Muftah H El-Naas

List of Publications by Year
in descending order

106	5,264	108046	100535
papers	citations	37 h-index	70 g-index

108	108	108	5842
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A comprehensive review of electrocoagulation for water treatment: Potentials and challenges. Journal of Environmental Management, 2017, 186, 24-41.	3.8	565
2	Copper removal from industrial wastewater: A comprehensive review. Journal of Industrial and Engineering Chemistry, 2017, 56, 35-44.	2.9	319
3	Biodegradation of phenol by Pseudomonas putida immobilized in polyvinyl alcohol (PVA) gel. Journal of Hazardous Materials, 2009, 164, 720-725.	6.5	292
4	Removal of phenol from petroleum refinery wastewater through adsorption on date-pit activated carbon. Chemical Engineering Journal, 2010, 162, 997-1005.	6.6	232
5	Immobilization of microbial cells for the biotreatment of wastewater: A review. Environmental Chemistry Letters, 2019, 17, 241-257.	8.3	222
6	Assessment of electrocoagulation for the treatment of petroleum refinery wastewater. Journal of Environmental Management, 2009, 91, 180-185.	3.8	211
7	Aerobic Biodegradation of Phenols: A Comprehensive Review. Critical Reviews in Environmental Science and Technology, 2012, 42, 1631-1690.	6.6	168
8	Reduction of COD in refinery wastewater through adsorption on date-pit activated carbon. Journal of Hazardous Materials, 2010, 173, 750-757.	6.5	164
9	Bio-regeneration of activated carbon: A comprehensive review. Separation and Purification Technology, 2018, 197, 345-359.	3.9	158
10	Adsorption of organic pollutants by nanomaterial-based adsorbents: An overview. Journal of Molecular Liquids, 2020, 301, 112335.	2.3	153
11	Modeling of CO2 absorption in membrane contactors. Separation and Purification Technology, 2008, 59, 286-293.	3.9	144
12	Aerobic biodegradation of BTEX: Progresses and Prospects. Journal of Environmental Chemical Engineering, 2014, 2, 1104-1122.	3.3	133
13	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
14	Characterization of the removal of Chromium(VI) from groundwater by electrocoagulation. Journal of Industrial and Engineering Chemistry, 2014, 20, 2775-2781.	2.9	107
15	CO₂ Capture Using Hollow Fiber Membranes: A Review of Membrane Wetting. Energy & Fuels, 2018, 32, 963-978.	2.5	101
16	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
17	Adsorption as a Process for Produced Water Treatment: A Review. Processes, 2020, 8, 1657.	1.3	93
18	Removal of carbon dioxide from pressurized CO2â€“CH4 gas mixture using hollow fiber membrane contactors. Journal of Membrane Science, 2010, 351, 21-27.	4.1	80

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19	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
20	A combined approach for the management of desalination reject brine and capture of CO2. Desalination, 2010, 251, 70-74.	4.0	75
21	Comparative study between adsorption and membrane technologies for the removal of mercury. Separation and Purification Technology, 2021, 257, 117833.	3.9	69
22	Electroreduction of Carbon Dioxide into Formate: A Comprehensive Review. ChemElectroChem, 2021, 8, 3207-3220.	1.7	65
23	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.	2.7	63
24	Biological treatment of wastewater contaminated with p-cresol using Pseudomonas putida immobilized in polyvinyl alcohol (PVA) gel. Journal of Water Process Engineering, 2014, 1, 84-90.	2.6	61
25	Evaluation of the removal of CO2 using membrane contactors: Membrane wettability. Journal of Membrane Science, 2010, 350, 410-416.	4.1	60
26	A new process for the capture of CO2 and reduction of water salinity. Desalination, 2017, 411, 69-75.	4.0	60
27	Simultaneous treatment of reject brine and capture of carbon dioxide: A comprehensive review. Desalination, 2020, 483, 114386.	4.0	55
28	Effect of electrolytes on electrokinetics and flocculation behavior of bentonite-polyacrylamide dispersions. Applied Clay Science, 2018, 158, 46-54.	2.6	50
29	Petroleum refinery wastewater treatment: A pilot scale study. Journal of Water Process Engineering, 2016, 14, 71-76.	2.6	49
30	Continuous biodegradation of phenol in a spouted bed bioreactor (SBBR). Chemical Engineering Journal, 2010, 160, 565-570.	6.6	48
31	Immobilization of Pseudomonas putida in PVA gel particles for the biodegradation of phenol at high concentrations. Biochemical Engineering Journal, 2011, 56, 46-50.	1.8	48
32	Carbon Mineralization by Reaction with Steel-Making Waste: A Review. Processes, 2019, 7, 115.	1.3	48
33	Batch degradation of phenol in a spouted bed bioreactor system. Journal of Industrial and Engineering Chemistry, 2010, 16, 267-272.	2.9	45
34	Enhanced CO2 capture through reaction with steel-making dust in high salinity water. International Journal of Greenhouse Gas Control, 2019, 91, 102819.	2.3	43
35	Chromium Removal from Tannery Wastewater by Electrocoagulation: Optimization and Sludge Characterization. Water (Switzerland), 2020, 12, 1374.	1.2	43
36	Catalytic Methane Decomposition to Carbon Nanostructures and COx-Free Hydrogen: A Mini-Review. Nanomaterials, 2021, 11, 1226.	1.9	41

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37	CO₂ Removal from CO₂â^'CH₄ Gas Mixture Using Different Solvents and Hollow Fiber Membranes. Industrial & Engineering Chemistry Research, 2009, 48, 3600-3605.	1.8	39
38	CO2 sequestration using accelerated gas-solid carbonation of pre-treated EAF steel-making bag house dust. Journal of Environmental Management, 2015, 156, 218-224.	3.8	39
39	A technoeconomic assessment of microalgal culture technology implementation for combined wastewater treatment and CO2 mitigation in the Arabian Gulf. Chemical Engineering Research and Design, 2019, 127, 90-102.	2.7	38
40	Removal of Oil Content from Oil-Water Emulsions Using Iron Oxide/Bentonite Nano Adsorbents. Journal of Water Process Engineering, 2020, 38, 101583.	2.6	34
41	Evaluation of the characteristics of polyvinyl alcohol (PVA) as matrices for the immobilization of Pseudomonas putida. International Biodeterioration and Biodegradation, 2013, 85, 413-420.	1.9	33
42	Optimization of magnesium recovery from reject brine for reuse in desalination post-treatment. Journal of Water Process Engineering, 2019, 31, 100810.	2.6	33
43	Facilitated Transport of CO2through Immobilized Liquid Membrane. Industrial & Engineering Chemistry Research, 2005, 44, 9273-9278.	1.8	31
44	An electrocoagulation column (ECC) for groundwater purification. Journal of Water Process Engineering, 2014, 4, 25-30.	2.6	31
45	Significance of gas velocity change during the transport of CO2 through hollow fiber membrane contactors. Chemical Engineering Journal, 2011, 168, 593-603.	6.6	30
46	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.	2.1	30
47	Early gas kick detection in vertical wells via transient multiphase flow modelling: A review. Journal of Natural Gas Science and Engineering, 2020, 80, 103391.	2.1	28
48	Mapping the desalination journal: A systematic bibliometric study over 54Âyears. Desalination, 2022, 526, 115535.	4.0	27
49	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
50	Combined steam and dry reforming of methane in narrow channel reactors. International Journal of Hydrogen Energy, 2012, 37, 7538-7544.	3.8	25
51	A perforated electrode design for passivation reduction during the electrochemical treatment of produced water. Journal of Water Process Engineering, 2020, 33, 101091.	2.6	23
52	Effects of potassium hydroxide and aluminum oxide on the performance of a modified solvay process for <scp> CO ₂ </scp> capture: A comparative study. International Journal of Energy Research, 2021, 45, 13952-13964.	2.2	22
53	Carbon Capture. , 2018, , 997-1016.		21
54	Effective Heterogeneous Fentonâ€Like degradation of Malachite Green Dye Using the Coreâ€Shell Fe₃O₄@SiO₂ Nanoâ€Catalyst. ChemistrySelect, 2021, 6, 865-875.	0.7	21

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55	Evaluation of a novel gas-liquid contactor/reactor system for natural gas applications. Journal of Natural Gas Science and Engineering, 2017, 39, 133-142.	2.1	19
56	Effective and sustainable adsorbent materials for oil spill cleanup based on a multistage desalination process. Journal of Environmental Management, 2021, 299, 113652.	3.8	18
57	Optimization of a Solvay-Based Approach for CO2 Capture. International Journal of Chemical Engineering and Applications (IJCEA), 2016, 7, 230-234.	0.3	18
58	Adsorption of 4-Nitrophenol onto Iron Oxide Bentonite Nanocomposite: Process Optimization, Kinetics, Isotherms and Mechanism. International Journal of Environmental Research, 2022, 16, 1.	1.1	17
59	Competitive interference during the biodegradation of cresols. International Journal of Environmental Science and Technology, 2018, 15, 301-308.	1.8	16
60	Electrodialysis based waste utilization methodology for the desalination industry. Desalination, 2021, 520, 115327.	4.0	16
61	KOH-Based Modified Solvay Process for Removing Na Ions from High Salinity Reject Brine at High Temperatures. Sustainability, 2021, 13, 10200.	1.6	15
62	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.	3.9	14
63	CO2 capture and ions removal through reaction with potassium hydroxide in desalination reject brine: Statistical optimization. Chemical Engineering and Processing: Process Intensification, 2022, 170, 108722.	1.8	13
64	Organic Contaminants in Refinery Wastewater: Characterization and Novel Approaches for Biotreatment. , 2018, , .		12
65	Enhanced Removal of Diesel Oil Using New Magnetic Bentonite-Based Adsorbents Combined with Different Carbon Sources. Water, Air, and Soil Pollution, 2022, 233, .	1.1	12
66	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
67	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.	3.9	11
68	Microbial Degradation of Chlorophenols. Environmental Science and Engineering, 2017, , 23-58.	0.1	10
69	Absorption of CO 2 in aqueous blend of methyldiethanolamine and arginine. Asia-Pacific Journal of Chemical Engineering, 2020, 15, e2460.	0.8	10
70	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
71	A New Process for the Recovery of Ammonia from Ammoniated High-Salinity Brine. Sustainability, 2021, 13, 10014.	1.6	9
72	PHENOL BIODEGRADATION BYRALSTONIA PICKETTIIEXTRACTED FROM PETROLEUM REFINERY OIL SLUDGE. Chemical Engineering Communications, 2012, 199, 1194-1204.	1.5	8

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73	Biotechnology for Gas-to-Liquid (GTL) Wastewater Treatment: A Review. Water (Switzerland), 2020, 12, 2126.	1.2	8
74	Isolation and Identification of Organics-Degrading Bacteria From Gas-to-Liquid Process Water. Frontiers in Bioengineering and Biotechnology, 2020, 8, 603305.	2.0	8
75	Computational fluid dynamics simulation of an Inert Particles Spouted Bed Reactor (IPSBR) system. International Journal of Chemical Reactor Engineering, 2020, .	0.6	8
76	Teaching water desalination through active learning. Education for Chemical Engineers, 2011, 6, e97-e102.	2.8	7
77	Utilization of Steel-Making Dust in Drilling Fluids Formulations. Processes, 2020, 8, 538.	1.3	7
78	A Mechanistic Gas Kick Model to Simulate Gas in A Riser with Water and Synthetic-Based Drilling Fluid. , 2020, , .		7
79	State of the Art in Separation Processes for Alternative Working Fluids in Clean and Efficient Power Generation. Separations, 2022, 9, 14.	1.1	7
80	Chemical kinetics of carbon dioxide in the blends of different amino acid salts and methyldiethanolamine. International Journal of Energy Research, 2020, 44, 12506-12524.	2.2	6
81	Comprehensive Optimization of the Dispersion of Mixing Particles in an Inert-Particle Spouted-Bed Reactor (IPSBR) System. Processes, 2021, 9, 1921.	1.3	6
82	Characterization and testing of solâ€“gel catalysts prepared as thin layers in a plate reactor. Fuel Processing Technology, 2011, 92, 1836-1841.	3.7	5
83	Rheological characteristics of nickelâ€“alumina solâ€“gel catalyst. Fuel Processing Technology, 2012, 102, 85-89.	3.7	5
84	Synthesis and Characterization of Fe3O4 Nanoparticles Using Different Experimental Methods. IOP Conference Series: Materials Science and Engineering, 2020, 778, 012028.	0.3	5
85	Corrosion Behavior of API-X120 Carbon Steel Alloy in a GTL F-T Process Water Environment at Low COD Concentration. Metals, 2020, 10, 707.	1.0	5
86	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.	2.1	4
87	Biodegradation of 2, 4 Dichlorophenol. American Journal of Engineering and Applied Sciences, 2017, 10, 175-191.	0.3	4
88	Zeolites Nanocomposite Membrane Applications in CO2 Capture. , 2018, , 916-921.		4
89	Date pits activated carbon as an effective adsorbent for water treatment. , 2021, , 135-161.		4
90	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.	2.1	4

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91	Electrocoagulation treatment of reject brine effluent from Solvay process. , 0, 163, 325-335.		4
92	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
93	Biodegradation of BTEX: Optimization through Response Surface Methodology. American Journal of Engineering and Applied Sciences, 2017, 10, 20-31.	0.3	3
94	A CFD Investigation on the Effect of IPSBR Operational Conditions on Liquid Phase Hydrodynamics. , 2021, , .		3
95	Biosorption of Heavy Metals: Potential and Applications of Yeast Cells for Cadmium Removal. Microorganisms for Sustainability, 2019, , 237-271.	0.4	3
96	Optimization of a Combined Approach for the Treatment of Carbide Slurry and Capture of CO₂. American Journal of Engineering and Applied Sciences, 2016, 9, 449-457.	0.3	2
97	Conversion of Carbon Dioxide: Opportunities and Fundamental Challenges. American Journal of Engineering and Applied Sciences, 2018, 11, 138-153.	0.3	2
98	Metal-oxide nanotubes functional material tailored for membrane water/wastewater treatment. IOP Conference Series: Materials Science and Engineering, 2019, 634, 012048.	0.3	2
99	Gas Capture Processes. Processes, 2020, 8, 70.	1.3	2
100	Treatment of saline wastewater and carbon dioxide capture using electrodialysis. , 2021, , .		2
101	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
102	Organic Contaminants in Industrial Wastewater: Prospects of Waste Management by Integrated Approaches. , 2020, , 205-235.		1
103	Treatment of petroleum industry wastewater: current practices and perspectives. , 2022, , 1-6.		1
104	METHANE REFORMING IN A SMALL CHANNEL REACTOR. , 2009, , .		0
105	Improvement of PVA Gel Properties for Cell Immobilization. , 0, , .		0
106	Prospects of green technology in the management of refinery wastewater: application of biofilms. , 2022, , 51-69.		0