

Muftah H El-Naas

List of Publications by Year in descending order

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106
papers

5,264
citations

108046

37
h-index

100535

70
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108
all docs

108
docs citations

108
times ranked

5842
citing authors

#	ARTICLE	IF	CITATIONS
1	CO ₂ capture and ions removal through reaction with potassium hydroxide in desalination reject brine: Statistical optimization. <i>Chemical Engineering and Processing: Process Intensification</i> , 2022, 170, 108722.	1.8	13
2	Mapping the desalination journal: A systematic bibliometric study over 54 years. <i>Desalination</i> , 2022, 526, 115535.	4.0	27
3	State of the Art in Separation Processes for Alternative Working Fluids in Clean and Efficient Power Generation. <i>Separations</i> , 2022, 9, 14.	1.1	7
4	Prospects of green technology in the management of refinery wastewater: application of biofilms. , 2022, , 51-69.		0
5	Treatment of petroleum industry wastewater: current practices and perspectives. , 2022, , 1-6.		1
6	Adsorption of 4-Nitrophenol onto Iron Oxide Bentonite Nanocomposite: Process Optimization, Kinetics, Isotherms and Mechanism. <i>International Journal of Environmental Research</i> , 2022, 16, 1.	1.1	17
7	Enhanced Removal of Diesel Oil Using New Magnetic Bentonite-Based Adsorbents Combined with Different Carbon Sources. <i>Water, Air, and Soil Pollution</i> , 2022, 233, .	1.1	12
8	Comparative study between adsorption and membrane technologies for the removal of mercury. <i>Separation and Purification Technology</i> , 2021, 257, 117833.	3.9	69
9	Effective Heterogeneous Fenton-Like degradation of Malachite Green Dye Using the Core-Shell Fe ₃ O ₄ @SiO ₂ Nano-Catalyst. <i>ChemistrySelect</i> , 2021, 6, 865-875.	0.7	21
10	Date pits activated carbon as an effective adsorbent for water treatment. , 2021, , 135-161.		4
11	A CFD Investigation on the Effect of IPSBR Operational Conditions on Liquid Phase Hydrodynamics. , 2021, , .		3
12	Treatment of saline wastewater and carbon dioxide capture using electrodialysis. , 2021, , .		2
13	Catalytic Methane Decomposition to Carbon Nanostructures and CO _x -Free Hydrogen: A Mini-Review. <i>Nanomaterials</i> , 2021, 11, 1226.	1.9	41
14	Effects of potassium hydroxide and aluminum oxide on the performance of a modified solvay process for CO ₂ capture: A comparative study. <i>International Journal of Energy Research</i> , 2021, 45, 13952-13964.	2.2	22
15	Electroreduction of Carbon Dioxide into Formate: A Comprehensive Review. <i>ChemElectroChem</i> , 2021, 8, 3207-3220.	1.7	65
16	A New Process for the Recovery of Ammonia from Ammoniated High-Salinity Brine. <i>Sustainability</i> , 2021, 13, 10014.	1.6	9
17	KOH-Based Modified Solvay Process for Removing Na Ions from High Salinity Reject Brine at High Temperatures. <i>Sustainability</i> , 2021, 13, 10200.	1.6	15
18	Effective and sustainable adsorbent materials for oil spill cleanup based on a multistage desalination process. <i>Journal of Environmental Management</i> , 2021, 299, 113652.	3.8	18

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19	Electrodialysis based waste utilization methodology for the desalination industry. <i>Desalination</i> , 2021, 520, 115327.	4.0	16
20	Comprehensive assessment and evaluation of correlations for gas-oil ratio, oil formation volume factor, gas viscosity, and gas density utilized in gas kick detection. <i>Journal of Petroleum Science and Engineering</i> , 2021, 207, 109135.	2.1	4
21	Comprehensive Optimization of the Dispersion of Mixing Particles in an Inert-Particle Spouted-Bed Reactor (IPSBR) System. <i>Processes</i> , 2021, 9, 1921.	1.3	6
22	Influence of polyelectrolyte structure and type on the degree of flocculation and rheological behavior of industrial MBR sludge. <i>Separation and Purification Technology</i> , 2020, 233, 116001.	3.9	14
23	Adsorption of organic pollutants by nanomaterial-based adsorbents: An overview. <i>Journal of Molecular Liquids</i> , 2020, 301, 112335.	2.3	153
24	Enhancement of flocculation and shear resistivity of bentonite suspension using a hybrid system of organic coagulants and anionic polyelectrolytes. <i>Separation and Purification Technology</i> , 2020, 237, 116462.	3.9	11
25	A perforated electrode design for passivation reduction during the electrochemical treatment of produced water. <i>Journal of Water Process Engineering</i> , 2020, 33, 101091.	2.6	23
26	Removal of Oil Content from Oil-Water Emulsions Using Iron Oxide/Bentonite Nano Adsorbents. <i>Journal of Water Process Engineering</i> , 2020, 38, 101583.	2.6	34
27	Synthesis and Characterization of Fe ₃ O ₄ Nanoparticles Using Different Experimental Methods. <i>IOP Conference Series: Materials Science and Engineering</i> , 2020, 778, 012028.	0.3	5
28	Biotechnology for Gas-to-Liquid (GTL) Wastewater Treatment: A Review. <i>Water (Switzerland)</i> , 2020, 12, 2126.	1.2	8
29	Adsorption as a Process for Produced Water Treatment: A Review. <i>Processes</i> , 2020, 8, 1657.	1.3	93
30	Utilization of Steel-Making Dust in Drilling Fluids Formulations. <i>Processes</i> , 2020, 8, 538.	1.3	7
31	Chromium Removal from Tannery Wastewater by Electrocoagulation: Optimization and Sludge Characterization. <i>Water (Switzerland)</i> , 2020, 12, 1374.	1.2	43
32	Early gas kick detection in vertical wells via transient multiphase flow modelling: A review. <i>Journal of Natural Gas Science and Engineering</i> , 2020, 80, 103391.	2.1	28
33	Chemical kinetics of carbon dioxide in the blends of different amino acid salts and methyldiethanolamine. <i>International Journal of Energy Research</i> , 2020, 44, 12506-12524.	2.2	6
34	Corrosion Behavior of API-X120 Carbon Steel Alloy in a GTL F-T Process Water Environment at Low COD Concentration. <i>Metals</i> , 2020, 10, 707.	1.0	5
35	Gas Capture Processes. <i>Processes</i> , 2020, 8, 70.	1.3	2
36	Absorption of CO ₂ in aqueous blend of methyldiethanolamine and arginine. <i>Asia-Pacific Journal of Chemical Engineering</i> , 2020, 15, e2460.	0.8	10

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37	Simultaneous treatment of reject brine and capture of carbon dioxide: A comprehensive review. Desalination, 2020, 483, 114386.	4.0	55
38	Isolation and Identification of Organics-Degrading Bacteria From Gas-to-Liquid Process Water. Frontiers in Bioengineering and Biotechnology, 2020, 8, 603305.	2.0	8
39	Computational fluid dynamics simulation of an Inert Particles Spouted Bed Reactor (IPSBR) system. International Journal of Chemical Reactor Engineering, 2020, .	0.6	8
40	Organic Contaminants in Industrial Wastewater: Prospects of Waste Management by Integrated Approaches. , 2020, , 205-235.		1
41	A Mechanistic Gas Kick Model to Simulate Gas in A Riser with Water and Synthetic-Based Drilling Fluid. , 2020, , .		7
42	Enhanced CO ₂ capture through reaction with steel-making dust in high salinity water. International Journal of Greenhouse Gas Control, 2019, 91, 102819.	2.3	43
43	A technoeconomic assessment of microalgal culture technology implementation for combined wastewater treatment and CO ₂ mitigation in the Arabian Gulf. Chemical Engineering Research and Design, 2019, 127, 90-102.	2.7	38
44	Reaction Kinetics of Carbon Dioxide in Aqueous Blends of N-Methyldiethanolamine and L-Arginine Using the Stopped-Flow Technique. Processes, 2019, 7, 81.	1.3	11
45	Carbon Mineralization by Reaction with Steel-Making Waste: A Review. Processes, 2019, 7, 115.	1.3	48
46	Optimization of magnesium recovery from reject brine for reuse in desalination post-treatment. Journal of Water Process Engineering, 2019, 31, 100810.	2.6	33
47	Metal-oxide nanotubes functional material tailored for membrane water/wastewater treatment. IOP Conference Series: Materials Science and Engineering, 2019, 634, 012048.	0.3	2
48	Immobilization of microbial cells for the biotreatment of wastewater: A review. Environmental Chemistry Letters, 2019, 17, 241-257.	8.3	222
49	Biosorption of Heavy Metals: Potential and Applications of Yeast Cells for Cadmium Removal. Microorganisms for Sustainability, 2019, , 237-271.	0.4	3
50	CO ₂ Capture Using Hollow Fiber Membranes: A Review of Membrane Wetting. Energy & Fuels, 2018, 32, 963-978.	2.5	101
51	Bio-regeneration of activated carbon: A comprehensive review. Separation and Purification Technology, 2018, 197, 345-359.	3.9	158
52	Effect of electrolytes on electrokinetics and flocculation behavior of bentonite-polyacrylamide dispersions. Applied Clay Science, 2018, 158, 46-54.	2.6	50
53	Competitive interference during the biodegradation of cresols. International Journal of Environmental Science and Technology, 2018, 15, 301-308.	1.8	16
54	Steel-Making dust as a potential adsorbent for the removal of lead (II) from an aqueous solution. Chemical Engineering Journal, 2018, 334, 837-844.	6.6	96

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55	Enhancing gas loading and reducing energy consumption in acid gas removal systems: A simulation study based on real NGL plant data. <i>Journal of Natural Gas Science and Engineering</i> , 2018, 55, 565-574.	2.1	30
56	Organic Contaminants in Refinery Wastewater: Characterization and Novel Approaches for Biotreatment. , 2018, , .		12
57	Zeolites Nanocomposite Membrane Applications in CO2 Capture. , 2018, , 916-921.		4
58	Conversion of Carbon Dioxide: Opportunities and Fundamental Challenges. <i>American Journal of Engineering and Applied Sciences</i> , 2018, 11, 138-153.	0.3	2
59	Carbon Capture. , 2018, , 997-1016.		21
60	Evaluation of an activated carbon packed bed for the adsorption of phenols from petroleum refinery wastewater. <i>Environmental Science and Pollution Research</i> , 2017, 24, 7511-7520.	2.7	63
61	A new process for the capture of CO2 and reduction of water salinity. <i>Desalination</i> , 2017, 411, 69-75.	4.0	60
62	Evaluation of a novel gas-liquid contactor/reactor system for natural gas applications. <i>Journal of Natural Gas Science and Engineering</i> , 2017, 39, 133-142.	2.1	19
63	Copper removal from industrial wastewater: A comprehensive review. <i>Journal of Industrial and Engineering Chemistry</i> , 2017, 56, 35-44.	2.9	319
64	A comprehensive review of electrocoagulation for water treatment: Potentials and challenges. <i>Journal of Environmental Management</i> , 2017, 186, 24-41.	3.8	565
65	Microbial Degradation of Chlorophenols. <i>Environmental Science and Engineering</i> , 2017, , 23-58.	0.1	10
66	Biodegradation of BTEX: Optimization through Response Surface Methodology. <i>American Journal of Engineering and Applied Sciences</i> , 2017, 10, 20-31.	0.3	3
67	Biodegradation of 2, 4 Dichlorophenol. <i>American Journal of Engineering and Applied Sciences</i> , 2017, 10, 175-191.	0.3	4
68	Optimization of a Combined Approach for the Treatment of Carbide Slurry and Capture of CO ₂ . <i>American Journal of Engineering and Applied Sciences</i> , 2016, 9, 449-457.	0.3	2
69	Correlating the physical solubility of CO2 in several amines to the concentrations of amine groups. <i>Journal of Natural Gas Science and Engineering</i> , 2016, 34, 841-848.	2.1	4
70	Petroleum refinery wastewater treatment: A pilot scale study. <i>Journal of Water Process Engineering</i> , 2016, 14, 71-76.	2.6	49
71	Optimization of a Solvay-Based Approach for CO2 Capture. <i>International Journal of Chemical Engineering and Applications (IJCEA)</i> , 2016, 7, 230-234.	0.3	18
72	CO2 sequestration using accelerated gas-solid carbonation of pre-treated EAF steel-making bag house dust. <i>Journal of Environmental Management</i> , 2015, 156, 218-224.	3.8	39

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73	An electrocoagulation column (ECC) for groundwater purification. Journal of Water Process Engineering, 2014, 4, 25-30.	2.6	31
74	Characterization of the removal of Chromium(VI) from groundwater by electrocoagulation. Journal of Industrial and Engineering Chemistry, 2014, 20, 2775-2781.	2.9	107
75	Biological treatment of wastewater contaminated with p-cresol using <i>Pseudomonas putida</i> immobilized in polyvinyl alcohol (PVA) gel. Journal of Water Process Engineering, 2014, 1, 84-90.	2.6	61
76	Aerobic biodegradation of BTEX: Progresses and Prospects. Journal of Environmental Chemical Engineering, 2014, 2, 1104-1122.	3.3	133
77	Evaluation of a three-step process for the treatment of petroleum refinery wastewater. Journal of Environmental Chemical Engineering, 2014, 2, 56-62.	3.3	121
78	Evaluation of the characteristics of polyvinyl alcohol (PVA) as matrices for the immobilization of <i>Pseudomonas putida</i> . International Biodeterioration and Biodegradation, 2013, 85, 413-420.	1.9	33
79	Synergistic effect of pretreatment and hydrolysis enzymes on the production of fermentable sugars from date palm lignocellulosic waste. Journal of Industrial and Engineering Chemistry, 2013, 19, 413-415.	2.9	26
80	PHENOL BIODEGRADATION BY <i>RALSTONIA PICKETTII</i> EXTRACTED FROM PETROLEUM REFINERY OIL SLUDGE. Chemical Engineering Communications, 2012, 199, 1194-1204.	1.5	8
81	Aerobic Biodegradation of Phenols: A Comprehensive Review. Critical Reviews in Environmental Science and Technology, 2012, 42, 1631-1690.	6.6	168
82	Rheological characteristics of nickel-alumina sol-gel catalyst. Fuel Processing Technology, 2012, 102, 85-89.	3.7	5
83	Combined steam and dry reforming of methane in narrow channel reactors. International Journal of Hydrogen Energy, 2012, 37, 7538-7544.	3.8	25
84	Teaching water desalination through active learning. Education for Chemical Engineers, 2011, 6, e97-e102.	2.8	7
85	Significance of gas velocity change during the transport of CO ₂ through hollow fiber membrane contactors. Chemical Engineering Journal, 2011, 168, 593-603.	6.6	30
86	Immobilization of <i>Pseudomonas putida</i> in PVA gel particles for the biodegradation of phenol at high concentrations. Biochemical Engineering Journal, 2011, 56, 46-50.	1.8	48
87	Characterization and testing of sol-gel catalysts prepared as thin layers in a plate reactor. Fuel Processing Technology, 2011, 92, 1836-1841.	3.7	5
88	Continuous biodegradation of phenol in a spouted bed bioreactor (SBBR). Chemical Engineering Journal, 2010, 160, 565-570.	6.6	48
89	Removal of phenol from petroleum refinery wastewater through adsorption on date-pit activated carbon. Chemical Engineering Journal, 2010, 162, 997-1005.	6.6	232
90	Batch degradation of phenol in a spouted bed bioreactor system. Journal of Industrial and Engineering Chemistry, 2010, 16, 267-272.	2.9	45

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91	Reduction of COD in refinery wastewater through adsorption on date-pit activated carbon. Journal of Hazardous Materials, 2010, 173, 750-757.	6.5	164
92	Removal of carbon dioxide from pressurized CO ₂ –CH ₄ gas mixture using hollow fiber membrane contactors. Journal of Membrane Science, 2010, 351, 21-27.	4.1	80
93	Evaluation of the removal of CO ₂ using membrane contactors: Membrane wettability. Journal of Membrane Science, 2010, 350, 410-416.	4.1	60
94	A combined approach for the management of desalination reject brine and capture of CO ₂ . Desalination, 2010, 251, 70-74.	4.0	75
95	Assessment of electrocoagulation for the treatment of petroleum refinery wastewater. Journal of Environmental Management, 2009, 91, 180-185.	3.8	211
96	Biodegradation of phenol by Pseudomonas putida immobilized in polyvinyl alcohol (PVA) gel. Journal of Hazardous Materials, 2009, 164, 720-725.	6.5	292
97	Effect of Temperature, Composition, and Shear Rate on Polyvinylidene Fluoride/Dimethylacetamide Solution Viscosity. Journal of Chemical & Engineering Data, 2009, 54, 3276-3280.	1.0	9
98	CO ₂ Removal from CO ₂ –CH ₄ Gas Mixture Using Different Solvents and Hollow Fiber Membranes. Industrial & Engineering Chemistry Research, 2009, 48, 3600-3605.	1.8	39
99	METHANE REFORMING IN A SMALL CHANNEL REACTOR. , 2009, , .		0
100	Modeling of CO ₂ absorption in membrane contactors. Separation and Purification Technology, 2008, 59, 286-293.	3.9	144
101	Removal of aluminum from aqueous solutions by adsorption on date-pit and BDH activated carbons. Journal of Hazardous Materials, 2008, 158, 300-307.	6.5	78
102	Facilitated Transport of CO ₂ through Immobilized Liquid Membrane. Industrial & Engineering Chemistry Research, 2005, 44, 9273-9278.	1.8	31
103	A Novel Plasma Technique to Stimulate Tight Carbonate Rocks. Energy Sources Part A Recovery, Utilization, and Environmental Effects, 2002, 24, 181-194.	0.5	3
104	Electrocoagulation treatment of reject brine effluent from Solvay process. , 0, 163, 325-335.		4
105	Transient Behavior in Biodegradation of 2, 4 Dichlorophenol: Is It a Starvation Effect?. International Journal of Chemical Engineering and Applications (IJCEA), 0, , 365-368.	0.3	1
106	Improvement of PVA Gel Properties for Cell Immobilization. , 0, , .		0