Mostafa Keshavarz Moraveji

List of Publications by Year
in descending order

119 papers	3,737 citations	136940 32 h-index	149686 56 g-index
121 all docs	121 docs citations	121 times ranked	3913 citing authors

#	Article	IF	Citations
1	PLGA-Based Nanoparticles in Cancer Treatment. Frontiers in Pharmacology, 2018, 9, 1260.	3.5	372
2	A review on bio-fuel production from microalgal biomass by using pyrolysis method. Renewable and Sustainable Energy Reviews, 2018, 82, 3046-3059.	16.4	172
3	Electrical conductivity, viscosity, and density of different nanofluids: An experimental study. Experimental Thermal and Fluid Science, 2016, 74, 339-346.	2.7	169
4	CFD modeling (comparing single and two-phase approaches) on thermal performance of Al2o3/water nanofluid in mini-channel heat sink. International Communications in Heat and Mass Transfer, 2013, 44, 157-164.	5.6	154
5	Droplet microfluidics: fundamentals and its advanced applications. RSC Advances, 2020, 10, 27560-27574.	3.6	144
6	Modeling of convective heat transfer of a nanofluid in the developing region of tube flow with computational fluid dynamics. International Communications in Heat and Mass Transfer, 2011, 38, 1291-1295.	5.6	120
7	Experimental investigation on heat transfer characteristics and pressure drop of BPHE (brazed plate) Tj ETQq1 1 0.784314 rgBT /Over	2.7	114
8	Characteristics and kinetics study of simultaneous pyrolysis of microalgae Chlorella vulgaris, wood and polypropylene through TGA. Bioresource Technology, 2017, 243, 481-491.	9.6	114
9	Comparative study of Euler and mixture models for turbulent flow of Al2O3 nanofluid inside a horizontal tube. International Communications in Heat and Mass Transfer, 2014, 52, 152-158.	5.6	98
10	Microfluidic assisted synthesis of PLGA drug delivery systems. RSC Advances, 2019, 9, 2055-2072.	3.6	87
11	Experimental investigation of aluminum oxide nanofluid on heat pipe thermal performance. International Communications in Heat and Mass Transfer, 2012, 39, 1444-1448.	5.6	85
12	Comparison between single-phase and two-phases CFD modeling of laminar forced convection flow of nanofluids in a circular tube under constant heat flux. International Communications in Heat and Mass Transfer, 2012, 39, 1297-1302.	5.6	76
13	Drilling rate of penetration prediction and optimization using response surface methodology and bat algorithm. Journal of Natural Gas Science and Engineering, 2016, 31, 829-841.	4.4	75
14	Coreâ€“shell nanoparticles used in drug delivery-microfluidics: a review. RSC Advances, 2020, 10, 18280-18295.	3.6	65
15	Experimental and field test analysis of different loss control materials for combating lost circulation in bentonite mud. Journal of Natural Gas Science and Engineering, 2017, 44, 1-8.	4.4	63
16	A Comparative Analysis of Single and Two-Phase Models of Turbulent Convective Heat Transfer in a Tube for TiO₂Nanofluid with CFD. Numerical Heat Transfer; Part A: Applications, 2013, 63, 795-806.	2.1	61
17	On evaluation of thermophysical properties of transformer oil-based nanofluids: A comprehensive modeling and experimental study. Journal of Molecular Liquids, 2020, 300, 112249.	4.9	61
18	CFD investigation of nanofluid effects (cooling performance and pressure drop) in mini-channel heat sink. International Communications in Heat and Mass Transfer, 2013, 40, 58-66.	5.6	58

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19	An experimental investigation on the use of saponin as a non-ionic surfactant for chemical enhanced oil recovery (EOR) in sandstone and carbonate oil reservoirs: IFT, wettability alteration, and oil recovery. Chemical Engineering Research and Design, 2020, 160, 417-425.	5.6	54
20	Thermal behavior, thermodynamics and kinetics of co-pyrolysis of binary and ternary mixtures of biomass through thermogravimetric analysis. Fuel, 2020, 280, 118665.	6.4	53
21	On the pyrolysis of different microalgae species in a conical spouted bed reactor: Bio-fuel yields and characterization. Bioresource Technology, 2020, 311, 123561.	9.6	52
22	Modeling of forced convective heat transfer of a non-Newtonian nanofluid in the horizontal tube under constant heat flux with computational fluid dynamics. International Communications in Heat and Mass Transfer, 2012, 39, 995-999.	5.6	49
23	Modeling of turbulent forced convective heat transfer and friction factor in a tube for Fe3o4 magnetic nanofluid with computational fluid dynamics. International Communications in Heat and Mass Transfer, 2012, 39, 1293-1296.	5.6	47
24	An experimental evaluation on thermophysical properties of functionalized graphene nanoplatelets ionanofluids. International Communications in Heat and Mass Transfer, 2018, 98, 31-40.	5.6	43
25	Experimental and numerical analysis of rheological characterization of hybrid nano-lubricants containing COOH-Functionalized MWCNTs and oxide nanoparticles. International Communications in Heat and Mass Transfer, 2019, 101, 103-115.	5.6	42
26	A review on the design and development of photocatalyst synthesis and application in microfluidic reactors: challenges and opportunities. Reviews in Chemical Engineering, 2020, 36, 687-722.	4.4	38
27	Gasâ€Liquid Hydrodynamics and Mass Transfer in Aqueous Alcohol Solutions in a Splitâ€Cylinder Airlift Reactor. Chemical Engineering and Technology, 2011, 34, 465-474.	1.5	36
28	Effect of CuO nanoparticle on dissolution of methane in water. Journal of Molecular Liquids, 2013, 180, 45-50.	4.9	36
29	Experimental investigation and CFD modeling of the dynamics of bubbles in nanofluid pool boiling. International Communications in Heat and Mass Transfer, 2014, 58, 12-24.	5.6	35
30	Co-pyrolysis of binary and ternary mixtures of microalgae, wood and waste tires through TGA. Renewable Energy, 2019, 142, 264-271.	8.9	35
31	CFD simulation of gasâ€“liquid flow behaviour in an air-lift reactor: determination of the optimum distance of the draft tube. Simulation Modelling Practice and Theory, 2010, 18, 927-945.	3.8	34
32	Natural convection in a rectangular enclosure containing an oval-shaped heat source and filled with Fe3O4/water nanofluid. International Communications in Heat and Mass Transfer, 2013, 44, 135-146.	5.6	34
33	Effect of three representative surfactants on methane hydrate formation rate and induction time. Egyptian Journal of Petroleum, 2017, 26, 331-339.	2.6	33
34	Numerical evaluation on thermalâ€“hydraulic characteristics of dilute heat-dissipating nanofluids flow in microchannels. Journal of Thermal Analysis and Calorimetry, 2019, 135, 671-683.	3.6	33
35	Microfluidics for coreâ€“shell drug carrier particles â€“ a review. RSC Advances, 2021, 11, 229-249.	3.6	33
36	Effects of surfactants on hydrodynamics and mass transfer in a splitâ€cylinder airlift reactor. Canadian Journal of Chemical Engineering, 2012, 90, 93-99.	1.7	32

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37	Investigation of drill pipe rotation effect on cutting transport with aerated mud using CFD approach. Advanced Powder Technology, 2017, 28, 1141-1153.	4.1	29
38	Implementation of soft computing approaches for prediction of physicochemical properties of ionic liquid mixtures. Korean Journal of Chemical Engineering, 2017, 34, 425-439.	2.7	28
39	Mechanistic assessment of Seidlitzia Rosmarinus-derived surfactant for restraining shale hydration: A comprehensive experimental investigation. Chemical Engineering Research and Design, 2019, 147, 570-578.	5.6	28
40	Application of amorphous silica nanoparticles in improving the rheological properties, filtration and shale stability of glycol-based drilling fluids. International Communications in Heat and Mass Transfer, 2020, 115, 104625.	5.6	27
41	Comparative Numerical Study of Nanofluid Heat Transfer through an Annular Channel. Numerical Heat Transfer; Part A: Applications, 2015, 67, 100-117.	2.1	26
42	On the evaluation of thermal conductivity of ionic liquids: Modeling and data assessment. Journal of Molecular Liquids, 2016, 224, 648-656.	4.9	26
43	CFD Examination of Convective Heat Transfer and Pressure Drop in a Horizontal Helically Coiled Tube with CuO/Oil Base Nanofluid. Numerical Heat Transfer; Part A: Applications, 2014, 66, 315-329.	2.1	24
44	Application of CFD for designing conventional three phase oilfield separator. Egyptian Journal of Petroleum, 2017, 26, 413-420.	2.6	24
45	Bridging performance of new eco-friendly lost circulation materials. Petroleum Exploration and Development, 2018, 45, 1154-1165.	7.0	24
46	Synthesis, characterization and absorbability of Crocus sativus petals hydrothermal carbonized hydrochar and activated hydrochar. Chemical Engineering and Processing: Process Intensification, 2021, 159, 108236.	3.6	24
47	Comparative Numerical Investigation on TiO₂/Water Nanofluid Turbulent Flow by Implementation of Single Phase and Two Phase Approaches. Numerical Heat Transfer; Part A: Applications, 2014, 66, 330-348.	2.1	23
48	Simultaneous pyrolysis of microalgae C. vulgaris, wood and polymer: The effect of third component addition. Bioresource Technology, 2018, 247, 66-72.	9.6	22
49	Performance of ceria/iron oxide nano-composites based on chitosan as an effective adsorbent for removal of Cr(VI) and Co(II) ions from aqueous systems. Environmental Science and Pollution Research, 2018, 25, 27059-27073.	5.3	22
50	Three-dimensional simulation of turbulent flow in a membrane tube filled with semi-circular baffles. Desalination, 2012, 294, 8-16.	8.2	21
51	Integral technique for evaluation and optimization of Ni (II) ions adsorption onto regenerated cellulose using response surface methodology. Arabian Journal of Chemistry, 2018, 11, 370-379.	4.9	21
52	Experimental investigation and CFD simulation of turbulence effect on hydrodynamic and mass transfer in a packed bed airlift internal loop reactor. International Communications in Heat and Mass Transfer, 2011, 38, 518-524.	5.6	19
53	Computational fluid dynamics to analyze the effects of initial wetting film and triple contact line on the efficiency of immiscible two-phase flow in a pore doublet model. Journal of Molecular Liquids, 2019, 273, 248-258.	4.9	19
54	Generalized models for predicting the critical properties of pure chemical compounds. Journal of Molecular Liquids, 2017, 240, 777-793.	4.9	18

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55	Investigation of effective processes parameters on lead (II) adsorption from wastewater by biochar in mild air oxidation pyrolysis process. International Journal of Environmental Analytical Chemistry, 2022, 102, 3975-3995.	3.3	18
56	An insight into the role of riboflavin ligand in the self-assembly of poly(lactic-co-glycolic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 70 5250-5260.	2.7	17
57	Optimized production, Pb(II) adsorption and characterization of alkali modified hydrochar from sugarcane bagasse. Scientific Reports, 2021, 11, 22328.	3.3	17
58	Free convection of waterâ€“Fe 3 O 4 nanofluid in an inclined cavity subjected to a magnetic field: CFD modeling, sensitivity analysis. Advanced Powder Technology, 2017, 28, 1573-1584.	4.1	16
59	CFD simulation of heat and mass transport for water transfer through hydrophilic membrane in direct-contact membrane distillation process. Desalination and Water Treatment, 2016, 57, 18109-18119.	1.0	15
60	CFD investigation of local properties of Al 2 O 3 /water nanofluid in a converging microchannel under imposed pressure difference. Advanced Powder Technology, 2017, 28, 763-774.	4.1	15
61	Novel Î±-alumina@CuO-Fe2O3nanofluid for potential application in PEM fuel cell cooling systems: Towards neutralizing the increase of electrical conductivity. Thermochimica Acta, 2021, 695, 178818.	2.7	15
62	Experimental and simulation study of gas diffusion effect during gas injection into naturally fractured reservoirs. Journal of Natural Gas Science and Engineering, 2016, 33, 438-447.	4.4	14
63	Application of new eco-friendly LCMs for combating the lost circulation in heavy-weight and oil-based mud. RSC Advances, 2018, 8, 9685-9696.	3.6	14
64	Physico-chemical properties prediction of hydrochar in macroalgae Sargassum horneri hydrothermal carbonisation. International Journal of Environmental Analytical Chemistry, 0, , 1-22.	3.3	14
65	An integrated microfluidic device for stem cell differentiation based on cell-imprinted substrate designed for cartilage regeneration in a rabbit model. Materials Science and Engineering C, 2021, 121, 111794.	7.3	14
66	CFD simulation of the hydrodynamics in an internal air-lift reactor with two different configurations. Frontiers of Chemical Science and Engineering, 2011, 5, 455-462.	4.4	13
67	Hydrodynamics and oxygen mass transfer in a packed bed split-cylinder airlift reactor containing dilute alcoholic solutions. Heat and Mass Transfer, 2013, 49, 11-19.	2.1	13
68	Hydrodynamics and mass transfer study of aliphatic alcohols in airlift reactors. Chemical Engineering Research and Design, 2013, 91, 925-932.	5.6	13
69	Adsorption of Pb(II), Cu(II) and Ni(II) ions from aqueous solutions by functionalised henna powder (Lawsonia Inermis); isotherm, kinetic and thermodynamic studies. International Journal of Environmental Analytical Chemistry, 2022, 102, 1-22.	3.3	13
70	Consideration of inclined mixers embedded inside a photobioreactor for microalgae cultivation using computational fluid dynamic and particle image velocimetry measurement. Journal of Cleaner Production, 2018, 195, 753-764.	9.3	12
71	A parametric study of the drying process of polypropylene particles in a pilot-scale fluidized bed dryer using Computational Fluid Dynamics. Chemical Engineering Research and Design, 2020, 156, 13-22.	5.6	12
72	Effects of surface active agents on hydrodynamics and mass transfer characteristics in a split-cylinder airlift bioreactor with packed bed. Chemical Engineering Research and Design, 2012, 90, 899-905.	5.6	11

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73	CFD modeling of hydrophobic pervaporation process: ethanol/water separation. Desalination and Water Treatment, 2013, 51, 3445-3453.	1.0	11
74	Biomolecular engineering of drugs loading in Riboflavin-targeted polymeric devices: simulation and experimental. Scientific Reports, 2022, 12, 5119.	3.3	11
75	3D Computational-Fluid-Dynamics Modeling of Horizontal Three-Phase Separators: An Approach for Estimating the Optimal Dimensions. SPE Production and Operations, 2018, 33, 879-895.	0.6	10
76	Effects of dynamic contact angle on immiscible two-phase flow displacement in angular pores: A computational fluid dynamics approach. Journal of Molecular Liquids, 2019, 292, 111457.	4.9	10
77	A CFD investigation into the enhancement of down-hole de-oiling hydro cyclone performance. Journal of Petroleum Science and Engineering, 2021, 199, 108352.	4.2	10
78	CFD modeling and experimental study of multi-walled carbon nanotubes production by fluidized bed catalytic chemical vapor deposition. International Communications in Heat and Mass Transfer, 2011, 38, 984-989.	5.6	9
79	Generalized analytical solution for gravity drainage phenomena in finite matrix block with arbitrary time dependent inlet boundary condition and variable matrix block size. Journal of Petroleum Science and Engineering, 2018, 167, 227-240.	4.2	9
80	Three-dimensional multiphase CFD modeling of thermalâ€“hydraulic characteristics of nanofluid flow in helical microchannels. Journal of Thermal Analysis and Calorimetry, 2019, 136, 1831-1846.	3.6	9
81	Synthesis and characterization of Î³-MnO2/chitosan/Fe3O4 cross-linked with EDTA and the study of its efficiency for the elimination of zinc(II) and lead(II) from wastewater. Environmental Science and Pollution Research, 2021, 28, 9235-9254.	5.3	9
82	Modeling apparent viscosity of waxy crude oils doped with polymeric wax inhibitors. Journal of Petroleum Science and Engineering, 2021, 196, 108076.	4.2	9
83	Rigorous modeling of frictional pressure loss in inclined annuli using artificial intelligence methods. Journal of Petroleum Science and Engineering, 2022, 211, 110203.	4.2	9
84	Hydrodynamics and Mass Transfer of Oily Micro-emulsions in An External Loop Airlift Reactor. Chinese Journal of Chemical Engineering, 2014, 22, 267-273.	3.5	8
85	Experimental study of the formation of natural gas hydrates in the presence of NaCl and KCl. Petroleum Science and Technology, 2019, 37, 1924-1930.	1.5	8
86	Mutual Solubility Study in Supercritical Fluid Extraction of Tocopherols from Crude Palm Oil Using CO2 Solvent. International Journal of Molecular Sciences, 2010, 11, 3649-3659.	4.1	7
87	Coupling of CFD and semiempirical methods for designing three-phase condensate separator: case study and experimental validation. Journal of Petroleum Exploration and Production, 2019, 9, 353-382.	2.4	7
88	Computational and experimental studies of a cell-imprinted-based integrated microfluidic device for biomedical applications. Scientific Reports, 2021, 11, 12130.	3.3	7
89	Microfluidic Engineering of RGD^[1]â€Terminated Nanocarriers Micellization and Inâ€Situ Docetaxel Encapsulation: An Atomistic Insight. ChemistrySelect, 2022, 7, .	1.5	7
90	Influence of acetaminophen on gas hold-up, liquid circulation velocity and mass transfer coefficient in a split-cylinder airlift bioreactor. Journal of Molecular Liquids, 2012, 173, 113-118.	4.9	6

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91	Molecular engineering of the last-generation CNTs in smart cancer therapy by grafting PEGâ€“PLGAâ€“riboflavin. RSC Advances, 2020, 10, 40637-40648.	3.6	6
92	Hydrodynamics and mass transfer of oilâ€“water micro-emulsion in a three phase internal airlift reactor. Fuel, 2012, 97, 197-201.	6.4	5
93	Application of generic cubic equations of state in the CFD simulation of the sweeping gas polytetrafluoroethylene (PTFE) membrane distillation. Desalination and Water Treatment, 2016, 57, 1647-1658.	1.0	5
94	Computational fluid dynamic modeling of a pervaporation process for removal of styrene from petrochemical wastewater. RSC Advances, 2016, 6, 15327-15339.	3.6	5
95	Synthesis, structure and mechanical properties of nanocomposites based on exfoliated nano magnesium silicate crystal and poly(acrylamide). Journal of Dispersion Science and Technology, 2019, 40, 276-286.	2.4	5
96	Morphological and structural insights into high aspect ratio lauric acid/TiO2 nanowires: A low-temperature synthesis. Ceramics International, 2021, 47, 9424-9436.	4.8	5
97	A low temperature synthesis of Ti/TiO2/Fatty Acid/GOx/ZnO and its evaluation for amoxicillin bio-photo-catalytic degradation. Journal of Molecular Liquids, 2021, 343, 116979.	4.9	5
98	Thermodynamic and Polymeric Inhibitors Effects on Methane Gas Hydrate Formation. Trends in Applied Sciences Research, 2012, 7, 505-513.	0.4	5
99	Insights into the coâ€“pyrolysis of olive stone, waste polyvinyl chloride and Spirulina microalgae blends through thermogravimetric analysis. Algal Research, 2022, 62, 102635.	4.6	5
100	Oil removal from an oil-in-water emulsion by electrochemical process using Taguchi method. Desalination and Water Treatment, 2012, 49, 19-25.	1.0	4
101	CFD Simulation of hold-up and liquid circulation velocity in a membrane airlift reactor. Theoretical Foundations of Chemical Engineering, 2012, 46, 266-273.	0.7	4
102	Biosynthesized silver nanofluid effect on methane dissolution in water. Journal of Molecular Liquids, 2013, 184, 1-3.	4.9	4
103	Simulation of landfill leachate treatment using electro-Fenton technique. Water Science and Technology, 2014, 69, 343-349.	2.5	4
104	Experimental and Computational Study on the Microfluidic Control of Micellar Nanocarrier Properties. ACS Omega, 2021, 6, 23117-23128.	3.5	4
105	Investigation of bubble diameter and flow regime between water and dilute aqueous ethanol solutions in an airlift reactor. Frontiers of Chemical Science and Engineering, 2011, 5, 194-202.	4.4	3
106	Hydrodynamics and mass transfer study of oil-water micro-emulsion in a three phase external loop airlift reactor. RSC Advances, 2014, 4, 62347-62355.	3.6	3
107	A new physical modeling for two-phase wellbore storage due to phase redistribution. Journal of Petroleum Science and Engineering, 2020, 195, 107706.	4.2	3
108	Effects of topological changes in microchannel geometries on the hydrodynamic formation and breakup of all-aqueous droplets. Physics of Fluids, 2022, 34, .	4.0	3

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109	The Influence of Oil-water Ratio on the Operation of an Airlift Reactor Containing Petroleum-based Micro-emulsion. Petroleum Science and Technology, 2014, 32, 514-520.	1.5	2
110	Study on thermal and mechanical behaviors of polypropylene grade 552R/Cloisite 15A nanocomposites suitable for yarn applications. Polymers and Polymer Composites, 2021, 29, S325-S334.	1.9	2
111	Inâ€Silico Tuning of Curcumin Loading on PEG Grafted Chitosan: An Atomistic Simulation. ChemistrySelect, 2021, 6, 4544-4555.	1.5	2
112	CFD Simulation of hydrodynamics of air sparging in a vertical tubular membrane. Theoretical Foundations of Chemical Engineering, 2013, 47, 779-787.	0.7	1
113	Effects of Convection and Fracture Boundary Conditions on Heat Transfer Shape Factor in Fractured Geothermal Reservoirs. Transport in Porous Media, 2018, 125, 357-375.	2.6	1
114	A new pressure and temperature dependent relative viscosity model for water-Al2O3 nanofluids using GMDH neural network. Petroleum Science and Technology, 0, , 1-21.	1.5	1
115	XDEM study of burden distribution in iron ore pellet firing. Ironmaking and Steelmaking, 2022, 49, 615-625.	2.1	1
116	Patterned synthesis of nanowires in microheaters: design and operational aspects. Microfluidics and Nanofluidics, 2022, 26, 1.	2.2	1
117	Hydrodynamics and mass transfer coefficient in a split-cylindrical airlift bioreactor containing oil-in-water micro-emulsions. , 2010, , .		0
118	From nitrate determination using microfluidic sensors to photocatalytic process intensification. International Journal of Environmental Analytical Chemistry, 2020, , 1-35.	3.3	0
119	EXPERIMENTAL INVESTIGATION AND CFD SIMULATION OF THE HYDRODYNAMIC AND MASS TRANSFER CHARACTERISTICS IN A SPLIT-CYLINDER AIRLIFT REACTOR CONTAINING PETROLEUM-WATER MICRO-EMULSIONS. Environmental Engineering and Management Journal, 2013, 12, 2357-2370.	0.6	0