

# Mohammed J Al-Marri

## List of Publications by Year in descending order

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189  
papers

8,765  
citations

41258

49  
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53109

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189  
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189  
docs citations

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times ranked

7859  
citing authors

#	ARTICLE	IF	CITATIONS
1	Heavy metal removal from aqueous solution by advanced carbon nanotubes: Critical review of adsorption applications. <i>Separation and Purification Technology</i> , 2016, 157, 141-161.	3.9	977
2	A comprehensive review of electrocoagulation for water treatment: Potentials and challenges. <i>Journal of Environmental Management</i> , 2017, 186, 24-41.	3.8	565
3	Recent progress and new developments in post-combustion carbon-capture technology with amine based solvents. <i>International Journal of Greenhouse Gas Control</i> , 2015, 40, 26-54.	2.3	403
4	Photo-stability of CsPbBr <sub>3</sub> perovskite quantum dots for optoelectronic application. <i>Science China Materials</i> , 2016, 59, 719-727.	3.5	201
5	Electrostatic phase separation: A review. <i>Chemical Engineering Research and Design</i> , 2015, 96, 177-195.	2.7	181
6	Review on current advances, future challenges and consideration issues for post-combustion CO <sub>2</sub> capture using amine-based absorbents. <i>Chinese Journal of Chemical Engineering</i> , 2016, 24, 278-288.	1.7	181
7	Size- and Wavelength-Dependent Two-Photon Absorption Cross-Section of CsPbBr <sub>3</sub> Perovskite Quantum Dots. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 2316-2321.	2.1	173
8	Enhancing oil removal from water using ferric oxide nanoparticles doped carbon nanotubes adsorbents. <i>Chemical Engineering Journal</i> , 2016, 293, 90-101.	6.6	148
9	Reduction of energy requirement of CO <sub>2</sub> desorption from a rich CO <sub>2</sub> -loaded MEA solution by using solid acid catalysts. <i>Applied Energy</i> , 2017, 202, 673-684.	5.1	140
10	A study of structure-activity relationships of commercial tertiary amines for post-combustion CO <sub>2</sub> capture. <i>Applied Energy</i> , 2016, 184, 219-229.	5.1	135
11	Trap States and Their Dynamics in Organometal Halide Perovskite Nanoparticles and Bulk Crystals. <i>Journal of Physical Chemistry C</i> , 2016, 120, 3077-3084.	1.5	128
12	Comprehensive mass transfer and reaction kinetics studies of CO <sub>2</sub> absorption into aqueous solutions of blended MDEA-MEA. <i>Chemical Engineering Journal</i> , 2012, 209, 501-512.	6.6	125
13	CO <sub>2</sub> enhanced gas recovery and sequestration in depleted gas reservoirs: A review. <i>Journal of Petroleum Science and Engineering</i> , 2021, 196, 107685.	2.1	125
14	Analysis of the reduction of energy cost by using MEA-MDEA-PZ solvent for post-combustion carbon dioxide capture (PCC). <i>Applied Energy</i> , 2017, 205, 1002-1011.	5.1	123
15	Carbon dioxide (CO <sub>2</sub> ) capture: Absorption-desorption capabilities of 2-amino-2-methyl-1-propanol (AMP), piperazine (PZ) and monoethanolamine (MEA) tri-solvent blends. <i>Journal of Natural Gas Science and Engineering</i> , 2016, 33, 742-750.	2.1	122
16	Evaluating CO <sub>2</sub> desorption performance in CO <sub>2</sub> -loaded aqueous tri-solvent blend amines with and without solid acid catalysts. <i>Applied Energy</i> , 2018, 218, 417-429.	5.1	117
17	Experimental study on the solvent regeneration of a CO <sub>2</sub> -loaded MEA solution using single and hybrid solid acid catalysts. <i>AIChE Journal</i> , 2016, 62, 753-765.	1.8	115
18	Reducing energy consumption of CO <sub>2</sub> desorption in CO <sub>2</sub> -loaded aqueous amine solution using Al <sub>2</sub> O <sub>3</sub> /HZSM-5 bifunctional catalysts. <i>Applied Energy</i> , 2018, 229, 562-576.	5.1	110

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19	Heat duty, heat of absorption, sensible heat and heat of vaporization of 2- amino-2- methyl-1- propanol (AMP), Piperazine (PZ) and Monoethanolamine (MEA) tri- solvent blend for carbon dioxide (CO <sub>2</sub> ) capture. Chemical Engineering Science, 2017, 170, 26-35.	1.9	96
20	Inter-phase charge and energy transfer in Ruddlesden- Popper 2D perovskites: critical role of the spacing cations. Journal of Materials Chemistry A, 2018, 6, 6244-6250.	5.2	94
21	Reducing Energy Penalty of CO <sub>2</sub> Capture Using Fe Promoted SO <sub>4</sub> <sup>2-</sup> /ZrO <sub>2</sub> /MCM-41 Catalyst. Environmental Science & Technology, 2019, 53, 6094-6102.	4.6	94
22	Carbon dioxide (CO <sub>2</sub> ) capture performance of aqueous tri-solvent blends containing 2-amino-2-methyl-1-propanol (AMP) and methyldiethanolamine (MDEA) promoted by diethylenetriamine (DETA). International Journal of Greenhouse Gas Control, 2016, 53, 292-304.	2.3	88
23	Investigation of Mass-Transfer Performance for CO <sub>2</sub> Absorption into Diethylenetriamine (DETA) in a Randomly Packed Column. Industrial & Engineering Chemistry Research, 2012, 51, 12058-12064.	1.8	83
24	The size and performance of offshore produced water oil-removal technologies for reinjection. Separation and Purification Technology, 2014, 134, 241-246.	3.9	83
25	Solubility, absorption heat and mass transfer studies of CO <sub>2</sub> absorption into aqueous solution of 1-dimethylamino-2-propanol. Fuel, 2015, 144, 121-129.	3.4	82
26	Synthesis of new amines for enhanced carbon dioxide (CO <sub>2</sub> ) capture performance: The effect of chemical structure on equilibrium solubility, cyclic capacity, kinetics of absorption and regeneration, and heats of absorption and regeneration. Separation and Purification Technology, 2016, 167, 97-107.	3.9	82
27	Experimental study on mass transfer and prediction using artificial neural network for CO <sub>2</sub> absorption into aqueous DETA. Chemical Engineering Science, 2013, 100, 195-202.	1.9	81
28	High Excitation Intensity Opens a New Trapping Channel in Organic-Inorganic Hybrid Perovskite Nanoparticles. ACS Energy Letters, 2016, 1, 1154-1161.	8.8	81
29	Investigation of CO <sub>2</sub> Regeneration in Single and Blended Amine Solvents with and without Catalyst. Industrial & Engineering Chemistry Research, 2017, 56, 7656-7664.	1.8	75
30	Controlled growth of Cu <sub>2</sub> O thin films by electrodeposition approach. Materials Science in Semiconductor Processing, 2017, 63, 203-211.	1.9	74
31	Ceramic membrane filtration of produced water: Impact of membrane module. Separation and Purification Technology, 2016, 165, 214-221.	3.9	73
32	Multi-layer multi-configuration time-dependent Hartree (ML-MCTDH) approach to the correlated exciton-vibrational dynamics in the FMO complex. Journal of Chemical Physics, 2016, 144, 185101.	1.2	72
33	A comparative kinetics study of CO <sub>2</sub> absorption into aqueous DEEA/MEA and DMEA/MEA blended solutions. AIChE Journal, 2018, 64, 1350-1358.	1.8	72
34	Zeolite catalyst-aided tri-solvent blend amine regeneration: An alternative pathway to reduce the energy consumption in amine-based CO <sub>2</sub> capture process. Applied Energy, 2019, 240, 827-841.	5.1	71
35	Advancement and new perspectives of using formulated reactive amine blends for post-combustion carbon dioxide (CO <sub>2</sub> ) capture technologies. Petroleum, 2017, 3, 10-36.	1.3	66
36	Kinetics of CO <sub>2</sub> absorption into a novel 1-diethylamino-2-propanol solvent using stopped-flow technique. AIChE Journal, 2014, 60, 3502-3510.	1.8	64

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37	13C NMR Spectroscopy of a Novel Amine Species in the DEABâ€‘CO <sub>2</sub> â€‘H <sub>2</sub> O system: VLE Model. Industrial & Engineering Chemistry Research, 2012, 51, 8608-8615.	1.8	63
38	Mass transfer performance and correlations for CO <sub>2</sub> absorption into aqueous blended of DEEA/MEA in a random packed column. AIChE Journal, 2017, 63, 3048-3057.	1.8	61
39	Part 5b: Solvent chemistry: reaction kinetics of CO <sub>2</sub> absorption into reactive amine solutions. Carbon Management, 2012, 3, 201-220.	1.2	60
40	Study of Formation of Bicarbonate Ions in CO <sub>2</sub> -Loaded Aqueous Single 1DMA2P and MDEA Tertiary Amines and Blended MEAâ€‘1DMA2P and MEAâ€‘MDEA Amines for Low Heat of Regeneration. Industrial & Engineering Chemistry Research, 2016, 55, 3710-3717.	1.8	60
41	Electrocoalescence of water drop trains in oil under constant and pulsatile electric fields. Chemical Engineering Research and Design, 2015, 104, 658-668.	2.7	58
42	Catalytic performance and mechanism of SO <sub>4</sub> <sup>2-</sup> /ZrO <sub>2</sub> /SBA-15 catalyst for CO <sub>2</sub> desorption in CO <sub>2</sub> -loaded monoethanolamine solution. Applied Energy, 2020, 259, 114179.	5.1	58
43	Premodified Sepiolite Functionalized with Triethylenetetramine as an Effective and Inexpensive Adsorbent for CO <sub>2</sub> Capture. Industrial & Engineering Chemistry Research, 2018, 57, 6189-6200.	1.8	57
44	Comparative studies of heat duty and total equivalent work of a new heat pump distillation with split flow process, conventional split flow process, and conventional baseline process for CO <sub>2</sub> capture using monoethanolamine. International Journal of Greenhouse Gas Control, 2014, 24, 87-97.	2.3	55
45	Amine-based CO <sub>2</sub> capture aided by acid-basic bifunctional catalyst: Advancement of amine regeneration using metal modified MCM-41. Chemical Engineering Journal, 2020, 383, 123077.	6.6	55
46	In situ DRIFTS Studies on Cu, Ni and CuNi catalysts for Ethanol Decomposition Reaction. Catalysis Letters, 2016, 146, 778-787.	1.4	54
47	SO <sub>4</sub> <sup>2-</sup> /ZrO <sub>2</sub> supported on Î³-Al <sub>2</sub> O <sub>3</sub> as a catalyst for CO <sub>2</sub> desorption from CO <sub>2</sub> -loaded monoethanolamine solutions. AIChE Journal, 2018, 64, 3988-4001.	1.8	54
48	Catalytic evaluation of nickel nanoparticles in methane steam reforming. International Journal of Hydrogen Energy, 2016, 41, 22876-22885.	3.8	52
49	Cleaning of ceramic membranes for produced water filtration. Journal of Petroleum Science and Engineering, 2018, 166, 283-289.	2.1	52
50	Direct Experimental Evidence for Photoinduced Strong-Coupling Polarons in Organolead Halide Perovskite Nanoparticles. Journal of Physical Chemistry Letters, 2016, 7, 4535-4539.	2.1	49
51	Experimental Studies on the Effect of Tertiary Amine Promoters in Aqueous Monoethanolamine (MEA) Solutions on the Absorption/Stripping Performances in Post-combustion CO <sub>2</sub> Capture. Energy & Fuels, 2017, 31, 13883-13891.	2.5	48
52	Effects of flue gas composition on carbon steel (1020) corrosion in MEA-based CO <sub>2</sub> capture process. International Journal of Greenhouse Gas Control, 2013, 19, 340-349.	2.3	45
53	Intercalation of ionic liquids into bentonite: Swelling and rheological behaviors. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 507, 141-151.	2.3	44
54	Walnut shell based adsorbents: A review study on preparation, mechanism, and application. Journal of Water Process Engineering, 2022, 45, 102527.	2.6	44

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55	Cobalt oxide nanopowder synthesis using cellulose assisted combustion technique. <i>Ceramics International</i> , 2016, 42, 12771-12777.	2.3	43
56	Heat transfer enhancement of nanofluids using iron nanoparticles decorated carbon nanotubes. <i>Applied Thermal Engineering</i> , 2016, 107, 1008-1018.	3.0	43
57	CO <sub>2</sub> Sorption Kinetics of Scaled-Up Polyethylenimine-Functionalized Mesoporous Silica Sorbent. <i>Langmuir</i> , 2015, 31, 3569-3576.	1.6	40
58	Analysis of solubility, absorption heat and kinetics of CO <sub>2</sub> absorption into 1-(2-hydroxyethyl)pyrrolidine solvent. <i>Chemical Engineering Science</i> , 2017, 162, 120-130.	1.9	40
59	Kinetics and mechanism study of homogeneous reaction of CO <sub>2</sub> and blends of diethanolamine and monoethanolamine using the stopped-flow technique. <i>Chemical Engineering Journal</i> , 2017, 316, 592-600.	6.6	40
60	The analysis of solubility, absorption kinetics of CO <sub>2</sub> absorption into aqueous 1-diethylamino-2-propanol solution. <i>AIChE Journal</i> , 2017, 63, 2694-2704.	1.8	40
61	Enhancing CO <sub>2</sub> desorption performance in rich MEA solution by addition of SO <sub>4</sub> <sup>2-</sup> /ZrO <sub>2</sub> /SiO <sub>2</sub> bifunctional catalyst. <i>Applied Energy</i> , 2019, 252, 113440.	5.1	40
62	Toward Efficient CO <sub>2</sub> Capture Solvent Design by Analyzing the Effect of Chain Lengths and Amino Types to the Absorption Capacity, Bicarbonate/Carbamate, and Cyclic Capacity. <i>Energy &amp; Fuels</i> , 2017, 31, 11099-11108.	2.5	38
63	Investigation mechanism of DEA as an activator on aqueous MEA solution for postcombustion CO <sub>2</sub> capture. <i>AIChE Journal</i> , 2018, 64, 2515-2525.	1.8	38
64	Theoretical modeling of the mass transfer performance of CO <sub>2</sub> absorption into DEAB solution in hollow fiber membrane contactor. <i>Journal of Membrane Science</i> , 2020, 593, 117439.	4.1	38
65	Hot electron and hole dynamics in thiol-capped CdSe quantum dots revealed by 2D electronic spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 26199-26204.	1.3	35
66	Demulsification of stable emulsions from produced water using a phase separator with inclined parallel arc coalescing plates. <i>Journal of Petroleum Science and Engineering</i> , 2015, 135, 16-21.	2.1	34
67	A new model for correlation and prediction of equilibrium CO <sub>2</sub> solubility in N-methyl-4-piperidinol solvent. <i>AIChE Journal</i> , 2017, 63, 3395-3403.	1.8	34
68	Air-stable Bis(pentamethylcyclopentadienyl) Zirconium Perfluorooctanesulfonate as an Efficient and Recyclable Catalyst for the Synthesis of N-substituted Amides. <i>ChemCatChem</i> , 2018, 10, 3532-3538.	1.8	34
69	Evaluation of Different Factors on Enhanced Oil Recovery of Heavy Oil Using Different Alkali Solutions. <i>Energy &amp; Fuels</i> , 2016, 30, 3860-3869.	2.5	33
70	Density, Viscosity, and N <sub>2</sub> O Solubility of Aqueous 2-(Methylamino)ethanol Solution. <i>Journal of Chemical &amp; Engineering Data</i> , 2017, 62, 129-140.	1.0	33
71	CO <sub>2</sub> absorption kinetics of 4-diethylamine-2-butanol solvent using stopped-flow technique. <i>Separation and Purification Technology</i> , 2014, 136, 81-87.	3.9	32
72	Effect of Amine Activators on Aqueous N,N-Diethylethanolamine Solution for Postcombustion CO <sub>2</sub> Capture. <i>Energy &amp; Fuels</i> , 2016, 30, 7481-7488.	2.5	32

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73	Analysis of partial electrocoalescence by Level-Set and finite element methods. <i>Chemical Engineering Research and Design</i> , 2016, 114, 180-189.	2.7	32
74	Development of a Promising Biphasic Absorbent for Postcombustion CO <sub>2</sub> Capture: Sulfolane + 2-(Methylamino)ethanol + H <sub>2</sub> O. <i>Industrial &amp; Engineering Chemistry Research</i> , 2020, 59, 14496-14506.	1.8	32
75	Toward to efficient CO <sub>2</sub> capture solvent design by analyzing the effect of substituent type connected to N-atom. <i>Energy</i> , 2018, 144, 1064-1072.	4.5	31
76	Comparison of Overall Gas-Phase Mass Transfer Coefficient for CO <sub>2</sub> Absorption between Tertiary Amines in a Randomly Packed Column. <i>Chemical Engineering and Technology</i> , 2015, 38, 1435-1443.	0.9	30
77	New Insights and Assessment of Primary Alkanolamine/Sulfolane Biphasic Solutions for Post-combustion CO <sub>2</sub> Capture: Absorption, Desorption, Phase Separation, and Technological Process. <i>Industrial &amp; Engineering Chemistry Research</i> , 2019, 58, 20461-20471.	1.8	30
78	Characterization and Correlations of CO <sub>2</sub> Absorption Performance into Aqueous Amine Blended Solution of Monoethanolamine (MEA) and N,N-Dimethylethanolamine (DMEA) in a Packed Column. <i>Energy &amp; Fuels</i> , 2019, 33, 7614-7625.	2.5	29
79	Experimental studies on mass transfer performance for CO <sub>2</sub> absorption into aqueous N,N-dimethylethanolamine (DMEA) based solutions in a PTFE hollow fiber membrane contactor. <i>International Journal of Greenhouse Gas Control</i> , 2019, 82, 210-217.	2.3	29
80	Experimental study of the kinetics of the homogenous reaction of CO <sub>2</sub> into a novel aqueous 3-diethylamino-1,2-propanediol solution using the stopped-flow technique. <i>Chemical Engineering Journal</i> , 2015, 270, 485-495.	6.6	28
81	Impact of the Inter- and Intramolecular Tertiary Amino Group on the Primary Amino Group in the CO <sub>2</sub> Absorption Process. <i>Industrial &amp; Engineering Chemistry Research</i> , 2016, 55, 7210-7217.	1.8	28
82	A theoretical study of gas adsorption on calcite for CO <sub>2</sub> enhanced natural gas recovery. <i>Applied Surface Science</i> , 2020, 504, 144575.	3.1	28
83	Modified Heterogeneous Catalyst-Aided Regeneration of CO <sub>2</sub> Capture Amines: A Promising Perspective for a Drastic Reduction in Energy Consumption. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 9526-9536.	3.2	28
84	Gold-Catalyzed Intermolecular Oxidation of Terminal Alkynes: Simple and Efficient Synthesis of $\beta$ -Mesyloxy Ketones. <i>Synlett</i> , 2013, 24, 1809-1812.	1.0	27
85	The comparative kinetics study of CO <sub>2</sub> absorption into non-aqueous DEEA/MEA and DMEA/MEA blended systems solution by using stopped-flow technique. <i>Chemical Engineering Journal</i> , 2020, 386, 121295.	6.6	27
86	Optimized process configuration for CO <sub>2</sub> recovery from crude synthesis gas via a rectisol wash process. <i>International Journal of Greenhouse Gas Control</i> , 2018, 79, 83-90.	2.3	26
87	Reaction Kinetics of Carbon Dioxide (CO <sub>2</sub> ) with Diethylenetriamine and 1-Amino-2-propanol in Nonaqueous Solvents Using Stopped-Flow Technique. <i>Industrial &amp; Engineering Chemistry Research</i> , 2016, 55, 7307-7317.	1.8	24
88	Thermodynamics and ANN models for predication of the equilibrium CO <sub>2</sub> solubility in aqueous 3-dimethylamino-1-propanol solution. <i>International Journal of Greenhouse Gas Control</i> , 2017, 63, 77-85.	2.3	24
89	Comparative kinetics of carbon dioxide (CO <sub>2</sub> ) absorption into EAE, 1DMA2P and their blends in aqueous solution using the stopped-flow technique. <i>International Journal of Greenhouse Gas Control</i> , 2020, 94, 102948.	2.3	24
90	Part 5a: Solvent chemistry: NMR analysis and studies for amine-CO <sub>2</sub> -H <sub>2</sub> O systems with vapor-liquid equilibrium modeling for CO <sub>2</sub> capture processes. <i>Carbon Management</i> , 2012, 3, 185-200.	1.2	23



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91	Thermodynamic investigation of hydrogen enrichment and carbon suppression using chemical additives in ethanol dry reforming. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 15149-15157.	3.8	23
92	Reaction kinetics of carbon dioxide with aqueous solutions of L-Arginine, Glycine & Sarcosine using the stopped flow technique. <i>International Journal of Greenhouse Gas Control</i> , 2017, 63, 47-58.	2.3	23
93	Synergistic Enhanced Ca-Fe Chemical Looping Reforming Process for Integrated CO <sub>2</sub> Capture and Conversion. <i>Industrial &amp; Engineering Chemistry Research</i> , 2020, 59, 1298-1307.	1.8	23
94	Scalable surface engineering of commercial metal foams for defect-rich hydroxides towards improved oxygen evolution. <i>Journal of Materials Chemistry A</i> , 2020, 8, 12603-12612.	5.2	23
95	Distinct photodynamics of <sup>1</sup> N and <sup>13</sup> C pseudoisomeric iron(II) complexes. <i>Chemical Communications</i> , 2021, 57, 6640-6643.	2.2	23
96	Theoretical studies of methane adsorption on Silica-Kaolinite interface for shale reservoir application. <i>Applied Surface Science</i> , 2021, 546, 149164.	3.1	23
97	PdZn nanoparticle electrocatalysts synthesized by solution combustion for methanol oxidation reaction in an alkaline medium. <i>RSC Advances</i> , 2017, 7, 42709-42717.	1.7	22
98	1D absorption kinetics modeling of CO <sub>2</sub> -DEAB-H <sub>2</sub> O system. <i>International Journal of Greenhouse Gas Control</i> , 2013, 12, 390-398.	2.3	21
99	Multilayer-MCTDH approach to the energy transfer dynamics in the LH2 antenna complex. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2017, 50, 184001.	0.6	21
100	Reaction kinetics of carbon dioxide in aqueous blends of N-methyldiethanolamine and glycine using the stopped flow technique. <i>Journal of Natural Gas Science and Engineering</i> , 2016, 33, 186-195.	2.1	20
101	Kinetics and new mechanism study of CO <sub>2</sub> absorption into water and tertiary amine solutions by stopped-flow technique. <i>AIChE Journal</i> , 2019, 65, 652-661.	1.8	20
102	Application of coordination effect into tri-solvent MEA+BEA+AMP blends at concentrations of 0.1 + 2 + 2 mol/L with absorption, desorption and mass transfer analyses. <i>International Journal of Greenhouse Gas Control</i> , 2021, 107, 103267.	2.3	20
103	Effect of rock mineralogy on Hot-CO <sub>2</sub> injection for enhanced gas recovery. <i>Journal of Natural Gas Science and Engineering</i> , 2019, 72, 103030.	2.1	19
104	Experimental Study of Regeneration Performance of Aqueous N,N-Diethylethanolamine Solution in a Column Packed with Dixon Ring Random Packing. <i>Industrial &amp; Engineering Chemistry Research</i> , 2016, 55, 8519-8526.	1.8	18
105	Pd Nanoclusters-Based Catalysts with Schiff Base Modifying Carrier for Co <sub>2</sub> Hydrogenation to Formic Acid. <i>Industrial &amp; Engineering Chemistry Research</i> , 2019, 58, 44-52.	1.8	18
106	CO <sub>2</sub> Adsorption on Premodified Li/Al Hydrotalcite Impregnated with Polyethylenimine. <i>Industrial &amp; Engineering Chemistry Research</i> , 2019, 58, 1177-1189.	1.8	18
107	New method of kinetic modeling for CO <sub>2</sub> absorption into blended amine systems: A case of MEA/EAE/3DEA1P trisolvant blends. <i>AIChE Journal</i> , 2022, 68, .	1.8	18
108	The development of kinetics model for CO <sub>2</sub> absorption into tertiary amines containing carbonic anhydrase. <i>AIChE Journal</i> , 2017, 63, 4933-4943.	1.8	17

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109	Regeneration Energy Analysis of Aqueous Tri- <i>n</i> -Solvent Blends Containing 2- <i>n</i> -Amino-2-methyl-1-propanol (AMP), Methyldiethanolamine (MDEA) and Diethylenetriamine (DETA) for Carbon Dioxide (CO <sub>2</sub> ) Capture. <i>Energy Procedia</i> , 2017, 114, 2039-2046.	1.8	17
110	Corrosion Behavior of API X100 Steel Material in a Hydrogen Sulfide Environment. <i>Metals</i> , 2017, 7, 109.	1.0	17
111	A study of film thickness and hydrodynamic entrance length in liquid laminar film flow along a vertical tube. <i>AIChE Journal</i> , 2018, 64, 2078-2088.	1.8	17
112	Impact of Surfactant on the Retention of CO <sub>2</sub> and Methane in Carbonate Reservoirs. <i>Energy &amp; Fuels</i> , 2018, 32, 5355-5363.	2.5	17
113	Experimental and Theoretical Studies on Mass Transfer Performance for CO <sub>2</sub> Absorption into Aqueous <i>N,N</i> -Dimethylethanolamine Solution in the Polytetrafluoroethylene Hollow-Fiber Membrane Contactor. <i>Industrial &amp; Engineering Chemistry Research</i> , 2018, 57, 16862-16874.	1.8	17
114	Linear dynamics modelling of droplet deformation in a pulsatile electric field. <i>Chemical Engineering Research and Design</i> , 2016, 114, 162-170.	2.7	16
115	Better Choice of Tertiary Alkanolamines for Postcombustion CO <sub>2</sub> Capture: Structure with Linear Alkanol Chain Instead of Branched. <i>Industrial &amp; Engineering Chemistry Research</i> , 2019, 58, 15344-15352.	1.8	16
116	Expeditious and highly efficient synthesis of propargylamines using a Pd-Cu nanowires catalyst under solvent-free conditions. <i>Applied Organometallic Chemistry</i> , 2019, 33, e4917.	1.7	16
117	Modeling of CO <sub>2</sub> equilibrium solubility in a novel <i>N,N</i> -Diethylamino-2-propanol Solvent. <i>AIChE Journal</i> , 2017, 63, 4465-4475.	1.8	15
118	Analysis for the speciation in CO <sub>2</sub> loaded aqueous MEDA and MAPA solution using <sup>13</sup> C NMR technology. <i>International Journal of Greenhouse Gas Control</i> , 2018, 71, 1-8.	2.3	15
119	Active and Stable Methane Oxidation Nano-Catalyst with Highly-Ionized Palladium Species Prepared by Solution Combustion Synthesis. <i>Catalysts</i> , 2018, 8, 66.	1.6	15
120	Impact of clays on CO <sub>2</sub> adsorption and enhanced gas recovery in sandstone reservoirs. <i>International Journal of Greenhouse Gas Control</i> , 2021, 106, 103286.	2.3	15
121	Reducing Heat Duty of MEA Regeneration Using a Sulfonic Acid-Functionalized Mesoporous MCM-41 Catalyst. <i>Industrial &amp; Engineering Chemistry Research</i> , 2021, 60, 18304-18315.	1.8	15
122	Dynamic Exergy Method for Evaluating the Control and Operation of Oxy-Combustion Boiler Island Systems. <i>Environmental Science &amp; Technology</i> , 2017, 51, 725-732.	4.6	14
123	Bimetallic Au-Pd nanochain networks: facile synthesis and promising application in biaryl synthesis. <i>New Journal of Chemistry</i> , 2017, 41, 3894-3899.	1.4	14
124	Kinetics of CO <sub>2</sub> Adsorption/Desorption of Polyethyleneimine-Mesoporous Silica. <i>Chemical Engineering and Technology</i> , 2017, 40, 1802-1809.	0.9	14
125	Novel thermodynamic model for vapor-liquid equilibrium of CO <sub>2</sub> in aqueous solution of 4-(ethyl-methyl-amino)-2-butanol with designed structures. <i>Chemical Engineering Science</i> , 2020, 218, 115557.	1.9	14
126	Effect of the support on physicochemical properties and catalytic performance of cobalt based nano-catalysts in Fischer-Tropsch reaction. <i>Materials Today Communications</i> , 2017, 10, 67-71.	0.9	13



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127	Analysis of equilibrium CO <sub>2</sub> solubility and thermodynamic models for aqueous 1-(2-hydroxyethyl) piperidine solution. <i>AIChE Journal</i> , 2019, 65, e16605.	1.8	13
128	Straightforward and Highly Efficient Synthesis of $\alpha$ -Acetoxy Ketones through Gold-Catalyzed Intermolecular Oxidation of Terminal Alkynes. <i>Synthesis</i> , 2013, 45, 2605-2611.	1.2	12
129	Amine regeneration tests on MEA, DEA, and MMEA with respect to carbamate stability analyses. <i>Canadian Journal of Chemical Engineering</i> , 2017, 95, 1471-1479.	0.9	12
130	Study on Diffusivity of CO <sub>2</sub> in Oil-Saturated Porous Media under High Pressure and Temperature. <i>Energy &amp; Fuels</i> , 2019, 33, 11364-11372.	2.5	12
131	Effect of fuel content on the electrocatalytic methanol oxidation performance of Pt/ZnO nanoparticles synthesized by solution combustion. <i>Applied Surface Science</i> , 2019, 492, 73-81.	3.1	12
132	Galvanic Exchange as a Novel Method for Carbon Nitride Supported CoAg Catalyst Synthesis for Oxygen Reduction and Carbon Dioxide Conversion. <i>Catalysts</i> , 2019, 9, 860.	1.6	12
133	Carbon dioxide EGR and sequestration in mature and immature shale: Adsorption study. <i>Journal of Petroleum Science and Engineering</i> , 2020, 188, 106923.	2.1	12
134	A novel reactive 4-diethylamino-2-butanol solvent for capturing CO <sub>2</sub> in the aspect of absorption capacity, cyclic capacity, mass transfer, and reaction kinetics. <i>Energy Procedia</i> , 2013, 37, 477-484.	1.8	11
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136	Highly Efficient Hydrogen Generation from a Formic Acid/Triethanolamine System Using a Pd-Based Catalyst and Correlation for Apparent Activation Energy Estimation. <i>Industrial &amp; Engineering Chemistry Research</i> , 2019, 58, 22984-22995.	1.8	11
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142	Efficient Metal-Organic Framework-Derived Cu-Zr Oxygen Carriers with an Enhanced Reduction Reaction Rate for Chemical Looping Air Separation. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 14795-14806.	3.2	10
143	A theoretical study of gas adsorption on $\alpha$ -quartz (O <sub>2</sub> ) for CO <sub>2</sub> enhanced natural gas recovery. <i>Applied Surface Science</i> , 2020, 525, 146472.	3.1	10
144	A study of kinetics, equilibrium solubility, speciation and thermodynamics of CO <sub>2</sub> absorption into benzylamine (BZA) solution. <i>Chemical Engineering Science</i> , 2022, 251, 117452.	1.9	10

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145	An experimental/computational study of steric hindrance effects on $\text{CO}_2$ absorption in (non)aqueous amine solutions. <i>AIChE Journal</i> , 2022, 68, .	1.8	10
146	Experimental and Theoretical Studies of Ultrafine Pd-Based Biochar Catalyst for Dehydrogenation of Formic Acid and Application of In Situ Hydrogenation. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 17282-17295.	4.0	10
147	Efficient nickel-based catalysts for amine regeneration of $\text{CO}_2$ capture: From experimental to calculations verifications. <i>AIChE Journal</i> , 2022, 68, .	1.8	10
148	Study of Direct Synthesis of DMC from $\text{CO}_2$ and Methanol on $\text{CeO}_2$ : Theoretical Calculation and Experiment. <i>Industrial &amp; Engineering Chemistry Research</i> , 2022, 61, 10804-10817.	1.8	10
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152	Synthesis, characterization and performance of Pd-based core-shell methane oxidation nano-catalysts. <i>Journal of Natural Gas Science and Engineering</i> , 2018, 55, 625-633.	2.1	9
153	Mass transfer performance and correlations for $\text{CO}_2$ absorption into aqueous blended PC/MEA in PTFE membrane contactor. <i>Journal of Chemical Technology and Biotechnology</i> , 2020, 95, 27-39.	1.6	9
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159	Flocculation and viscoelastic behavior of industrial papermaking suspensions. <i>Korean Journal of Chemical Engineering</i> , 2016, 33, 448-455.	1.2	8
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162	Catalytic Performance and Mechanism of Meso-Microporous Material $\text{SBA-15}$ -Supported $\text{FeZr}$ Catalysts for $\text{CO}_2$ Desorption in $\text{CO}_2$ -Loaded Aqueous Amine Solution. <i>Industrial &amp; Engineering Chemistry Research</i> , 2021, 60, 2698-2709.	1.8	8

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164	Kinetics of CO <sub>2</sub> absorption into ethanolamine+water+ethanol system mechanism, role of water, and kinetic model. Chemical Engineering Science, 2022, 259, 117732.	1.9	8
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183	Ab-Initio Molecular Dynamics investigation of gas adsorption on $\alpha$ -quartz (001) for CO <sub>2</sub> enhanced natural gas recovery. Journal of Petroleum Science and Engineering, 2021, 205, 108963.	2.1	2
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