

# Mohammed J Al-Marri

## List of Publications by Year in descending order

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189  
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189  
times ranked

7859  
citing authors

#	ARTICLE	IF	CITATIONS
1	Heavy metal removal from aqueous solution by advanced carbon nanotubes: Critical review of adsorption applications. Separation and Purification Technology, 2016, 157, 141-161.	7.9	977
2	A comprehensive review of electrocoagulation for water treatment: Potentials and challenges. Journal of Environmental Management, 2017, 186, 24-41.	7.8	565
3	Recent progress and new developments in post-combustion carbon-capture technology with amine based solvents. International Journal of Greenhouse Gas Control, 2015, 40, 26-54.	4.6	403
4	Photo-stability of CsPbBr <sub>3</sub> perovskite quantum dots for optoelectronic application. Science China Materials, 2016, 59, 719-727.	6.3	201
5	Electrostatic phase separation: A review. Chemical Engineering Research and Design, 2015, 96, 177-195.	5.6	181
6	Review on current advances, future challenges and consideration issues for post-combustion CO <sub>2</sub> capture using amine-based absorbents. Chinese Journal of Chemical Engineering, 2016, 24, 278-288.	3.5	181
7	Size- and Wavelength-Dependent Two-Photon Absorption Cross-Section of CsPbBr <sub>3</sub> Perovskite Quantum Dots. Journal of Physical Chemistry Letters, 2017, 8, 2316-2321.	4.6	173
8	Enhancing oil removal from water using ferric oxide nanoparticles doped carbon nanotubes adsorbents. Chemical Engineering Journal, 2016, 293, 90-101.	12.7	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. Applied Energy, 2017, 202, 673-684.	10.1	140
10	A study of structure–activity relationships of commercial tertiary amines for post-combustion CO <sub>2</sub> capture. Applied Energy, 2016, 184, 219-229.	10.1	135
11	Trap States and Their Dynamics in Organometal Halide Perovskite Nanoparticles and Bulk Crystals. Journal of Physical Chemistry C, 2016, 120, 3077-3084.	3.1	128
12	Comprehensive mass transfer and reaction kinetics studies of CO <sub>2</sub> absorption into aqueous solutions of blended MDEA–MEA. Chemical Engineering Journal, 2012, 209, 501-512.	12.7	125
13	CO <sub>2</sub> enhanced gas recovery and sequestration in depleted gas reservoirs: A review. Journal of Petroleum Science and Engineering, 2021, 196, 107685.	4.2	125
14	Analysis of the reduction of energy cost by using MEA-MDEA-PZ solvent for post-combustion carbon dioxide capture (PCC). Applied Energy, 2017, 205, 1002-1011.	10.1	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. Journal of Natural Gas Science and Engineering, 2016, 33, 742-750.	4.4	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. Applied Energy, 2018, 218, 417-429.	10.1	117
17	Experimental study on the solvent regeneration of a CO <sub>2</sub> -loaded MEA solution using single and hybrid solid acid catalysts. AIChE Journal, 2016, 62, 753-765.	3.6	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. Applied Energy, 2018, 229, 562-576.	10.1	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.	3.8	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.	10.3	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.	10.0	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.	4.6	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.	3.7	83
24	The size and performance of offshore produced water oil-removal technologies for reinjection. Separation and Purification Technology, 2014, 134, 241-246.	7.9	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.	6.4	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.	7.9	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.	3.8	81
28	High Excitation Intensity Opens a New Trapping Channel in Organic-Inorganic Hybrid Perovskite Nanoparticles. ACS Energy Letters, 2016, 1, 1154-1161.	17.4	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.	3.7	75
30	Controlled growth of Cu <sub>2</sub> O thin films by electrodeposition approach. Materials Science in Semiconductor Processing, 2017, 63, 203-211.	4.0	74
31	Ceramic membrane filtration of produced water: Impact of membrane module. Separation and Purification Technology, 2016, 165, 214-221.	7.9	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.	3.0	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.	3.6	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.	10.1	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.	2.8	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.	3.6	64

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37	<sup>13</sup> C 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.	3.7	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.	3.6	61
39	Part 5b: Solvent chemistry: reaction kinetics of CO <sub>2</sub> absorption into reactive amine solutions. Carbon Management, 2012, 3, 201-220.	2.4	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.	3.7	60
41	Electrocoalescence of water drop trains in oil under constant and pulsatile electric fields. Chemical Engineering Research and Design, 2015, 104, 658-668.	5.6	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.	10.1	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.	3.7	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.	4.6	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.	12.7	55
46	In situ DRIFTS Studies on Cu, Ni and CuNi catalysts for Ethanol Decomposition Reaction. Catalysis Letters, 2016, 146, 778-787.	2.6	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.	3.6	54
48	Catalytic evaluation of nickel nanoparticles in methane steam reforming. International Journal of Hydrogen Energy, 2016, 41, 22876-22885.	7.1	52
49	Cleaning of ceramic membranes for produced water filtration. Journal of Petroleum Science and Engineering, 2018, 166, 283-289.	4.2	52
50	Direct Experimental Evidence for Photoinduced Strong-Coupling Polarons in Organolead Halide Perovskite Nanoparticles. Journal of Physical Chemistry Letters, 2016, 7, 4535-4539.	4.6	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.	5.1	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.	4.6	45
53	Intercalation of ionic liquids into bentonite: Swelling and rheological behaviors. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 507, 141-151.	4.7	44
54	Walnut shell based adsorbents: A review study on preparation, mechanism, and application. Journal of Water Process Engineering, 2022, 45, 102527.	5.6	44

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55	Cobalt oxide nanopowder synthesis using cellulose assisted combustion technique. <i>Ceramics International</i> , 2016, 42, 12771-12777.	4.8	43
56	Heat transfer enhancement of nanofluids using iron nanoparticles decorated carbon nanotubes. <i>Applied Thermal Engineering</i> , 2016, 107, 1008-1018.	6.0	43
57	CO <sub>2</sub> Sorption Kinetics of Scaled-Up Polyethylenimine-Functionalized Mesoporous Silica Sorbent. <i>Langmuir</i> , 2015, 31, 3569-3576.	3.5	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.	3.8	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.	12.7	40
60	The analysis of solubility, absorption kinetics of CO <sub>2</sub> absorption into aqueous 1,4-diethylamino-2-propanol solution. <i>AIChE Journal</i> , 2017, 63, 2694-2704.	3.6	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.	10.1	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.	5.1	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.	3.6	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.	8.2	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.	2.8	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.	4.2	34
67	A new model for correlation and prediction of equilibrium CO <sub>2</sub> solubility in N-methyl-2-piperidinol solvent. <i>AIChE Journal</i> , 2017, 63, 3395-3403.	3.6	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.	3.7	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.	5.1	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.	1.9	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.	7.9	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.	5.1	32

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73	Analysis of partial electrocoalescence by Level-Set and finite element methods. Chemical Engineering Research and Design, 2016, 114, 180-189.	5.6	32
74	Development of a Promising Biphasic Absorbent for Postcombustion CO <sub>2</sub> Capture: Sulfolane + 2-(Methylamino)ethanol + H <sub>2</sub> O. Industrial & Engineering Chemistry Research, 2020, 59, 14496-14506.	3.7	32
75	Toward to efficient CO <sub>2</sub> capture solvent design by analyzing the effect of substituent type connected to N-atom. Energy, 2018, 144, 1064-1072.	8.8	31
76	Comparison of Overall Gas-Phase Mass Transfer Coefficient for CO <sub>2</sub> Absorption between Tertiary Amines in a Randomly Packed Column. Chemical Engineering and Technology, 2015, 38, 1435-1443.	1.5	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. Industrial & Engineering Chemistry Research, 2019, 58, 20461-20471.	3.7	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. Energy & Fuels, 2019, 33, 7614-7625.	5.1	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. International Journal of Greenhouse Gas Control, 2019, 82, 210-217.	4.6	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. Chemical Engineering Journal, 2015, 270, 485-495.	12.7	28
81	Impact of the Inter- and Intramolecular Tertiary Amino Group on the Primary Amino Group in the CO <sub>2</sub> Absorption Process. Industrial & Engineering Chemistry Research, 2016, 55, 7210-7217.	3.7	28
82	A theoretical study of gas adsorption on calcite for CO <sub>2</sub> enhanced natural gas recovery. Applied Surface Science, 2020, 504, 144575.	6.1	28
83	Modified Heterogeneous Catalyst-Aided Regeneration of CO <sub>2</sub> Capture Amines: A Promising Perspective for a Drastic Reduction in Energy Consumption. ACS Sustainable Chemistry and Engineering, 2020, 8, 9526-9536.	6.7	28
84	Gold-Catalyzed Intermolecular Oxidation of Terminal Alkynes: Simple and Efficient Synthesis of $\beta$ -Mesoxy Ketones. Synlett, 2013, 24, 1809-1812.	1.8	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. Chemical Engineering Journal, 2020, 386, 121295.	12.7	27
86	Optimized process configuration for CO <sub>2</sub> recovery from crude synthesis gas via a rectisol wash process. International Journal of Greenhouse Gas Control, 2018, 79, 83-90.	4.6	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. Industrial & Engineering Chemistry Research, 2016, 55, 7307-7317.	3.7	24
88	Thermodynamics and ANN models for predication of the equilibrium CO <sub>2</sub> solubility in aqueous 3-dimethylamino-1-propanol solution. International Journal of Greenhouse Gas Control, 2017, 63, 77-85.	4.6	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. International Journal of Greenhouse Gas Control, 2020, 94, 102948.	4.6	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. Carbon Management, 2012, 3, 185-200.	2.4	23



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91	Thermodynamic investigation of hydrogen enrichment and carbon suppression using chemical additives in ethanol dry reforming. International Journal of Hydrogen Energy, 2016, 41, 15149-15157.	7.1	23
92	Reaction kinetics of carbon dioxide with aqueous solutions of L-Arginine, Glycine & Sarcosine using the stopped flow technique. International Journal of Greenhouse Gas Control, 2017, 63, 47-58.	4.6	23
93	Synergistic Enhanced Ca-Fe Chemical Looping Reforming Process for Integrated CO <sub>2</sub> Capture and Conversion. Industrial & Engineering Chemistry Research, 2020, 59, 1298-1307.	3.7	23
94	Scalable surface engineering of commercial metal foams for defect-rich hydroxides towards improved oxygen evolution. Journal of Materials Chemistry A, 2020, 8, 12603-12612.	10.3	23
95	Distinct photodynamics of $\text{Fe-N}$ and $\text{Fe-C}$ pseudoisomeric iron(II) complexes. Chemical Communications, 2021, 57, 6640-6643.	4.1	23
96	Theoretical studies of methane adsorption on Silica-Kaolinite interface for shale reservoir application. Applied Surface Science, 2021, 546, 149164.	6.1	23
97	PdZn nanoparticle electrocatalysts synthesized by solution combustion for methanol oxidation reaction in an alkaline medium. RSC Advances, 2017, 7, 42709-42717.	3.6	22
98	1D absorption kinetics modeling of CO <sub>2</sub> -DEAB-H <sub>2</sub> O system. International Journal of Greenhouse Gas Control, 2013, 12, 390-398.	4.6	21
99	Multilayer-MCTDH approach to the energy transfer dynamics in the LH2 antenna complex. Journal of Physics B: Atomic, Molecular and Optical Physics, 2017, 50, 184001.	1.5	21
100	Reaction kinetics of carbon dioxide in aqueous blends of N-methyldiethanolamine and glycine using the stopped flow technique. Journal of Natural Gas Science and Engineering, 2016, 33, 186-195.	4.4	20
101	Kinetics and new mechanism study of CO <sub>2</sub> absorption into water and tertiary amine solutions by stopped-flow technique. AIChE Journal, 2019, 65, 652-661.	3.6	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. International Journal of Greenhouse Gas Control, 2021, 107, 103267.	4.6	20
103	Effect of rock mineralogy on Hot-CO <sub>2</sub> injection for enhanced gas recovery. Journal of Natural Gas Science and Engineering, 2019, 72, 103030.	4.4	19
104	Experimental Study of Regeneration Performance of Aqueous N,N-Diethylethanolamine Solution in a Column Packed with Dixon Ring Random Packing. Industrial & Engineering Chemistry Research, 2016, 55, 8519-8526.	3.7	18
105	Pd Nanoclusters-Based Catalysts with Schiff Base Modifying Carrier for Co <sub>2</sub> Hydrogenation to Formic Acid. Industrial & Engineering Chemistry Research, 2019, 58, 44-52.	3.7	18
106	CO <sub>2</sub> Adsorption on Premodified Li/Al Hydrotalcite Impregnated with Polyethylenimine. Industrial & Engineering Chemistry Research, 2019, 58, 1177-1189.	3.7	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. AIChE Journal, 2022, 68, .	3.6	18
108	The development of kinetics model for CO <sub>2</sub> absorption into tertiary amines containing carbonic anhydrase. AIChE Journal, 2017, 63, 4933-4943.	3.6	17

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109	Regeneration Energy Analysis of Aqueous Triâ€‘Solvent Blends Containing 2â€‘Aminoâ€‘2â€‘Methylâ€‘1â€‘Propanol (AMP), Methyl-diethanolamine (MDEA) and Diethylenetriamine (DETA) for Carbon Dioxide (CO <sub>2</sub> ) Capture. Energy Procedia, 2017, 114, 2039-2046.	1.8	17
110	Corrosion Behavior of API X100 Steel Material in a Hydrogen Sulfide Environment. Metals, 2017, 7, 109.	2.3	17
111	A study of film thickness and hydrodynamic entrance length in liquid laminar film flow along a vertical tube. AIChE Journal, 2018, 64, 2078-2088.	3.6	17
112	Impact of Surfactant on the Retention of CO <sub>2</sub> and Methane in Carbonate Reservoirs. Energy & Fuels, 2018, 32, 5355-5363.	5.1	17
113	Experimental and Theoretical Studies on Mass Transfer Performance for CO <sub>2</sub> Absorption into Aqueous <i>N</i>-Dimethylethanolamine Solution in the Polytetrafluoroethylene Hollow-Fiber Membrane Contactor. Industrial & Engineering Chemistry Research, 2018, 57, 16862-16874.	3.7	17
114	Linear dynamics modelling of droplet deformation in a pulsatile electric field. Chemical Engineering Research and Design, 2016, 114, 162-170.	5.6	16
115	Better Choice of Tertiary Alkanolamines for Postcombustion CO <sub>2</sub> Capture: Structure with Linear Alkanol Chain Instead of Branched. Industrial & Engineering Chemistry Research, 2019, 58, 15344-15352.	3.7	16
116	Expedition and highly efficient synthesis of propargylamines using a Pdâ€‘Cu nanowires catalyst under solventâ€‘free conditions. Applied Organometallic Chemistry, 2019, 33, e4917.	3.5	16
117	Modeling of CO <sub>2</sub> equilibrium solubility in a novel 1â€‘Diethylaminoâ€‘2â€‘Propanol Solvent. AIChE Journal, 2017, 63, 4465-4475.	3.6	15
118	Analysis for the speciation in CO <sub>2</sub> loaded aqueous MEDA and MAPA solution using <sup>13</sup> C NMR technology. International Journal of Greenhouse Gas Control, 2018, 71, 1-8.	4.6	15
119	Active and Stable Methane Oxidation Nano-Catalyst with Highly-Ionized Palladium Species Prepared by Solution Combustion Synthesis. Catalysts, 2018, 8, 66.	3.5	15
120	Impact of clays on CO <sub>2</sub> adsorption and enhanced gas recovery in sandstone reservoirs. International Journal of Greenhouse Gas Control, 2021, 106, 103286.	4.6	15
121	Reducing Heat Duty of MEA Regeneration Using a Sulfonic Acid-Functionalized Mesoporous MCM-41 Catalyst. Industrial & Engineering Chemistry Research, 2021, 60, 18304-18315.	3.7	15
122	Dynamic Exergy Method for Evaluating the Control and Operation of Oxy-Combustion Boiler Island Systems. Environmental Science & Technology, 2017, 51, 725-732.	10.0	14
123	Bimetallic Auâ€‘Pd nanochain networks: facile synthesis and promising application in biaryl synthesis. New Journal of Chemistry, 2017, 41, 3894-3899.	2.8	14
124	Kinetics of CO <sub>2</sub> Adsorption/Desorption of Polyethyleneimineâ€‘Mesoporous Silica. Chemical Engineering and Technology, 2017, 40, 1802-1809.	1.5	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. Chemical Engineering Science, 2020, 218, 115557.	3.8	14
126	Effect of the support on physicochemical properties and catalytic performance of cobalt based nano-catalysts in Fischer-Tropsch reaction. Materials Today Communications, 2017, 10, 67-71.	1.9	13



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127	Analysis of equilibrium CO <sub>2</sub> solubility and thermodynamic models for aqueous 2-(2-hydroxyethyl) piperidine solution. <i>AIChE Journal</i> , 2019, 65, e16605.	3.6	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.	2.3	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.	1.7	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.	5.1	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.	6.1	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.	3.5	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.	4.2	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
135	Synthesis and characterization of poly(vinyl alcohol)/Cloisite <sup>®</sup> 20A nanocomposites. <i>Journal of Vinyl and Additive Technology</i> , 2017, 23, 181-187.	3.4	11
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