) with temperature, pressure, and rate control using an efficient hybrid optimization technique. <i>Energy</i> , 2022, 239, 122149.	4.5	6
2	Surface topography effects on dynamic behavior of water droplet over a micro-structured surface using an improved-VOF based lattice Boltzmann method. <i>Journal of Molecular Liquids</i> , 2022, 350, 118509.	2.3	5
3	Euler-Lagrange numerical simulation of improved magnetic drug delivery in a three-dimensional CT-based carotid artery bifurcation. <i>Computer Methods and Programs in Biomedicine</i> , 2022, 219, 106778.	2.6	18
4	Pore-scale simulation of nanoparticle transport and deposition in a microchannel using a Lagrangian approach. <i>Journal of Molecular Liquids</i> , 2022, 355, 118948.	2.3	11
5	Pore-scale computational analyses of non-Darcy flow through highly porous structures with various degrees of geometrical complexity. <i>Sustainable Energy Technologies and Assessments</i> , 2022, 52, 102048.	1.7	5
6	Analysis of the effects of porous media parameters and inclination angle on the thermal storage and efficiency improvement of a photovoltaic-phase change material system. <i>Journal of Energy Storage</i> , 2022, 50, 104690.	3.9	17
7	Heat transfer augmentation of a PTC with rotating absorber, utilizing nanofluid and porous lines. <i>Sustainable Energy Technologies and Assessments</i> , 2022, 52, 102229.	1.7	3
8	Improved thermal energy storage with metal foam enhanced phase change materials considering various pore arrangements: A pore-scale parallel lattice Boltzmann solution. <i>Journal of Energy Storage</i> , 2022, 52, 104744.	3.9	16
9	A Review on the Long-Term Performance of Proton Exchange Membrane Fuel Cells: From Degradation Modeling to the Effects of Bipolar Plates, Sealings, and Contaminants. <i>Energies</i> , 2022, 15, 5081.	1.6	18
10	A Novel Streamline-Based Objective Function for Well Placement Optimization in Waterfloods. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 2021, 143, .	1.4	6
11	Optimal design and sensitivity analysis of energy storage for concentrated solar power plants using phase change material by gradient metal foams. <i>Journal of Energy Storage</i> , 2021, 35, 102233.	3.9	30
12	Semi-analytical study of impingement cooling of metal foam heat sinks of CPUs with air and hydrogen jets under LTNE condition. <i>Journal of Thermal Analysis and Calorimetry</i> , 2021, 145, 1801-1816.	2.0	17
13	Experimental study of a parabolic trough solar collector with rotating absorber tube. <i>Renewable Energy</i> , 2021, 168, 734-749.	4.3	59
14	A numerical analysis of the effects of nanofluid and porous media utilization on the performance of parabolic trough solar collectors. <i>Sustainable Energy Technologies and Assessments</i> , 2021, 45, 101179.	1.7	18
15	A numerical study on the effect of osmotic pressure on stress and strain in intercellular structures of tumor tissue in the poro-elastic model. <i>Meccanica</i> , 2021, 56, 2471-2486.	1.2	2
16	Pore-scale convection-conduction heat transfer and fluid flow in open-cell metal foams: A three-dimensional multiple-relaxation time lattice Boltzmann (MRT-LBM) solution. <i>International Communications in Heat and Mass Transfer</i> , 2021, 126, 105465.	2.9	42
17	Thermal and electrical efficiencies enhancement of a solar photovoltaic-thermal/air system (PVT/air) using metal foams. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2021, 124, 276-289.	2.7	55
18	A new design with preheating and layered porous ceramic for hydrogen production through methane steam reforming process. <i>Energy</i> , 2021, 231, 120952.	4.5	28

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19	A new design for hybrid cooling of Li-ion battery pack utilizing PCM and mini channel cold plates. Applied Thermal Engineering, 2021, 197, 117398.	3.0	95
20	Improved design of heat sink including porous pin fins with different arrangements: A numerical turbulent flow and heat transfer study. Applied Thermal Engineering, 2021, 198, 117519.	3.0	30
21	Applications of porous materials in combustion systems: A comprehensive and state-of-the-art review. Fuel, 2021, 304, 121411.	3.4	55
22	Optimization of SMR process for syngas production through a solar-assisted thermo-chemical reactor with a multi-layered porous core. Solar Energy, 2021, 230, 208-221.	2.9	21
23	Efficiency enhancement of the parabolic trough solar collector using the rotating absorber tube and nanoparticles. Renewable Energy, 2020, 145, 569-584.	4.3	85
24	Three-dimensional analysis of magnetohydrodynamic transverse mixed convection of nanofluid inside a lid-driven enclosure using MRT-LBM. International Journal of Mechanical Sciences, 2020, 165, 105199.	3.6	55
25	MHD enhanced nanofluid mediated heat transfer in porous metal for CPU cooling. Applied Thermal Engineering, 2020, 168, 114843.	3.0	110
26	Effect of Reynolds asymmetry and use of porous media in the counterflow double-pipe heat exchanger for passive heat transfer enhancement. Journal of Thermal Analysis and Calorimetry, 2020, 140, 1079-1093.	2.0	32
27	Recent developments of advanced numerical heat transfer in porous media. Journal of Thermal Analysis and Calorimetry, 2020, 141, 1489-1491.	2.0	6
28	Experimental estimation of axial vertical flow permeability through a packed bed of granular activated carbon. Journal of Thermal Analysis and Calorimetry, 2020, 141, 1493-1508.	2.0	3
29	Battery thermal management with thermal energy storage composites of PCM, metal foam, fin and nanoparticle. Journal of Energy Storage, 2020, 28, 101235.	3.9	272
30	Mixed convection enhancement by using optimized porous media and nanofluid in a cavity with two rotating cylinders. Journal of Thermal Analysis and Calorimetry, 2020, 141, 1829-1846.	2.0	44
31	A numerical study on the effect of static magnetic field on the hemodynamics of magnetic fluid in biological porous media. Journal of Thermal Analysis and Calorimetry, 2020, 141, 1543-1558.	2.0	7
32	Similarity solution of air and nanofluid impingement cooling of a cylindrical porous heat sink. Journal of Thermal Analysis and Calorimetry, 2019, 135, 1399-1415.	2.0	72
33	Eccentricity effects of heat source inside a porous annulus on the natural convection heat transfer and entropy generation of Cu-water nanofluid. International Communications in Heat and Mass Transfer, 2019, 109, 104367.	2.9	73
34	Simple geometrical modifications for substantial color intensity and detection limit enhancements in lateral-flow immunochromatographic assays. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2019, 1110-1111, 1-8.	1.2	9
35	Impingement jet hydrogen, air and Cu H ₂ O nanofluid cooling of a hot surface covered by porous media with non-uniform input jet velocity. International Journal of Hydrogen Energy, 2019, 44, 15933-15948.	3.8	93
36	Using sharp wedge-shaped porous media in front and wake regions of external nanofluid flow over a bundle of cylinders. International Journal of Numerical Methods for Heat and Fluid Flow, 2019, 29, 3730-3755.	1.6	25

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37	Numerical analysis on forced convection enhancement in an annulus using porous ribs and nanoparticle addition to base fluid. <i>Journal of Central South University</i> , 2019, 26, 1089-1098.	1.2	31
38	Design optimization and thermal management of the PEMFC using artificial neural networks. <i>Energy</i> , 2019, 182, 443-459.	4.5	64
39	Numerical melting performance analysis of a cylindrical thermal energy storage unit using nano-enhanced PCM and multiple horizontal fins. <i>Numerical Heat Transfer; Part A: Applications</i> , 2019, 75, 560-577.	1.2	91
40	Two-phase mixed convection heat transfer and entropy generation analysis of a non-Newtonian nanofluid inside a cavity with internal rotating heater and cooler. <i>International Journal of Mechanical Sciences</i> , 2019, 151, 842-857.	3.6	76
41	Sensitivity analysis and performance evaluation of the PEMFC using wave-like porous ribs. <i>Applied Thermal Engineering</i> , 2019, 150, 433-444.	3.0	61
42	Thermal management in PEMFCs: The respective effects of porous media in the gas flow channel. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 3121-3137.	3.8	55
43	Numerical performance analysis of a counter-flow double-pipe heat exchanger with using nanofluid and both sides partly filled with porous media. <i>Journal of Thermal Analysis and Calorimetry</i> , 2019, 135, 1595-1610.	2.0	70
44	Optimal scenario design of steam-assisted gravity drainage to enhance oil recovery with temperature and rate control. <i>Energy</i> , 2019, 166, 610-623.	4.5	33
45	Recent advances in modeling and simulation of nanofluid flows-Part I: Fundamentals and theory. <i>Physics Reports</i> , 2019, 790, 1-48.	10.3	670
46	Numerical analysis of mixed convection of two-phase non-Newtonian nanofluid flow inside a partially porous square enclosure with a rotating cylinder. <i>Journal of Thermal Analysis and Calorimetry</i> , 2019, 137, 267-287.	2.0	124
47	Parallel processing of numerical simulation of two-phase flow in fractured reservoirs considering the effect of natural flow barriers using the streamline simulation method. <i>International Journal of Heat and Mass Transfer</i> , 2019, 131, 574-583.	2.5	23
48	Multi-layered Porous Foam Effects on Heat Transfer and Entropy Generation of Nanofluid Mixed Convection Inside a Two-Sided Lid-Driven Enclosure with Internal Heating. <i>Transport in Porous Media</i> , 2019, 126, 223-247.	1.2	55
49	Application of SiO ₂ -water nanofluid to enhance oil recovery. <i>Journal of Thermal Analysis and Calorimetry</i> , 2019, 135, 565-580.	2.0	47
50	Application of nanofluid and optimization of pore size arrangement of heterogeneous porous media to enhance mixed convection inside a two-sided lid-driven cavity. <i>Journal of Thermal Analysis and Calorimetry</i> , 2019, 135, 947-961.	2.0	68
51	Optimization of heat transfer enhancement and pumping power of a heat exchanger tube using nanofluid with gradient and multi-layered porous foams. <i>Applied Thermal Engineering</i> , 2018, 138, 465-474.	3.0	119
52	The effect of inclination angle and hot wall configuration on Cu-water nanofluid natural convection inside a porous square cavity. <i>Advanced Powder Technology</i> , 2018, 29, 519-536.	2.0	81
53	Numerical simulation of two-phase mass transport in three-dimensional naturally fractured reservoirs using discrete streamlines. <i>Numerical Heat Transfer; Part A: Applications</i> , 2018, 73, 482-500.	1.2	10
54	Nanofluid and porous fins effect on natural convection and entropy generation of flow inside a cavity. <i>Advanced Powder Technology</i> , 2018, 29, 142-156.	2.0	138

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55	The effect of temperature dependent relative permeability on heavy oil recovery during hot water injection process using streamline-based simulation. <i>Applied Thermal Engineering</i> , 2018, 129, 106-116.	3.0	55
56	Sensitivity and colour intensity enhancement in lateral flow immunoassay tests by adjustment of test line position. <i>Clinica Chimica Acta</i> , 2018, 487, 210-215.	0.5	12
57	Streamline simulation of water-oil displacement in a heterogeneous fractured reservoir using different transfer functions. <i>Oil and Gas Science and Technology</i> , 2018, 73, 14.	1.4	7
58	Computational analysis of SWCNH nanofluid-based direct absorption solar collector with a metal sheet. <i>Solar Energy</i> , 2018, 170, 252-262.	2.9	70
59	A Comparative Study of Genetic and Particle Swarm Optimization Algorithms and Their Hybrid Method in Water Flooding Optimization. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 2018, 140, .	1.4	14
60	Experimental investigation of effects of grain size, inlet pressure and flow rate of air and argon on pressure drop through a packed bed of granular activated carbon. <i>International Communications in Heat and Mass Transfer</i> , 2018, 96, 20-26.	2.9	11
61	Lattice Boltzmann numerical simulation and entropy generation analysis of natural convection of nanofluid in a porous cavity with different linear temperature distributions on side walls. <i>Journal of Molecular Liquids</i> , 2017, 233, 415-430.	2.3	86
62	Two-phase mixture numerical simulation of natural convection of nanofluid flow in a cavity partially filled with porous media to enhance heat transfer. <i>Journal of Molecular Liquids</i> , 2017, 238, 553-569.	2.3	103
63	Particle swarm optimization of thermal enhanced oil recovery from oilfields with temperature control. <i>Applied Thermal Engineering</i> , 2017, 123, 658-669.	3.0	52
64	Two-phase simulation of non-Newtonian nanofluid natural convection in a circular annulus partially or completely filled with porous media. <i>International Journal of Mechanical Sciences</i> , 2017, 133, 689-703.	3.6	87
65	Optimal selection of annulus radius ratio to enhance heat transfer with minimum entropy generation in developing laminar forced convection of water-Al ₂ O ₃ nanofluid flow. <i>Journal of Central South University</i> , 2017, 24, 1850-1865.	1.2	51
66	Numerical investigation of porous rib arrangement on heat transfer and entropy generation of nanofluid flow in an annulus using a two-phase mixture model. <i>Numerical Heat Transfer; Part A: Applications</i> , 2017, 71, 1251-1273.	1.2	66
67	MHD transverse mixed convection and entropy generation study of electromagnetic pump including a nanofluid using 3D LBM simulation. <i>International Journal of Mechanical Sciences</i> , 2017, 133, 73-90.	3.6	73
68	Numerical simulation and optimization of steam-assisted gravity drainage with temperature, rate, and well distance control using an efficient hybrid optimization technique. <i>Numerical Heat Transfer; Part A: Applications</i> , 2017, 72, 721-744.	1.2	36
69	MHD nanofluid free convection and entropy generation in porous enclosures with different conductivity ratios. <i>Journal of Magnetism and Magnetic Materials</i> , 2017, 442, 474-490.	1.0	129
70	Heat transfer and entropy generation study of non-Darcy double-diffusive natural convection in inclined porous enclosures with different source configurations. <i>Applied Thermal Engineering</i> , 2017, 110, 1462-1475.	3.0	60
71	Numerical simulation of two-phase flow in fractured porous media using streamline simulation and IMPES methods and comparing results with a commercial software. <i>Journal of Central South University</i> , 2016, 23, 2630-2637.	1.2	30
72	Heat transfer and entropy generation analysis of turbulent flow of TiO ₂ -water nanofluid inside annuli with different radius ratios using two-phase mixture model. <i>Applied Thermal Engineering</i> , 2016, 100, 1149-1160.	3.0	64

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73	Efficient Particle Swarm Optimization of Well Placement to Enhance Oil Recovery Using a Novel Streamline-Based Objective Function. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 2016, 138, .	1.4	41
74	Numerical investigation of flow characteristics, heat transfer and entropy generation of nanofluid flow inside an annular pipe partially or completely filled with porous media using two-phase mixture model. <i>Energy</i> , 2015, 93, 2451-2466.	4.5	141
75	Three-dimensional streamline-based simulation of non-isothermal two-phase flow in heterogeneous porous media. <i>Computers and Fluids</i> , 2014, 103, 116-131.	1.3	42
76	Entropy Generation Analysis of Nanofluid Flow in Turbulent and Laminar Regimes. <i>Journal of Computational and Theoretical Nanoscience</i> , 2012, 9, 1586-1595.	0.4	35
77	Application of space-time conservation element and solution element method in streamline simulation. <i>Journal of Petroleum Science and Engineering</i> , 2012, 96-97, 58-67.	2.1	13
78	Detection of flaws in a two-dimensional body through measurement of surface temperatures and use of conjugate gradient method. <i>Computational Mechanics</i> , 2010, 46, 597-607.	2.2	7
79	Second Law Analysis of Nanofluid Flow Through Circular Pipe. , 2010, , .		0
80	Prediction of Internal Flow Parameters in a Two-dimensional Body Using Steady-state Surface Temperature Data and IHCP Methods. , 2008, , .		2