

Mehdi Khiadani

List of Publications by Year in descending order

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96
papers

2,263
citations

201385

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276539

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99
docs citations

99
times ranked

2049
citing authors

#	ARTICLE	IF	CITATIONS
1	Effects of binary hybrid nanofluid on heat transfer and fluid flow in a triangular-corrugated channel: An experimental and numerical study. Powder Technology, 2022, 395, 267-279.	2.1	21
2	Effect of ozonation-based disinfection methods on the removal of antibiotic resistant bacteria and resistance genes (ARB/ARGs) in water and wastewater treatment: a systematic review. Science of the Total Environment, 2022, 811, 151404.	3.9	53
3	Prussian blue-conjugated ZnO nanoparticles for near-infrared light-responsive photocatalysis. Materials Today Energy, 2022, 23, 100895.	2.5	14
4	Hydrothermal and energy analysis of flat plate solar collector using copper oxide nanomaterials with different morphologies: Economic performance. Sustainable Energy Technologies and Assessments, 2022, 49, 101772.	1.7	5
5	Concentration polarization control in stand-alone and hybrid forward osmosis systems: Recent technological advancements and future directions. Chemical Engineering Research and Design, 2022, 178, 199-223.	2.7	9
6	Treatment of synthetic dye containing textile raw wastewater effluent using UV/Chlorine/Br photolysis process followed by activated carbon adsorption. Environmental Science and Pollution Research, 2022, 29, 39400-39409.	2.7	12
7	Rational design of ZnO-zeolite imidazole hybrid nanoparticles with reduced charge recombination for enhanced photocatalysis. Journal of Colloid and Interface Science, 2022, 614, 538-546.	5.0	36
8	Development of machine learning and stepwise mechanistic models for performance prediction of direct contact membrane distillation module- A comparative study. Chemical Engineering and Processing: Process Intensification, 2022, 173, 108857.	1.8	10
9	Effects of influent physicochemical characteristics on air dissolution, bubble size and rise velocity in dissolved air flotation: A review. Separation and Purification Technology, 2022, 289, 120772.	3.9	38
10	A review on state-of-the-art applications of data-driven methods in desalination systems. Desalination, 2022, 532, 115744.	4.0	22
11	Performance analysis of tubular membrane distillation modules: An experimental and CFD analysis. Chemical Engineering Research and Design, 2022, 183, 478-493.	2.7	4
12	Methodology for spatially resolved transient convection processes using infrared thermography. Experimental Heat Transfer, 2021, 34, 269-292.	2.3	12
13	An Adsorption–Catalysis Pathway toward Sustainable Application of Mesoporous Carbon Nanospheres for Efficient Environmental Remediation. ACS ES&T Water, 2021, 1, 145-156.	2.3	21
14	A comparative study of various machine learning methods for performance prediction of an evaporative condenser. International Journal of Refrigeration, 2021, 126, 280-290.	1.8	18
15	Quantifying techno-economic indicators' impact on isolated renewable energy systems. IScience, 2021, 24, 102730.	1.9	5
16	Development of artificial neural networks for performance prediction of a heat pump assisted humidification-dehumidification desalination system. Desalination, 2021, 508, 115052.	4.0	36
17	Flow and heat transfer characteristics of turbulent swirling impinging jets. Applied Thermal Engineering, 2021, 196, 117357.	3.0	9
18	CFD-PBM and experimental investigation of a shear thinning fluid in a gas-liquid tank agitated by a helical ribbon impeller. Separation and Purification Technology, 2021, 272, 118855.	3.9	21

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19	Microplastics fouling and interaction with polymeric membranes: A review. <i>Chemosphere</i> , 2021, 283, 131185.	4.2	49
20	Semifluidized Bed Adsorption Column Studies for Simultaneous Removal of Aqueous Phase Pb ²⁺ and Cd ²⁺ by Composite Adsorbents: an Experimental and Mass Transfer Dynamic Model-Based Approach. <i>Water, Air, and Soil Pollution</i> , 2021, 232, 1.	1.1	2
21	Phase change materials (PCMs) for improving solar still productivity: a review. <i>Journal of Thermal Analysis and Calorimetry</i> , 2020, 139, 1585-1617.	2.0	63
22	Nozzle exit conditions and the heat transfer in non-swirling and weakly swirling turbulent impinging jets. <i>Heat and Mass Transfer</i> , 2020, 56, 269-290.	1.2	11
23	Performance of a dual helical ribbon impeller in a two-phase (gas-liquid) stirred tank reactor. <i>Chemical Engineering and Processing: Process Intensification</i> , 2020, 148, 107811.	1.8	28
24	Optimal sizing design and operation of electrical and thermal energy storage systems in smart buildings. <i>Journal of Energy Storage</i> , 2020, 28, 101186.	3.9	68
25	Preparation and Characterization of Raw and Inorganic Acid-Activated Pine Cone Biochar and Its Application in the Removal of Aqueous-Phase Pb ²⁺ Metal Ions by Adsorption. <i>Water, Air, and Soil Pollution</i> , 2020, 231, 1.	1.1	36
26	A real-time energy management strategy for pumped hydro storage systems in farmhouses. <i>Journal of Energy Storage</i> , 2020, 32, 101928.	3.9	12
27	A multipurpose desalination, cooling, and air-conditioning system powered by waste heat recovery from diesel exhaust fumes and cooling water. <i>Case Studies in Thermal Engineering</i> , 2020, 21, 100702.	2.8	25
28	Effect of hybrid (microwave-H ₂ O ₂) feed sludge pretreatment on single and two-stage anaerobic digestion efficiency of real mixed sewage sludge. <i>Chemical Engineering Research and Design</i> , 2020, 136, 194-202.	2.7	22
29	Comparison and verification of turbulence Reynolds-averaged Navier-Stokes closures to model spatially varied flows. <i>Scientific Reports</i> , 2020, 10, 19059.	1.6	6
30	Aqueous phase phenol removal from synthetic and real steel plant effluents through a batch and Semifluidized bed column operation: Experimental and model analysis. <i>Journal of Environmental Chemical Engineering</i> , 2020, 8, 104441.	3.3	4
31	Socio-Hydrological Modelling to Assess Reliability of an Urban Water System under Formal-Informal Supply Dynamics. <i>Water (Switzerland)</i> , 2020, 12, 2795.	1.2	2
32	Assessment of reference evapotranspiration across an arid urban environment having poor data monitoring system. <i>Hydrological Processes</i> , 2020, 34, 4000-4016.	1.1	12
33	Integration of heat pipe solar water heating systems with different residential households: An energy, environmental, and economic evaluation. <i>Case Studies in Thermal Engineering</i> , 2020, 21, 100662.	2.8	20
34	Modelling, design, and experimental validation of a grid-connected farmhouse comprising a photovoltaic and a pumped hydro storage system. <i>Energy Conversion and Management</i> , 2020, 210, 112675.	4.4	21
35	A solar membrane-based wastewater treatment system for high-quality water production. <i>Energy</i> , 2020, 206, 118233.	4.5	7
36	A novel photovoltaic-pumped hydro storage microgrid applicable to rural areas. <i>Applied Energy</i> , 2020, 262, 114284.	5.1	42

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37	Effect of salinity on air dissolution, size distribution of microbubbles, and hydrodynamics of a dissolved air flotation (DAF) system. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2020, 591, 124547.	2.3	24
38	Performance improvement of thermal-driven membrane-based solar desalination systems using nanofluid in the feed stream. <i>Sustainable Energy Technologies and Assessments</i> , 2020, 39, 100715.	1.7	15
39	Water-stable MOFs-based core-shell nanostructures for advanced oxidation towards environmental remediation. <i>Composites Part B: Engineering</i> , 2020, 192, 107985.	5.9	36
40	Comparative and performative investigation of various data-based and conventional theoretical methods for modelling heat pipe solar collectors. <i>Solar Energy</i> , 2020, 198, 212-223.	2.9	25
41	Evaporation rates and temperature distributions in fine droplet flash evaporation sprays. <i>International Journal of Thermal Sciences</i> , 2019, 145, 106037.	2.6	18
42	Experimental and mathematical investigations of spray angle and droplet sizes of a flash evaporation desalination system. <i>Powder Technology</i> , 2019, 355, 542-551.	2.1	31
43	Optimal allocation of distributed energy storage systems to improve performance and power quality of distribution networks. <i>Applied Energy</i> , 2019, 252, 113468.	5.1	81
44	Performance improvement of spray flash evaporation desalination systems using multiple nozzle arrangement. <i>Applied Thermal Engineering</i> , 2019, 163, 114385.	3.0	18
45	A novel solar-driven direct contact membrane-based water desalination system. <i>Energy Conversion and Management</i> , 2019, 199, 112055.	4.4	49
46	Theoretical modelling approaches of heat pipe solar collectors in solar systems: A comprehensive review. <i>Solar Energy</i> , 2019, 193, 227-243.	2.9	26
47	Transient heat transfer characteristics of swirling and non-swirling turbulent impinging jets. <i>Experimental Thermal and Fluid Science</i> , 2019, 109, 109917.	1.5	10
48	An optimal allocation and sizing strategy of distributed energy storage systems to improve performance of distribution networks. <i>Journal of Energy Storage</i> , 2019, 26, 100847.	3.9	35
49	Strategies to improve the thermal performance of heat pipe solar collectors in solar systems: A review. <i>Energy Conversion and Management</i> , 2019, 183, 307-331.	4.4	83
50	Parametric design exploration of fin-and-oval tube compact heat exchangers performance with a new type of corrugated fin patterns. <i>International Journal of Thermal Sciences</i> , 2019, 144, 173-190.	2.6	35
51	Performance analysis of a thermal-driven tubular direct contact membrane distillation system. <i>Applied Thermal Engineering</i> , 2019, 159, 113887.	3.0	21
52	Effects of internal geometry on hydrodynamics of dissolved air flotation (DAF) tank: An experimental study using particle image velocimetry (PIV). <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2019, 575, 382-390.	2.3	13
53	Enhancing heat pipe solar water heating systems performance using a novel variable mass flow rate technique and different solar working fluids. <i>Solar Energy</i> , 2019, 186, 191-203.	2.9	38
54	Transparent polymers to emulate the rheological properties of primary, activated, and digested sludge. <i>Chemical Engineering Research and Design</i> , 2019, 146, 404-415.	2.7	10

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55	An improved mathematical model for a pumped hydro storage system considering electrical, mechanical, and hydraulic losses. <i>Applied Energy</i> , 2019, 247, 228-236.	5.1	43
56	Thermal performance of an evacuated tube heat pipe solar water heating system in cold season. <i>Applied Thermal Engineering</i> , 2019, 149, 644-657.	3.0	74
57	A comparative study of predicting oxygen transfer in weirs and water jets in cross-flows. <i>Water Management</i> , 2019, 172, 14-29.	0.4	1
58	Experimental investigation and analysis of a new single-stage vacuum spray flash desalinator utilising a gas-liquid ejector. <i>Journal of Cleaner Production</i> , 2018, 190, 118-127.	4.6	4
59	A review of latest developments, progress, and applications of heat pipe solar collectors. <i>Renewable and Sustainable Energy Reviews</i> , 2018, 95, 273-304.	8.2	122
60	Calibration of Valiantzas's™ reference evapotranspiration equations for the Pilbara region, Western Australia. <i>Theoretical and Applied Climatology</i> , 2017, 128, 845-856.	1.3	22
61	Modelling of moving bed biofilm reactor (MBBR) efficiency on hospital wastewater (HW) treatment: a comprehensive analysis on BOD and COD removal. <i>International Journal of Environmental Science and Technology</i> , 2017, 14, 841-852.	1.8	23
62	Experimental Study on Oxygen Transfer Capacity of Water Jets Discharging into Turbulent Cross-Flow. <i>Journal of Environmental Engineering, ASCE</i> , 2017, 143, 04017007.	0.7	11
63	Reoxygenation by Free, Wall-Supported, and Plate-Supported Rectangular Jets Plunging into a Quiescent Pool. <i>Journal of Environmental Engineering, ASCE</i> , 2017, 143, .	0.7	6
64	A numerical model and experimental verification for analysing a new vacuum spray flash desalinator utilising low grade energy. <i>Desalination</i> , 2017, 413, 109-118.	4.0	30
65	Large-scale regional delineation of riparian vegetation in the arid and semi-arid Pilbara region, WA. <i>Hydrological Processes</i> , 2017, 31, 4269-4281.	1.1	15
66	Spatially Varied Open-Channel Flow with Increasing Discharge Equation. <i>Journal of Hydraulic Engineering</i> , 2017, 143, 04016089.	0.7	2
67	Delineation of riparian vegetation from Landsat multi-temporal imagery using PCA. <i>Hydrological Processes</i> , 2017, 31, 800-810.	1.1	11
68	Oxygen Transfer by Multiple Vertical Plunging Jets in Tandem. <i>Journal of Environmental Engineering, ASCE</i> , 2017, 143, .	0.7	9
69	Efficiency of a Combined Desalination and Power System Utilizing a Two-Phase Flow Multistream Heat Exchanger. <i>Heat Transfer Engineering</i> , 2017, 38, 1000-1007.	1.2	7
70	Developing Equations for Estimating Reference Evapotranspiration in Australia. <i>Water Resources Management</i> , 2016, 30, 3815-3828.	1.9	31
71	Optimised exergy efficiency of a combined flash spray desalinator recovering discharge thermal energy. <i>Desalination and Water Treatment</i> , 2016, 57, 18588-18596.	1.0	5
72	A novel vacuum discharge thermal energy combined desalination and power generation system utilizing R290/R600a. <i>Energy</i> , 2016, 98, 215-224.	4.5	29

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73	Defluoridation of water using activated alumina in presence of natural organic matter via response surface methodology. <i>Environmental Science and Pollution Research</i> , 2016, 23, 887-897.	2.7	33
74	The Design and Construction of a High Efficiency Satellite Electrical Power Supply System. <i>Journal of Power Electronics</i> , 2016, 16, 666-674.	0.9	11
75	Assessment of Artificial Neural Networks and IHACRES models for simulating streamflow in Marillana catchment in the Pilbara, Western Australia. <i>Australian Journal of Water Resources</i> , 2015, 19, 116-126.	1.6	7
76	Photocatalytic Degradation of the Azo Dye Acid Red 14 in Nanosized TiO ₂ Suspension under Simulated Solar Light. <i>Clean - Soil, Air, Water</i> , 2015, 43, 1037-1043.	0.7	13
77	Multivariate detection and attribution of land-cover changes in the Central Pilbara, Western Australia. <i>International Journal of Remote Sensing</i> , 2015, 36, 2599-2621.	1.3	7
78	Comparison of Simulation Methods for Recharge Mounds Under Rectangular Basins. <i>Water Resources Management</i> , 2015, 29, 2855-2874.	1.9	6
79	Performance analysis of a low pressure discharge thermal energy combined desalination unit. <i>Applied Thermal Engineering</i> , 2015, 76, 116-122.	3.0	14
80	Applicability of universal Bacteroidales genetic marker for microbial monitoring of drinking water sources in comparison to conventional indicators. <i>Environmental Monitoring and Assessment</i> , 2014, 186, 7055-7062.	1.3	10
81	Removal of turbidity from water by dissolved air flotation and conventional sedimentation systems using poly aluminum chloride as coagulant. <i>Desalination and Water Treatment</i> , 2014, 52, 985-989.	1.0	9
82	Improving urban run-off quality using iron oxide nanoparticles with magnetic field. <i>Desalination and Water Treatment</i> , 2014, 52, 678-682.	1.0	3
83	Validation of linear and non-linear kinetic modeling of saline wastewater treatment by sequencing batch reactor with adapted and non-adapted consortiums. <i>Desalination</i> , 2014, 344, 228-235.	4.0	50
84	Urban runoff treatment using nano-sized iron oxide coated sand with and without magnetic field applying. <i>Journal of Environmental Health Science & Engineering</i> , 2013, 11, 43.	1.4	13
85	Multi-Component Adsorption of Benzene, Toluene, Ethylbenzene, and Xylene from Aqueous Solutions by Montmorillonite Modified with Tetradecyl Trimethyl Ammonium Bromide. <i>Journal of Chemistry</i> , 2013, 2013, 1-10.	0.9	33
86	Application of <i>Glycyrrhiza glabra</i> Root as a Novel Adsorbent in the Removal of Toluene Vapors: Equilibrium, Kinetic, and Thermodynamic Study. <i>Journal of Environmental and Public Health</i> , 2013, 2013, 1-7.	0.4	9
87	Turbulence measurements in spatially-varied flow with increasing discharge. <i>Journal of Hydraulic Research/De Recherches Hydrauliques</i> , 2012, 50, 418-426.	0.7	5
88	Removal of benzene, toluene, ethylbenzene and xylene (BTEX) from aqueous solutions by montmorillonite modified with nonionic surfactant: Equilibrium, kinetic and thermodynamic study. <i>Chemical Engineering Journal</i> , 2012, 191, 341-348.	6.6	152
89	Treatment of saline wastewater by a sequencing batch reactor with emphasis on aerobic granule formation. <i>Bioresource Technology</i> , 2012, 111, 21-26.	4.8	47
90	Determining Chlorine Decay Constants in Isfahan Water Transportation Pipeline. <i>International Conference on Bioinformatics and Biomedical Engineering: [proceedings] International Conference on Bioinformatics and Biomedical Engineering</i> , 2010, , .	0.0	0

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91	Velocity Distributions in Spatially Varied Flow with Increasing Discharge. Journal of Hydraulic Engineering, 2007, 133, 721-735.	0.7	8
92	Boundary Shear Stress in Spatially Varied Flow with Increasing Discharge. Journal of Hydraulic Engineering, 2005, 131, 705-714.	0.7	16
93	Friction Factors for Spatially Varied Flow with Increasing Discharge. Journal of Hydraulic Engineering, 2005, 131, 792-799.	0.7	23
94	Pb (II) ions sequestration from aqueous solutions by canola stalk: isotherms and kinetics studies. , 0, 118, 205-215.		1
95	Effect of salinity and temperature on air dissolution in an unpacked air saturator of a dissolved air flotation system. , 0, 170, 91-100.		4
96	Evaluating the spatiotemporal variations of daytime surface and canopy urban heat islands: an arid climate case study. Journal of Environmental Planning and Management, 0, , 1-22.	2.4	0