Babak Aghel

List of Publications by Citations

44 papers	868 citations	19 h-index	28 g-index
47 ext. papers	1,223 ext. citations	5.3 avg, IF	5.32 L-index

#	Paper	IF	Citations
44	Optimization of biodiesel production from soybean oil in a microreactor. *Energy Conversion and Management*, **2014**, 79, 599-605	10.6	110
43	Production of biodiesel from waste cooking oil using a homogeneous catalyst: Study of semi-industrial pilot of microreactor. *Renewable Energy*, **2019**, 136, 677-682	8.1	72
42	Applications of rice husk ash as green and sustainable biomass. *Journal of Cleaner Production*, **2019**, 237, 117851	10.3	70
41	The use of KOH/Clinoptilolite catalyst in pilot of microreactor for biodiesel production from waste cooking oil. *Fuel*, **2020**, 263, 116659	7.1	53
40	Using a wire coil insert for biodiesel production enhancement in a microreactor. *Energy Conversion and Management*, **2014**, 84, 541-549	10.6	48
39	Pilot-scale production of biodiesel from waste cooking oil using kettle limescale as a heterogeneous catalyst. *Renewable Energy*, **2019**, 142, 207-214	8.1	37
38	Study of the transesterification of waste cooking oil for the production of biodiesel in a microreactor pilot: The effect of acetone as the co-solvent. *Fuel*, **2020**, 273, 117736	7.1	33
37	CFD modeling of mixing intensification assisted with ultrasound wave in a T-type microreactor. *Chemical Engineering and Processing: Process Intensification*, **2014**, 86, 36-46	3.7	32
36	Experimental study of carbon dioxide absorption by mixed aqueous solutions of methyl diethanolamine (MDEA) and piperazine (PZ) in a microreactor. *Chemical Engineering Research and Design*, **2019**, 131, 152-159	5.5	26
35	The feasibility of Levenberg□Marquardt algorithm combined with imperialist competitive computational method predicting drag reduction in crude oil pipelines. *Journal of Petroleum Science and Engineering*, **2020**, 185, 106634	4.4	26
34	Optimization of monoethanolamine for CO2 absorption in a microchannel reactor. *Journal of CO2 Utilization*, **2018**, 28, 264-273	7.6	26
33	On the viscosity of natural gas. *Fuel*, **2015**, 150, 609-618	7.1	23
32	Biodiesel production from waste cooking oil using wheat bran ash as a sustainable biomass. *Fuel*, **2021**, 295, 120542	7.1	23
31	Application of the microchannel reactor to carbon dioxide absorption. *Journal of Cleaner Production* , **2019**, 231, 723-732	10.3	22
30	Modeling and prediction of water quality parameters using a hybrid particle swarm optimization□eural fuzzy approach. *International Journal of Environmental Science and Technology*, **2019**, 16, 4823-4832	3.3	22
29	Feature validity during machine learning paradigms for predicting biodiesel purity. *Fuel*, **2020**, 262, 116498	7.1	22
28	Optimization of biodiesel production process in a continuous microchannel using response surface methodology. *Korean Journal of Chemical Engineering*, **2017**, 34, 1013-1020	2.8	21

27	Effect of Different Cosolvents on Transesterification of Waste Cooking Oil in a Microreactor. *Chemical Engineering and Technology*, **2018**, 41, 598-605	2	21
26	New heterogeneous process for continuous biodiesel production in microreactors. *Canadian Journal of Chemical Engineering*, **2017**, 95, 1280-1287	2.3	20
25	Carbon dioxide desorption from aqueous solutions of monoethanolamine and diethanolamine in a microchannel reactor. *Separation and Purification Technology*, **2020**, 237, 116390	8.3	19
24	Estimation of kinematic viscosity of biodiesel-diesel blends: Comparison among accuracy of intelligent and empirical paradigms. *Renewable Energy*, **2021**, 177, 318-326	8.1	18
23	Comparison of aqueous and non-aqueous alkanolamines solutions for carbon dioxide desorption in a microreactor. *Energy*, **2020**, 201, 117618	7.9	16
22	Use of modified Iranian clinoptilolite zeolite for cadmium and lead removal from oil refinery wastewater. *International Journal of Environmental Science and Technology*, **2020**, 17, 1239-1250	3.3	15
21	Using Y-shaped microreactor for continuous decolorization of an Azo dye. *Desalination and Water Treatment*, **2014**, 52, 5513-5519		13
20	Heat-transfer enhancement of two-phase closed thermosyphon using a novel cross-flow condenser. *Heat and Mass Transfer*, **2017**, 53, 765-773	2.2	11
19	Review on microfluidic device applications for fluids separation and water treatment processes. *SN Applied Sciences*, **2020**, 2, 1	1.8	9
18	Experimental and CFD studies on using coil wire insert in a proton exchange membrane fuel cell. *Chemical Engineering and Processing: Process Intensification*, **2010**, 49, 689-696	3.7	8
17	Forecasting of water thermal conductivity enhancement by adding nano-sized alumina particles. *Journal of Thermal Analysis and Calorimetry*, **2021**, 145, 1791-1800	4.1	8
16	Experimental study on heat transfer characteristics of a modified two-phase closed thermosyphon. *Thermal Science*, **2017**, 21, 2481-2489	1.2	5
15	Desorption of carbon dioxide from a mixture of monoethanolamine with alcoholic solvents in a microreactor. *Fuel*, **2021**, 306, 121636	7.1	5
14	The effect of alkanolamine mixtures on CO2 absorption efficiency in T-Shaped microchannel. *Environmental Technology and Innovation*, **2021**, 24, 102006	7	4
13	A review of recent progress in biogas upgrading: With emphasis on carbon capture. *Biomass and Bioenergy*, **2022**, 160, 106422	5.3	4
12	Biodiesel production from waste cooking oil in a micro-sized reactor in the presence of cow bone-based KOH catalyst. *Biomass Conversion and Biorefinery*,1	2.3	3
11	Transesterification of waste cooking oil using Clay/CaO as a solid base catalyst. *Energy*, **2021**, 122536	7.9	3
10	Removal of dissolved oxygen from industrial raw water in a microchannel. *Environmental Technology and Innovation*, **2021**, 23, 101672	7	3

9	Transesterification of waste cooking oil using clinoptilolite/ industrial phosphoric waste as green and environmental catalysts. *Energy*, **2022**, 244, 123138	7.9	2
8	Remediation of Spent Caustic in the Wastewater of Oil Refinery by Photo-Fenton Process **2020**, 9, 179-188		2
7	Liquid-liquid equilibrium of a ternary system of water+ ethanol+ benzene or furfural in a micro-extractor: experimental investigation and thermodynamic modeling. *Separation Science and Technology*, **2020**, 55, 3402-3411	2.5	2
6	Simulation of pentane plant of Kermanshah oil refinery company. *Petroleum Science and Technology* , **2019**, 37, 1917-1923	1.4	1
5	Optimizing the Production of Biodiesel from Waste Cooking Oil Utilizing Industrial Waste-Derived MgO/CaO Catalysts. *Chemical Engineering and Technology*, **2022**, 45, 348-354	2	1
4	Application of Nanofluids in CO2 Absorption: A Review. *Applied Sciences (Switzerland)*, **2022**, 12, 3200	2.6	1
3	Stripping of hydrogen sulfide from crude oil desalter effluent via different adsorbents. *International Journal of Environmental Science and Technology*,1	3.3	0
2	Intensified biogas upgrading via various wastewater using microchannel. *Chemical Engineering and Processing: Process Intensification*, **2022**, 108927	3.7	0
1	Discrimination between Pore and Throat Resistances against Single-Phase Flow in Porous Media. *Water (Switzerland)*, **2022**, 14, 1064	3	