

Muftah H El-Naas

List of Publications by Year in descending order

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Version: 2024-02-01

106
papers

5,264
citations

94433

37
h-index

88630

70
g-index

108
all docs

108
docs citations

108
times ranked

5263
citing authors

#	ARTICLE	IF	CITATIONS
1	CO ₂ capture and ions removal through reaction with potassium hydroxide in desalination reject brine: Statistical optimization. Chemical Engineering and Processing: Process Intensification, 2022, 170, 108722.	3.6	13
2	Mapping the desalination journal: A systematic bibliometric study over 54 years. Desalination, 2022, 526, 115535.	8.2	27
3	State of the Art in Separation Processes for Alternative Working Fluids in Clean and Efficient Power Generation. Separations, 2022, 9, 14.	2.4	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. International Journal of Environmental Research, 2022, 16, 1.	2.3	17
7	Enhanced Removal of Diesel Oil Using New Magnetic Bentonite-Based Adsorbents Combined with Different Carbon Sources. Water, Air, and Soil Pollution, 2022, 233, .	2.4	12
8	Comparative study between adsorption and membrane technologies for the removal of mercury. Separation and Purification Technology, 2021, 257, 117833.	7.9	69
9	Effective Heterogeneous Fenton-Like degradation of Malachite Green Dye Using the Core-Shell Fe ₃ O ₄ @SiO ₂ Nano-Catalyst. ChemistrySelect, 2021, 6, 865-875.	1.5	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. Nanomaterials, 2021, 11, 1226.	4.1	41
14	Effects of potassium hydroxide and aluminum oxide on the performance of a modified solvay process for CO_2 capture: A comparative study. International Journal of Energy Research, 2021, 45, 13952-13964.	4.5	22
15	Electroreduction of Carbon Dioxide into Formate: A Comprehensive Review. ChemElectroChem, 2021, 8, 3207-3220.	3.4	65
16	A New Process for the Recovery of Ammonia from Ammoniated High-Salinity Brine. Sustainability, 2021, 13, 10014.	3.2	9
17	KOH-Based Modified Solvay Process for Removing Na Ions from High Salinity Reject Brine at High Temperatures. Sustainability, 2021, 13, 10200.	3.2	15
18	Effective and sustainable adsorbent materials for oil spill cleanup based on a multistage desalination process. Journal of Environmental Management, 2021, 299, 113652.	7.8	18

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19	Electrodialysis based waste utilization methodology for the desalination industry. Desalination, 2021, 520, 115327.	8.2	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. Journal of Petroleum Science and Engineering, 2021, 207, 109135.	4.2	4
21	Comprehensive Optimization of the Dispersion of Mixing Particles in an Inert-Particle Spouted-Bed Reactor (IPSBR) System. Processes, 2021, 9, 1921.	2.8	6
22	Influence of polyelectrolyte structure and type on the degree of flocculation and rheological behavior of industrial MBR sludge. Separation and Purification Technology, 2020, 233, 116001.	7.9	14
23	Adsorption of organic pollutants by nanomaterial-based adsorbents: An overview. Journal of Molecular Liquids, 2020, 301, 112335.	4.9	153
24	Enhancement of flocculation and shear resistivity of bentonite suspension using a hybrid system of organic coagulants and anionic polyelectrolytes. Separation and Purification Technology, 2020, 237, 116462.	7.9	11
25	A perforated electrode design for passivation reduction during the electrochemical treatment of produced water. Journal of Water Process Engineering, 2020, 33, 101091.	5.6	23
26	Removal of Oil Content from Oil-Water Emulsions Using Iron Oxide/Bentonite Nano Adsorbents. Journal of Water Process Engineering, 2020, 38, 101583.	5.6	34
27	Synthesis and Characterization of Fe ₃ O ₄ Nanoparticles Using Different Experimental Methods. IOP Conference Series: Materials Science and Engineering, 2020, 778, 012028.	0.6	5
28	Biotechnology for Gas-to-Liquid (GTL) Wastewater Treatment: A Review. Water (Switzerland), 2020, 12, 2126.	2.7	8
29	Adsorption as a Process for Produced Water Treatment: A Review. Processes, 2020, 8, 1657.	2.8	93
30	Utilization of Steel-Making Dust in Drilling Fluids Formulations. Processes, 2020, 8, 538.	2.8	7
31	Chromium Removal from Tannery Wastewater by Electrocoagulation: Optimization and Sludge Characterization. Water (Switzerland), 2020, 12, 1374.	2.7	43
32	Early gas kick detection in vertical wells via transient multiphase flow modelling: A review. Journal of Natural Gas Science and Engineering, 2020, 80, 103391.	4.4	28
33	Chemical kinetics of carbon dioxide in the blends of different amino acid salts and methyldiethanolamine. International Journal of Energy Research, 2020, 44, 12506-12524.	4.5	6
34	Corrosion Behavior of API-X120 Carbon Steel Alloy in a GTL F-T Process Water Environment at Low COD Concentration. Metals, 2020, 10, 707.	2.3	5
35	Gas Capture Processes. Processes, 2020, 8, 70.	2.8	2
36	Absorption of CO ₂ in aqueous blend of methyldiethanolamine and arginine. Asia-Pacific Journal of Chemical Engineering, 2020, 15, e2460.	1.5	10

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37	Simultaneous treatment of reject brine and capture of carbon dioxide: A comprehensive review. Desalination, 2020, 483, 114386.	8.2	55
38	Isolation and Identification of Organics-Degrading Bacteria From Gas-to-Liquid Process Water. Frontiers in Bioengineering and Biotechnology, 2020, 8, 603305.	4.1	8
39	Computational fluid dynamics simulation of an Inert Particles Spouted Bed Reactor (IPSBR) system. International Journal of Chemical Reactor Engineering, 2020, .	1.1	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.	4.6	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.	5.6	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.	2.8	11
45	Carbon Mineralization by Reaction with Steel-Making Waste: A Review. Processes, 2019, 7, 115.	2.8	48
46	Optimization of magnesium recovery from reject brine for reuse in desalination post-treatment. Journal of Water Process Engineering, 2019, 31, 100810.	5.6	33
47	Metal-oxide nanotubes functional material tailored for membrane water/wastewater treatment. IOP Conference Series: Materials Science and Engineering, 2019, 634, 012048.	0.6	2
48	Immobilization of microbial cells for the biotreatment of wastewater: A review. Environmental Chemistry Letters, 2019, 17, 241-257.	16.2	222
49	Biosorption of Heavy Metals: Potential and Applications of Yeast Cells for Cadmium Removal. Microorganisms for Sustainability, 2019, , 237-271.	0.7	3
50	CO ₂ Capture Using Hollow Fiber Membranes: A Review of Membrane Wetting. Energy & Fuels, 2018, 32, 963-978.	5.1	101
51	Bio-regeneration of activated carbon: A comprehensive review. Separation and Purification Technology, 2018, 197, 345-359.	7.9	158
52	Effect of electrolytes on electrokinetics and flocculation behavior of bentonite-polyacrylamide dispersions. Applied Clay Science, 2018, 158, 46-54.	5.2	50
53	Competitive interference during the biodegradation of cresols. International Journal of Environmental Science and Technology, 2018, 15, 301-308.	3.5	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.	12.7	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. Journal of Natural Gas Science and Engineering, 2018, 55, 565-574.	4.4	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. American Journal of Engineering and Applied Sciences, 2018, 11, 138-153.	0.6	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. Environmental Science and Pollution Research, 2017, 24, 7511-7520.	5.3	63
61	A new process for the capture of CO2 and reduction of water salinity. Desalination, 2017, 411, 69-75.	8.2	60
62	Evaluation of a novel gas-liquid contactor/reactor system for natural gas applications. Journal of Natural Gas Science and Engineering, 2017, 39, 133-142.	4.4	19
63	Copper removal from industrial wastewater: A comprehensive review. Journal of Industrial and Engineering Chemistry, 2017, 56, 35-44.	5.8	319
64	A comprehensive review of electrocoagulation for water treatment: Potentials and challenges. Journal of Environmental Management, 2017, 186, 24-41.	7.8	565
65	Microbial Degradation of Chlorophenols. Environmental Science and Engineering, 2017, , 23-58.	0.2	10
66	Biodegradation of BTEX: Optimization through Response Surface Methodology. American Journal of Engineering and Applied Sciences, 2017, 10, 20-31.	0.6	3
67	Biodegradation of 2, 4 Dichlorophenol. American Journal of Engineering and Applied Sciences, 2017, 10, 175-191.	0.6	4
68	Optimization of a Combined Approach for the Treatment of Carbide Slurry and Capture of CO ₂ . American Journal of Engineering and Applied Sciences, 2016, 9, 449-457.	0.6	2
69	Correlating the physical solubility of CO2 in several amines to the concentrations of amine groups. Journal of Natural Gas Science and Engineering, 2016, 34, 841-848.	4.4	4
70	Petroleum refinery wastewater treatment: A pilot scale study. Journal of Water Process Engineering, 2016, 14, 71-76.	5.6	49
71	Optimization of a Solvay-Based Approach for CO2 Capture. International Journal of Chemical Engineering and Applications (IJCEA), 2016, 7, 230-234.	0.3	18
72	CO2 sequestration using accelerated gas-solid carbonation of pre-treated EAF steel-making bag house dust. Journal of Environmental Management, 2015, 156, 218-224.	7.8	39

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73	An electrocoagulation column (ECC) for groundwater purification. Journal of Water Process Engineering, 2014, 4, 25-30.	5.6	31
74	Characterization of the removal of Chromium(VI) from groundwater by electrocoagulation. Journal of Industrial and Engineering Chemistry, 2014, 20, 2775-2781.	5.8	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.	5.6	61
76	Aerobic biodegradation of BTEX: Progresses and Prospects. Journal of Environmental Chemical Engineering, 2014, 2, 1104-1122.	6.7	133
77	Evaluation of a three-step process for the treatment of petroleum refinery wastewater. Journal of Environmental Chemical Engineering, 2014, 2, 56-62.	6.7	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.	3.9	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.	5.8	26
80	PHENOL BIODEGRADATION BY <i>RALSTONIA PICKETTII</i> EXTRACTED FROM PETROLEUM REFINERY OIL SLUDGE. Chemical Engineering Communications, 2012, 199, 1194-1204.	2.6	8
81	Aerobic Biodegradation of Phenols: A Comprehensive Review. Critical Reviews in Environmental Science and Technology, 2012, 42, 1631-1690.	12.8	168
82	Rheological characteristics of nickel-alumina sol-gel catalyst. Fuel Processing Technology, 2012, 102, 85-89.	7.2	5
83	Combined steam and dry reforming of methane in narrow channel reactors. International Journal of Hydrogen Energy, 2012, 37, 7538-7544.	7.1	25
84	Teaching water desalination through active learning. Education for Chemical Engineers, 2011, 6, e97-e102.	4.8	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.	12.7	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.	3.6	48
87	Characterization and testing of sol-gel catalysts prepared as thin layers in a plate reactor. Fuel Processing Technology, 2011, 92, 1836-1841.	7.2	5
88	Continuous biodegradation of phenol in a spouted bed bioreactor (SBBR). Chemical Engineering Journal, 2010, 160, 565-570.	12.7	48
89	Removal of phenol from petroleum refinery wastewater through adsorption on date-pit activated carbon. Chemical Engineering Journal, 2010, 162, 997-1005.	12.7	232
90	Batch degradation of phenol in a spouted bed bioreactor system. Journal of Industrial and Engineering Chemistry, 2010, 16, 267-272.	5.8	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.	12.4	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.	8.2	80
93	Evaluation of the removal of CO ₂ using membrane contactors: Membrane wettability. Journal of Membrane Science, 2010, 350, 410-416.	8.2	60
94	A combined approach for the management of desalination reject brine and capture of CO ₂ . Desalination, 2010, 251, 70-74.	8.2	75
95	Assessment of electrocoagulation for the treatment of petroleum refinery wastewater. Journal of Environmental Management, 2009, 91, 180-185.	7.8	211
96	Biodegradation of phenol by Pseudomonas putida immobilized in polyvinyl alcohol (PVA) gel. Journal of Hazardous Materials, 2009, 164, 720-725.	12.4	292
97	Effect of Temperature, Composition, and Shear Rate on Polyvinylidene Fluoride/Dimethylacetamide Solution Viscosity. Journal of Chemical & Engineering Data, 2009, 54, 3276-3280.	1.9	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.	3.7	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.	7.9	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.	12.4	78
102	Facilitated Transport of CO ₂ through Immobilized Liquid Membrane. Industrial & Engineering Chemistry Research, 2005, 44, 9273-9278.	3.7	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