Saeid Baroutian

List of Publications by Year
in descending order

102 papers	5,225 citations	100601 38 h-index	104191 69 g-index
103 all docs	103 docs citations	103 times ranked	6361 citing authors

#	Article	IF	Citations
1	Removal of Hexavalent Chromium-Contaminated Water and Wastewater: A Review. Water, Air, and Soil Pollution, 2009, 200, 59-77.	1.1	733
2	Densities of ammonium and phosphonium based deep eutectic solvents: Prediction using artificial intelligence and group contribution techniques. Thermochimica Acta, 2012, 527, 59-66.	1.2	264
3	Combination of fungal and physicochemical processes for lignocellulosic biomass pretreatment â€“ A review. Renewable and Sustainable Energy Reviews, 2016, 54, 217-234.	8.2	255
4	A review of wet air oxidation and Thermal Hydrolysis technologies in sludge treatment. Bioresource Technology, 2014, 155, 289-299.	4.8	213
5	Recent advances in subcritical water and supercritical carbon dioxide extraction of bioactive compounds from plant materials. Trends in Food Science and Technology, 2020, 97, 156-169.	7.8	173
6	A packed bed membrane reactor for production of biodiesel using activated carbon supported catalyst. Bioresource Technology, 2011, 102, 1095-1102.	4.8	165
7	Potassium hydroxide catalyst supported on palm shell activated carbon for transesterification of palm oil. Fuel Processing Technology, 2010, 91, 1378-1385.	3.7	160
8	Recognizing the challenges of anaerobic digestion: Critical steps toward improving biogas generation. Fuel, 2020, 261, 116497.	3.4	149
9	Subcritical water extraction of bioactive compounds from waste onion skin. Journal of Cleaner Production, 2018, 183, 487-494.	4.6	137
10	Valorisation of food waste via hydrothermal carbonisation and techno-economic feasibility assessment. Science of the Total Environment, 2019, 690, 261-276.	3.9	130
11	Physicochemical, structural and combustion characterization of food waste hydrochar obtained by hydrothermal carbonization. Bioresource Technology, 2018, 266, 357-363.	4.8	122
12	Resource recovery from organic solid waste using hydrothermal processing: Opportunities and challenges. Renewable and Sustainable Energy Reviews, 2018, 96, 64-75.	8.2	117
13	Rheology of a primary and secondary sewage sludge mixture: Dependency on temperature and solid concentration. Bioresource Technology, 2013, 140, 227-233.	4.8	111
14	Phosphate recovery from hydrothermally treated sewage sludge using struvite precipitation. Bioresource Technology, 2017, 239, 171-179.	4.8	96
15	A techno-economic comparison of subcritical water, supercritical CO 2 and organic solvent extraction of bioactives from grape marc. Journal of Cleaner Production, 2017, 158, 349-358.	4.6	85
16	Advances in the pretreatment of brown macroalgae for biogas production. Fuel Processing Technology, 2019, 195, 106151.	3.7	82
17	Degradation of plastic waste using stimulated and naturally occurring microbial strains. Chemosphere, 2021, 263, 127975.	4.2	78
18	Flipped classroom with cooperative learning as a cornerstone. Education for Chemical Engineers, 2018, 23, 25-33.	2.8	72

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19	Density of Palm Oil-Based Methyl Ester. Journal of Chemical & Engineering Data, 2008, 53, 877-880.	1.0	69
20	Hydrothermal degradation of organic matter in municipal sludge using non-catalytic wet oxidation. Chemical Engineering Journal, 2015, 260, 846-854.	6.6	66
21	An exploration of barriers for commercializing phosphorus recovery technologies. Journal of Cleaner Production, 2019, 229, 1342-1354.	4.6	64
22	Evaluation of bioactive compounds extracted from Hayward kiwifruit pomace by subcritical water extraction. Food and Bioproducts Processing, 2019, 115, 143-153.	1.8	62
23	Mechanisms, status, and challenges of thermal hydrolysis and advanced thermal hydrolysis processes in sewage sludge treatment. Chemosphere, 2021, 281, 130890.	4.2	58
24	Fundamental mechanisms and reactions in non-catalytic subcritical hydrothermal processes: A review. Water Research, 2017, 123, 607-622.	5.3	57
25	Efficiency of hydrothermal pretreatment on the anaerobic digestion of pelagic Sargassum for biogas and fertiliser recovery. Fuel, 2020, 279, 118527.	3.4	57
26	Decentralized anaerobic digestion systems for increased utilization of biogas from municipal solid waste. Renewable and Sustainable Energy Reviews, 2018, 90, 982-991.	8.2	56
27	Pretreatment of radiata pine using two white rot fungal strains Stereum hirsutum and Trametes versicolor. Energy Conversion and Management, 2017, 142, 13-19.	4.4	55
28	Effect of temperature on the fuel properties of food waste and coal blend treated under co-hydrothermal carbonization. Waste Management, 2019, 89, 236-246.	3.7	54
29	Challenges in biodegradation of non-degradable thermoplastic waste: From environmental impact to operational readiness. Biotechnology Advances, 2021, 49, 107731.	6.0	54
30	LIQUID-LIQUID MIXING IN STIRRED VESSELS: A REVIEW. Chemical Engineering Communications, 2013, 200, 595-627.	1.5	52
31	Recovery of phenolic antioxidants from green kiwifruit peel using subcritical water extraction. Food and Bioproducts Processing, 2020, 122, 136-144.	1.8	49
32	Viscosities and Densities of Binary and Ternary Blends of Palm Oil + Palm Biodiesel + Diesel Fuel at Different Temperatures. Journal of Chemical & Engineering Data, 2010, 55, 504-507.	1.0	47
33	Techno-economic comparison between B10 of Eruca sativa L. and other indigenous seed oils in Pakistan. Chemical Engineering Research and Design, 2011, 89, 165-171.	2.7	47
34	Formation and degradation of valuable intermediate products during wet oxidation of municipal sludge. Bioresource Technology, 2016, 205, 280-285.	4.8	45
35	Optimization of food waste hydrothermal liquefaction by a two-step process in association with a double analysis. Energy, 2020, 199, 117438.	4.5	45
36	Blended aviation biofuel from esterified Jatropha curcas and waste vegetable oils. Journal of the Taiwan Institute of Chemical Engineers, 2013, 44, 911-916.	2.7	42

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37	Effects of biochar and activated carbon on biogas generation: A thermogravimetric and chemical analysis approach. Energy Conversion and Management, 2020, 203, 112221.	4.4	42
38	Breakthrough analysis of continuous fixed-bed adsorption of sevoflurane using activated carbons. Chemosphere, 2020, 239, 124839.	4.2	41
39	Density of Jatropha curcas Seed Oil and its Methyl Esters: Measurement and Estimations. International Journal of Thermophysics, 2009, 30, 529-541.	1.0	40
40	Transformation and removal of wood extractives from pulp mill sludge using wet oxidation and thermal hydrolysis. Bioresource Technology, 2013, 146, 294-300.	4.8	37
41	Methanol recovery during transesterification of palm oil in a TiO2/Al2O3 membrane reactor: Experimental study and neural network modeling. Separation and Purification Technology, 2010, 76, 58-63.	3.9	36
42	Hydrothermal deconstruction of municipal solid waste for solid reduction and value production. Journal of Cleaner Production, 2018, 201, 812-819.	4.6	35
43	Enhancing biogas production from caribbean pelagic Sargassum utilising hydrothermal pretreatment and anaerobic co-digestion with food waste. Chemosphere, 2021, 275, 130035.	4.2	35
44	Prediction of glycerol removal from biodiesel using ammonium and phosphunium based deep eutectic solvents using artificial intelligence techniques. Chemometrics and Intelligent Laboratory Systems, 2012, 118, 193-199.	1.8	32
45	Hydrothermal processing of cellulose: A comparison between oxidative and non-oxidative processes. Bioresource Technology, 2017, 226, 229-237.	4.8	32
46	Relative influence of process variables during non-catalytic wet oxidation of municipal sludge. Bioresource Technology, 2013, 148, 605-610.	4.8	31
47	Study of various curved-blade impeller geometries on power consumption in stirred vessel using response surface methodology. Journal of the Taiwan Institute of Chemical Engineers, 2013, 44, 192-201.	2.7	30
48	Variation in metals during wet oxidation of sewage sludge. Bioresource Technology, 2017, 245, 234-241.	4.8	29
49	Measuring and modeling particulate dispersion: A case study of Kerman Cement Plant. Journal of Hazardous Materials, 2006, 136, 468-474.	6.5	28
50	Densities of Ethyl Esters Produced from Different Vegetable Oils. Journal of Chemical & Engineering Data, 2008, 53, 2222-2225.	1.0	28
51	Transforming biomass pyrolysis technologies to produce liquid smoke food flavouring. Journal of Cleaner Production, 2021, 294, 125368.	4.6	28
52	A kinetic model of municipal sludge degradation during non-catalytic wet oxidation. Water Research, 2015, 87, 225-236.	5.3	27
53	Rheological characterisation of biologically treated and non-treated putrescible food waste. Waste Management, 2018, 71, 494-501.	3.7	27
54	Benefits and Challenges of a Virtual Laboratory in Chemical and Biochemical Engineering: Studentsâ€™ Experiences in Fermentation. Journal of Chemical Education, 2021, 98, 866-875.	1.1	25

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55	Energy performance evaluation of ultrasonic pretreatment of organic solid waste in a pilot-scale digester. Ultrasonics Sonochemistry, 2019, 51, 517-525.	3.8	23
56	Rheological measurements as a tool for monitoring the performance of high pressure and high temperature treatment of sewage sludge. Water Research, 2017, 114, 254-263.	5.3	21
57	Effect of Subcritical Water on the Extraction of Bioactive Compounds from Carrot Leaves. Food and Bioprocess Technology, 2018, 11, 1895-1903.	2.6	21
58	Subcritical water extraction for selective recovery of phenolic bioactives from kÄnuka leaves. Journal of Supercritical Fluids, 2020, 158, 104721.	1.6	21
59	Value-added potential of New Zealand mÄnuka and kÄnuka products: A review. Industrial Crops and Products, 2019, 130, 198-207.	2.5	18
60	Enhanced biodegradation of non-biodegradable plastics by UV radiation: Part 1. Journal of Environmental Chemical Engineering, 2021, 9, 106464.	3.3	18
61	Investigation of convection and diffusion during biodiesel production in packed membrane reactor using 3D simulation. Journal of Industrial and Engineering Chemistry, 2014, 20, 1493-1504.	2.9	17
62	Recovery of bioactives from kÄnuka leaves using subcritical water extraction: Techno-economic analysis, environmental impact assessment and technology readiness level. Journal of Supercritical Fluids, 2021, 169, 105119.	1.6	17
63	Enhancement of landfill gas generation from aged waste by a combination of moisture adjustment and application of biochar and neutral red additives: A field-scale study. Fuel, 2021, 283, 118932.	3.4	17
64	Production of liquid smoke using fluidised-bed fast pyrolysis and its application to green lipped mussel meat. Food Control, 2021, 124, 107874.	2.8	17
65	Effects of Spray-Drying and Freeze-Drying on Bioactive and Volatile Compounds of Smoke Powder Food Flavouring. Food and Bioprocess Technology, 2022, 15, 785-794.	2.6	17
66	TiO2/Al2O3 membrane reactor equipped with a methanol recovery unit to produce palm oil biodiesel. International Journal of Energy Research, 2012, 36, 120-129.	2.2	16
67	Rheological characterization of thermal hydrolysed waste activated sludge. Water Research, 2019, 156, 445-455.	5.3	16
68	Techno-economic and environmental impact assessment of biogas production and fertiliser recovery from pelagic Sargassum: A biorefinery concept for Barbados. Energy Conversion and Management, 2021, 245, 114605.	4.4	16
69	Densities and Viscosities of Binary Blends of Methyl Esters + Ethyl Esters and Ternary Blends of Methyl Esters + Ethyl Esters + Diesel Fuel from T = (293.15 to 358.15) K. Journal of Chemical & Engineering Data, 2012, 57, 1387-1395.	1.0	15
70	Enrichment of surface oxygen functionalities on activated carbon for adsorptive removal of sevoflurane. Chemosphere, 2020, 260, 127496.	4.2	15
71	Improving biogas generation from aged landfill waste using moisture adjustment and neutral red additive â€“ Case study: Hampton Downsâ€™s landfill site. Energy Conversion and Management, 2020, 216, 112947.	4.4	15
72	Estimation of Vegetable Oil-Based Ethyl Esters Biodiesel Densities Using Artificial Neural Networks. Journal of Applied Sciences, 2008, 8, 3005-3011.	0.1	15

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73	Prediction of Palm Oil-Based Methyl Ester Biodiesel Density Using Artificial Neural Networks. Journal of Applied Sciences, 2008, 8, 1938-1943.	0.1	14
74	Hydrothermal deconstruction of two antibiotics (amoxicillin and metronidazole). Journal of Cleaner Production, 2021, 325, 129330.	4.6	12
75	Digitalisation in chemical engineering: Industrial needs, academic best practice, and curriculum limitations. Education for Chemical Engineers, 2022, 39, 94-107.	2.8	12
76	3D Simulation of fatty acid methyl ester production in a packed membrane reactor. Fuel Processing Technology, 2014, 118, 7-19.	3.7	11
77	Catalytic wet oxidation of glucose as model compound of wastewater over copper/rare earth oxides catalysts. Journal of Water Process Engineering, 2020, 36, 101251.	2.6	10
78	Oxidative hydrothermal surface modification of activated carbon for sevoflurane removal. Chemosphere, 2021, 264, 128535.	4.2	10
79	Adsorptive removal of residual catalyst from palm biodiesel: Application of response surface methodology. Hemijska Industrija, 2012, 66, 373-380.	0.3	10
80	Catalytic wet oxidation of glucose as a model compound for organic waste using transition metal oxide powders. Journal of Environmental Chemical Engineering, 2022, 10, 107198.	3.3	10
81	A techno-economic-societal assessment of recovery of waste volatile anaesthetics. Separation and Purification Technology, 2019, 226, 304-314.	3.9	9
82	Economic Performance of Small-Scale Fast Pyrolysis Process of Coproducing Liquid Smoke Food Flavoring and Biofuels. ACS Sustainable Chemistry and Engineering, 2021, 9, 1911-1919.	3.2	9
83	Hydrothermal deconstruction of local anesthetics (bupivacaine and lignocaine) in pharmaceutical waste. Journal of Environmental Chemical Engineering, 2021, 9, 106273.	3.3	9
84	Subcritical hydrothermal deconstruction of two hormones (adrenaline and progesterone) in pharmaceutical waste. Journal of Supercritical Fluids, 2022, 179, 105388.	1.6	9
85	Effect of rhamnolipid biosurfactant on biodegradation of untreated and UV-pretreated non-degradable thermoplastics: Part 2. Journal of Environmental Chemical Engineering, 2022, 10, 107033.	3.3	9
86	Current status and trends in extraction of bioactives from brown macroalgae using supercritical <scp>CO₂</scp> and subcritical water. Journal of Chemical Technology and Biotechnology, 2022, 97, 1929-1940.	1.6	9
87	Hydrothermal co-hydrolysis of corncob/sugarcane bagasse/Broussonetia papyrifera blends: Kinetics, thermodynamics and fermentation. Bioresource Technology, 2021, 342, 125923.	4.8	7
88	Numerical Modeling of Particulate Matter Dispersion from Kerman Cement Plant, Iran. Environmental Monitoring and Assessment, 2007, 130, 73-82.	1.3	6
89	Application of hydrothermal treatment to affect the fermentability of Pinus radiata pulp mill effluent sludge. Bioresource Technology, 2014, 170, 100-107.	4.8	6
90	Information Literacy: The impact of a hands-on workshop for international postgraduate students. Education for Chemical Engineers, 2016, 14, 16-23.	2.8	6

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91	ESTIMATION OF PARTICLE CONCENTRATION EMITTED FROM THE STACKS OF KERMAN CEMENT PLANT USING ARTIFICIAL NEURAL NETWORKS. Chemical Engineering Communications, 2008, 195, 821-833.	1.5	5
92	Bridging theory with real world research experience: Co-teaching Engineering Biotechnology with R&D professionals. Education for Chemical Engineers, 2016, 16, 9-16.	2.8	5
93	The antibacterial and antiproliferative ability of kÄnuka, <scp>Kunzea ericoides</scp>, leaf extracts obtained by subcritical water extraction. Journal of Chemical Technology and Biotechnology, 2021, 96, 1308-1315.	1.6	5
94	Plasma spraying of transition metal oxide coatings. Surface Engineering, 2021, 37, 875-889.	1.1	5
95	Technical Evaluation of Pongame and Jatropha B20 Fuels in Pakistan. Arabian Journal for Science and Engineering, 2013, 38, 759-766.	1.1	4
96	Quantification and composition of pharmaceutical waste in New Zealand. Journal of Material Cycles and Waste Management, 2022, 24, 1603-1611.	1.6	4
97	Effect of hydrodynamic mixing conditions on wet oxidation reactions in a stirred vessel reactor. Bioresource Technology, 2018, 262, 333-337.	4.8	3
98	Authorsâ€™ response to comments on Ang etÂal. â€œBreakthrough analysis of continuous fixed-bed adsorption of sevoflurane using activated carbonsâ€• Chemosphere, 2020, 247, 126389.	4.2	2
99	The effect of liquid smoke obtained from fast pyrolysis of a hardwood on physical properties and shelf life of cheddar cheese. European Food Research and Technology, 2022, 248, 625-633.	1.6	2
100	Oxidised plasma-sprayed transition metal â€“ Reusable supported catalysts for organic waste treatment. Journal of Industrial and Engineering Chemistry, 2022, 113, 488-501.	2.9	2
101	The effects of ageing treatment on bioactive contents and chemical composition of liquid smoke food flavourings. European Food Research and Technology, 2022, 248, 1311-1319.	1.6	1
102	Tailoring of activated carbon with ammonia for enhanced anaesthetic sevoflurane adsorption. Separation and Purification Technology, 2020, 251, 117404.	3.9	0