Omid Tavakoli

List of Publications by Year
in descending order

75 papers	2,072 citations	218592 26 h-index	265120 42 g-index
75 all docs	75 docs citations	75 times ranked	2553 citing authors

#	Article	IF	Citations
1	Investigation of graphene-based systems for hydrogen storage. Renewable and Sustainable Energy Reviews, 2017, 74, 104-109.	8.2	119
2	Enzymatic clarification of fruit juices using xylanase immobilized on 1,3,5-triazine-functionalized silica-encapsulated magnetic nanoparticles. Biochemical Engineering Journal, 2016, 109, 51-58.	1.8	109
3	Competitive removal of heavy metal ions from squid oil under isothermal condition by CR11 chelate ion exchanger. Journal of Hazardous Materials, 2017, 334, 256-266.	6.5	98
4	Green methods for the synthesis of metal nanoparticles using biogenic reducing agents: a review. Reviews in Chemical Engineering, 2018, 34, 529-559.	2.3	95
5	Electrochemical hydrogen storage in Pd-coated porous silicon/graphene oxide. International Journal of Hydrogen Energy, 2016, 41, 12175-12182.	3.8	85
6	Effective Recovery of Harmful Metal Ions from Squid Wastes Using Subcritical and Supercritical Water Treatments. Environmental Science & Technology, 2005, 39, 2357-2363.	4.6	72
7	Experimental optimization of SC-CO2 extraction of carotenoids from Dunaliella salina. Journal of Supercritical Fluids, 2017, 121, 89-95.	1.6	71
8	A review on kinetic study approach for pyrolysis of plastic wastes using thermogravimetric analysis. Journal of Analytical and Applied Pyrolysis, 2021, 160, 105340.	2.6	65
9	Sub-critical Water Hydrolysis Treatment for Waste Squid Entrails and Production of Amino Acids, Organic Acids, and Fatty Acids. Journal of Chemical Engineering of Japan, 2004, 37, 253-260.	0.3	60
10	Aptamer-based colorimetric determination of Pb²⁺ using a paper-based microfluidic platform. Analytical Methods, 2018, 10, 4438-4444.	1.3	52
11	Conversion of scallop viscera wastes to valuable compounds using sub-critical water. Green Chemistry, 2006, 8, 100-106.	4.6	50
12	Bio-oil production from refinery oily sludge using hydrothermal liquefaction technology. Journal of Supercritical Fluids, 2017, 127, 33-40.	1.6	49
13	Phenol contaminated water treatment by photocatalytic degradation on electrospun Ag/TiO2 nanofibers: Optimization by the response surface method. Journal of Water Process Engineering, 2020, 37, 101489.	2.6	49
14	Acetic acid is key for synergetic hydrogen production in Chlamydomonas-bacteria co-cultures. Bioresource Technology, 2019, 289, 121648.	4.8	48
15	Production of fucoxanthin by the microalga Tisochrysis lutea: A review of recent developments. Aquaculture, 2020, 516, 734637.	1.7	47
16	Practical strategies to improve harvestable biomass energy yield in microalgal culture: A review. Biomass and Bioenergy, 2021, 145, 105941.	2.9	47
17	Novel Fe₃O₄/hydroxyapatite/Î²â€cyclodextrin nanocomposite adsorbent: Synthesis and application in heavy metal removal from aqueous solution. Applied Organometallic Chemistry, 2019, 33, e4634.	1.7	45
18	Application of novel magnetic Î² -cyclodextrin-anhydride polymer nano-adsorbent in cationic dye removal from aqueous solution. Journal of the Taiwan Institute of Chemical Engineers, 2017, 80, 452-463.	2.7	41

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19	Technical, economic and energy assessment of an alternative strategy for mass production of biomass and lipid from microalgae. Journal of Environmental Chemical Engineering, 2018, 6, 866-873.	3.3	38
20	Improving hydrogen production using co-cultivation of bacteria with Chlamydomonas reinhardtii microalga. Materials Science for Energy Technologies, 2019, 2, 1-7.	1.0	36
21	Rapid biosynthesis of novel Cu/Cr/Ni trimetallic oxide nanoparticles with antimicrobial activity. Journal of Environmental Chemical Engineering, 2018, 6, 1898-1911.	3.3	34
22	High-strength distillery wastewater treatment using catalytic sub- and supercritical water. Journal of Supercritical Fluids, 2015, 97, 74-80.	1.6	33
23	Squid Oil and Fat Production from Squid Wastes Using Subcritical Water Hydrolysis:â€‰ Free Fatty Acids and Transesterification. Industrial & Engineering Chemistry Research, 2006, 45, 5675-5680.	1.8	29
24	Subcritical water gasification of beet-based distillery wastewater for hydrogen production. Journal of Supercritical Fluids, 2015, 104, 212-220.	1.6	29
25	Tuning the surface chemistry and porosity of waste-derived nanoporous materials toward exceptional performance in antibiotic adsorption: Experimental and DFT studies. Chemical Engineering Journal, 2019, 374, 274-291.	6.6	29
26	Efficient photocatalytic degradation of organic pollutants by magnetically recoverable nitrogen-doped TiO2 nanocomposite photocatalysts under visible light irradiation. Environmental Science and Pollution Research, 2015, 22, 18859-18873.	2.7	28
27	Hydrogen production from dairy wastewater using catalytic supercritical water gasification: Mechanism and reaction pathway. International Journal of Hydrogen Energy, 2021, 46, 22368-22384.	3.8	28
28	Hydrogen production through hydrothermal gasification of industrial wastewaters using transition metal oxide catalysts. Journal of Supercritical Fluids, 2016, 114, 32-45.	1.6	27
29	Defect engineering-induced porosity in graphene quantum dots embedded metal-organic frameworks for enhanced benzene and toluene adsorption. Journal of Hazardous Materials, 2021, 416, 125973.	6.5	27
30	Beta-carotene/cyclodextrin-based inclusion complex: improved loading, solubility, stability, and cytotoxicity. Journal of Inclusion Phenomena and Macrocyclic Chemistry, 2022, 102, 55-64.	0.9	26
31	Green products from herbal medicine wastes by subcritical water treatment. Journal of Hazardous Materials, 2022, 424, 127294.	6.5	26
32	An experimental study on stability and rheological properties of magnetorheological fluid using iron nanoparticle coreâ€“shell structured by cellulose. Journal of Thermal Analysis and Calorimetry, 2019, 135, 1687-1697.	2.0	25
33	Adsorptive mercaptan removal of liquid phase using nanoporous graphene: Equilibrium, kinetic study and DFT calculations. Ecotoxicology and Environmental Safety, 2018, 165, 533-539.	2.9	24
34	Removal of mercaptan from natural gas condensate using N-doped carbon nanotube adsorbents: Kinetic and DFT study. Journal of Natural Gas Science and Engineering, 2018, 55, 288-297.	2.1	24
35	Enhancing production of fucoxanthin by the optimization of culture media of the microalga Tisochrysis lutea. Aquaculture, 2021, 533, 736074.	1.7	22
36	Co-pyrolysis of municipal sewage sludge and microalgae Chlorella Vulgaris: Productsâ€™ optimization; thermo-kinetic study, and ANN modeling. Energy Conversion and Management, 2022, 254, 115258.	4.4	22

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37	An Efficient Numerical Scheme to Solve a Quintic Equation of State for Supercritical Fluids. Chemical Engineering Communications, 2015, 202, 402-407.	1.5	21
38	Membrane-sparger vs. membrane contactor as a photobioreactors for carbon dioxide biofixation of Synechococcus elongatus in batch and semi-continuous mode. Journal of CO2 Utilization, 2016, 16, 23-31.	3.3	21
39	Production of ultrafine clobetasol propionate via rapid expansion of supercritical solution (RESS): Full factorial approach. Journal of Supercritical Fluids, 2015, 101, 176-183.	1.6	19
40	Catalytic hydrothermal treatment of pharmaceutical wastewater using sub- and supercritical water reactions. Journal of Supercritical Fluids, 2014, 95, 265-272.	1.6	18
41	Acetic acid uptake rate controls H2 production in Chlamydomonas-bacteria co-cultures. Algal Research, 2019, 42, 101605.	2.4	17
42	C-Phycocyanin prevents acute myocardial infarction-induced oxidative stress, inflammation and cardiac damage. Pharmaceutical Biology, 2022, 60, 755-763.	1.3	17
43	A review on alginate-based bioinks, combination with other natural biomaterials and characteristics. Journal of Biomaterials Applications, 2022, 37, 355-372.	1.2	16
44	Potential for biodiesel production and carbon capturing from Synechococcus Elongatus: An isolation and evaluation study. Biocatalysis and Agricultural Biotechnology, 2017, 9, 230-235.	1.5	15
45	Plant-mediated Cu/Cr/Ni nanoparticle formation strategy for simultaneously separation of the mixed ions from aqueous solution. Journal of the Taiwan Institute of Chemical Engineers, 2019, 96, 148-159.	2.7	15
46	Application of sub-critical water technology for recovery of heavy metal ions from the wastes of Japanese scallop Patinopecten yessoensis. Science of the Total Environment, 2008, 398, 175-184.	3.9	13
47	Enzymatic Production of Biodiesel from Microalgal Oil using Ethyl Acetate as an Acyl Acceptor. Journal of Oleo Science, 2015, 64, 69-74.	0.6	13
48	Hydrothermal liquefaction of Chlorella vulgaris and catalytic upgrading of product: Effect of process parameter on bio-oil yield and thermodynamics modeling. Fuel, 2022, 318, 123595.	3.4	13
49	Co-pyrolysis of lentil husk wastes and Chlorella vulgaris: Bio-oil and biochar yields optimization. Journal of Analytical and Applied Pyrolysis, 2022, 165, 105548.	2.6	13
50	Cyanobacterial CO₂biofixation in batch and semi-continuous cultivation, using hydrophobic and hydrophilic hollow fiber membrane photobioreactors. , 2016, 6, 218-231.		12
51	Algal biorefinery: a potential solution to the foodâ€“energyâ€“waterâ€“environment nexus. Sustainable Energy and Fuels, 2022, 6, 2623-2664.	2.5	11
52	Decoupling a novel Trichormus variabilis-Synechocystis sp. interaction to boost phycoremediation. Scientific Reports, 2019, 9, 2511.	1.6	10
53	Experimental and modeling assessment of large-scale cultivation of microalgae Nannochloropsis sp. PTCC 6016 to reach high efficiency lipid extraction. International Journal of Environmental Science and Technology, 2022, 19, 5511-5528.	1.8	10
54	Integrated CO2 Capture and Nutrient Removal by Microalgae Chlorella vulgaris and Optimization Using Neural Network and Support Vector Regression. Waste and Biomass Valorization, 2022, 13, 4749-4770.	1.8	10

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55	Production of fucoxanthin from the microalga Tisochrysis lutea in the bubble column photobioreactor applying mass transfer coefficient. Journal of Biotechnology, 2022, 348, 47-54.	1.9	9
56	Bioenergy production usingTrichormus variabilisâ€“ a review. Biofuels, Bioproducts and Biorefining, 2019, 13, 1365-1382.	1.9	7
57	Enhanced visibleÂlight photocatalytic CO2 reduction over direct Z-scheme heterojunction Cu/P co-doped g-C3N4@TiO2 photocatalyst. Chemical Papers, 2022, 76, 3459-3469.	1.0	7
58	Superhydrophobic and super-oleophilic natural sponge sorbent for crude oil/water separation. Journal of Water Process Engineering, 2022, 48, 102783.	2.6	7
59	Carbon dioxide biofixation and biomass production from flue gas of power plant using microalgae. , 2012, , .		6
60	The Surveying of Soil and Groundwater Pollution in a Petroleum Refinery and the Potential of Bioremediation for Oil Decontamination. Petroleum Science and Technology, 2013, 31, 2585-2595.	0.7	6
61	The Effect of a Porous Layer on I-V Characterization of a Polysilicon p-n Junction. Silicon, 2018, 10, 205-210.	1.8	6
62	New insights into mechanistic aspects and structure of polycrystalline Cu/Cr/Ni metal oxide nanoclusters synthesized using Eryngium campestre and Froriepia subpinnata. Korean Journal of Chemical Engineering, 2019, 36, 489-499.	1.2	6
63	Efficient photocatalytic degradation of phenol by Ag-doped TiO2 nanocomposite photocatalysts under visible light irradiation in a three-phase fluidized bed reactor. Chemical Papers, 2021, 75, 3181-3196.	1.0	6
64	The effect of audible sound frequency on the growth and beta-carotene production of Dunaliella salina. South African Journal of Botany, 2021, 141, 373-382.	1.2	6
65	Effects of simultaneous <scp>CO₂</scp> addition and biomass recycling on growth characteristics of microalgal mixed culture. Journal of Chemical Technology and Biotechnology, 2021, 96, 3398-3407.	1.6	5
66	Optimization of culture media to enhance the ability of local Bacillus thuringiensis var. tenebrionis. Journal of the Saudi Society of Agricultural Sciences, 2020, 19, 468-475.	1.0	5
67	Catalytic supercritical water gasification of black liquor along with lignocellulosic biomass. International Journal of Hydrogen Energy, 2022, 47, 16729-16740.	3.8	5
68	Fabrication of a new reactor design to apply freshwater mussel Anodonta cygnea for biological removal of water pollution. Aquaculture, 2021, 544, 737077.	1.7	4
69	Experimental and DFT insights into nitrogen and sulfur co-doped carbon nanotubes for effective desulfurization of liquid phases: Equilibrium & kinetic study. Frontiers of Environmental Science and Engineering, 2021, 15, 1.	3.3	4
70	Elimination and detoxification of phenanthrene assisted by a laccase from halophile Alkalibacillus almallahensis. Journal of Environmental Health Science & Engineering, 2022, 20, 227-239.	1.4	4
71	Hydrothermal Decomposition of Strongly Acidic Cationâ€Exchange Resin to Valuable Compounds Using Subcritical Water in Alkaline Media. ChemistrySelect, 2020, 5, 3257-3265.	0.7	2
72	Optimization of metabolic intermediates to enhance the production of fucoxanthin from Tisochrysis lutea. Journal of Applied Phycology, 2022, 34, 1269-1279.	1.5	2

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73	Cultivation of Mixed Microalgae Using Municipal Wastewater: Biomass Productivity, Nutrient Removal, and Biochemical Content. Iranian Journal of Biotechnology, 2020, 18, e2586.	0.3	1
74	Design and Optimization of a Two-Stage Microalgae-Assisted Lipid Production. Bioenergy Research, 0, , 1.	2.2	1
75	Investigation of foaming tendency of aqueous mixture of MDEA+IPAE for carbon dioxide absorption. Journal of CO2 Utilization, 2022, 62, 102079.	3.3	0