

# Mohammed J Al-Marri

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

180  
papers

5,916  
citations

41  
h-index

70  
g-index

189  
ext. papers

7,157  
ext. citations

5.1  
avg. IF

6.19  
L-index

#	Paper	IF	Citations
180	A study of kinetics, equilibrium solubility, speciation and thermodynamics of CO <sub>2</sub> absorption into benzylamine (BZA) solution. <i>Chemical Engineering Science</i> , <b>2022</b> , 251, 117452	4.4	1
179	Walnut shell based adsorbents: A review study on preparation, mechanism, and application. <i>Journal of Water Process Engineering</i> , <b>2022</b> , 45, 102527	6.7	5
178	Kinetics of CO <sub>2</sub> Absorption into Ethanolamine+Water+Ethanol System Mechanism, Role of Water, and Kinetic Model. <i>Chemical Engineering Science</i> , <b>2022</b> , 117732	4.4	0
177	Applied Artificial Neural Network for Hydrogen Sulfide Solubility in Natural Gas Purification. <i>ACS Omega</i> , <b>2021</b> , 6, 31321-31329	3.9	0
176	CO <sub>2</sub> Adsorption Behavior of 3-Aminopropyltrimethoxysilane-Functionalized Attapulgite with the Grafting Modification Method. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2021</b> , 60, 17150-17161	3.9	0
175	Impact of clays on CO <sub>2</sub> adsorption and enhanced gas recovery in sandstone reservoirs. <i>International Journal of Greenhouse Gas Control</i> , <b>2021</b> , 106, 103286	4.2	5
174	Theoretical studies of methane adsorption on Silica-Kaolinite interface for shale reservoir application. <i>Applied Surface Science</i> , <b>2021</b> , 546, 149164	6.7	5
173	Simple and Shortcut Method for Evaluating and Guiding the Removal of Degradation Products, Improving Solvent Performance, and Reducing Regeneration Energy. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2021</b> , 60, 6249-6261	3.9	
172	Application of coordination effect into tri-solvent MEA+BEA+AMP blends at concentrations of 0.1 + 2 + 2~0.5 + 2 + 2 mol/L with absorption, desorption and mass transfer analyses. <i>International Journal of Greenhouse Gas Control</i> , <b>2021</b> , 107, 103267	4.2	7
171	CO <sub>2</sub> enhanced gas recovery and sequestration in depleted gas reservoirs: A review. <i>Journal of Petroleum Science and Engineering</i> , <b>2021</b> , 196, 107685	4.4	39
170	Selective preparation and reaction kinetics of dimethyl carbonate from alcoholysis of methyl carbamate with methanol over ZnAl-LDO. <i>Reaction Chemistry and Engineering</i> , <b>2021</b> , 6, 1854-1868	4.9	0
169	Distinct photodynamics of $\Delta$ and $\Lambda$ pseudoisomeric iron(II) complexes. <i>Chemical Communications</i> , <b>2021</b> , 57, 6640-6643	5.8	10
168	Catalytic Performance and Mechanism of Meso-Microporous Material SBA-15-Supported FeZr Catalysts for CO <sub>2</sub> Desorption in CO <sub>2</sub> -Loaded Aqueous Amine Solution. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2021</b> , 60, 2698-2709	3.9	0
167	Ab-Initio Molecular Dynamics investigation of gas adsorption on quartz (001) for CO <sub>2</sub> enhanced natural gas recovery. <i>Journal of Petroleum Science and Engineering</i> , <b>2021</b> , 205, 108963	4.4	1
166	Phosphorus-doped h-boron nitride as an efficient metal-free catalyst for direct dehydrogenation of ethylbenzene. <i>Catalysis Science and Technology</i> , <b>2021</b> , 11, 5590-5597	5.5	2
165	Reducing Heat Duty of MEA Regeneration Using a Sulfonic Acid-Functionalized Mesoporous MCM-41 Catalyst. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2021</b> , 60, 18304-18315	3.9	2
164	Comparative kinetics of homogeneous reaction of CO <sub>2</sub> and unloaded/loaded amine using stopped-flow technique: A case study of MDEA solution. <i>Separation and Purification Technology</i> , <b>2020</b> , 242, 116833	8.3	3

163	Scalable surface engineering of commercial metal foams for defect-rich hydroxides towards improved oxygen evolution. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 12603-12612	13	12
162	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> , <b>2020</b> , 8, 9526-9536	8.3	16
161	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> , <b>2020</b> , 218, 115557	4.4	6
160	Carbon dioxide EGR and sequestration in mature and immature shale: Adsorption study. <i>Journal of Petroleum Science and Engineering</i> , <b>2020</b> , 188, 106923	4.4	7
159	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> , <b>2020</b> , 94, 102948	4.2	15
158	A theoretical study of gas adsorption on Quartz (001) for CO <sub>2</sub> enhanced natural gas recovery. <i>Applied Surface Science</i> , <b>2020</b> , 525, 146472	6.7	7
157	Synthesis of fumed silica supported Ni catalyst for carbon dioxide conversion to methane <b>2020</b> , 10, 715-724		2
156	Amine-based CO <sub>2</sub> capture aided by acid-basic bifunctional catalyst: Advancement of amine regeneration using metal modified MCM-41. <i>Chemical Engineering Journal</i> , <b>2020</b> , 383, 123077	14.7	24
155	A theoretical study of gas adsorption on calcite for CO <sub>2</sub> enhanced natural gas recovery. <i>Applied Surface Science</i> , <b>2020</b> , 504, 144575	6.7	11
154	Study of Equilibrium Solubility, NMR Analysis, and Reaction Kinetics of CO <sub>2</sub> Absorption into Aqueous N1,N2-Dimethylethane-1,2-diamine Solutions. <i>Energy &amp; Fuels</i> , <b>2020</b> , 34, 672-682	4.1	7
153	Synergistic Enhanced CaFe Chemical Looping Reforming Process for Integrated CO <sub>2</sub> Capture and Conversion. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2020</b> , 59, 1298-1307	3.9	6
152	Catalytic performance and mechanism of SO <sub>4</sub> 2/ZrO <sub>2</sub> /SBA-15 catalyst for CO <sub>2</sub> desorption in CO <sub>2</sub> -loaded monoethanolamine solution. <i>Applied Energy</i> , <b>2020</b> , 259, 114179	10.7	26
151	The effect of N-heterocyclic carbene units on the absorption spectra of Fe(II) complexes: a challenge for theory. <i>Physical Chemistry Chemical Physics</i> , <b>2020</b> , 22, 27605-27616	3.6	5
150	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> , <b>2020</b> , 59, 14496-14506	3.9	4
149	Efficient Metal-Organic Framework-Derived CuZr Oxygen Carriers with an Enhanced Reduction Reaction Rate for Chemical Looping Air Separation. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2020</b> , 8, 14795-14806	8.3	3
148	Ab Initio Molecular Dynamics Investigation of CH <sub>4</sub> /CO Adsorption on Calcite: Improving the Enhanced Gas Recovery Process. <i>ACS Omega</i> , <b>2020</b> , 5, 30226-30236	3.9	2
147	Predictions of equilibrium solubility and mass transfer coefficient for CO <sub>2</sub> absorption into aqueous solutions of 4-diethylamino-2-butanol using artificial neural networks. <i>Petroleum</i> , <b>2020</b> , 6, 385-391	4.1	4
146	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> , <b>2020</b> , 386, 121295	14.7	10

145	Fast screening of amine/physical solvent systems and mass transfer studies on efficient aqueous hybrid MEA/Sulfolane solution for postcombustion CO <sub>2</sub> capture. <i>Journal of Chemical Technology and Biotechnology</i> , <b>2020</b> , 95, 649-664	3.5	4
144	Mass transfer performance and correlations for CO <sub>2</sub> absorption into aqueous blended PG/MEA in PTFE membrane contactor. <i>Journal of Chemical Technology and Biotechnology</i> , <b>2020</b> , 95, 27-39	3.5	3
143	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> , <b>2020</b> , 593, 117439	9.6	18
142	High-dimensional exciton-vibrational wave-packet dynamics in the FMO complex. influence of site-specific spectral densities. <i>EPJ Web of Conferences</i> , <b>2019</b> , 205, 10010	0.3	1
141	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> , <b>2019</b> , 82, 210-217	4.2	12
140	Effect of fuel content on the electrocatalytic methanol oxidation performance of Pt/ZnO nanoparticles synthesized by solution combustion. <i>Applied Surface Science</i> , <b>2019</b> , 492, 73-81	6.7	9
139	Reducing Energy Penalty of CO Capture Using Fe Promoted SO/ZrO/MCM-41 Catalyst. <i>Environmental Science &amp; Technology</i> , <b>2019</b> , 53, 6094-6102	10.3	46
138	Analysis of equilibrium CO <sub>2</sub> solubility and thermodynamic models for aqueous 1-(2-hydroxyethyl)-piperidine solution. <i>AIChE Journal</i> , <b>2019</b> , 65, e16605	3.6	7
137	Expeditious and highly efficient synthesis of propargylamines using a Pd-Cu nanowires catalyst under solvent-free conditions. <i>Applied Organometallic Chemistry</i> , <b>2019</b> , 33, e4917	3.1	13
136	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. <i>Applied Energy</i> , <b>2019</b> , 240, 827-841	10.7	35
135	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> , <b>2019</b> , 58, 15344-15352	3.9	11
134	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> , <b>2019</b> , 33, 7614-7625	4.1	11
133	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> , <b>2019</b> , 252, 113440	10.7	25
132	Study on Diffusivity of CO <sub>2</sub> in Oil-Saturated Porous Media under High Pressure and Temperature. <i>Energy &amp; Fuels</i> , <b>2019</b> , 33, 11364-11372	4.1	6
131	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> , <b>2019</b> , 58, 20461-20471	3.9	17
130	Effect of rock mineralogy on Hot-CO <sub>2</sub> injection for enhanced gas recovery. <i>Journal of Natural Gas Science and Engineering</i> , <b>2019</b> , 72, 103030	4.6	10
129	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> , <b>2019</b> , 58, 22984-22995	3.9	1
128	Galvanic Exchange as a Novel Method for Carbon Nitride Supported CoAg Catalyst Synthesis for Oxygen Reduction and Carbon Dioxide Conversion. <i>Catalysts</i> , <b>2019</b> , 9, 860	4	7

127	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> , <b>2019</b> , 58, 44-52	3.9	10
126	CO <sub>2</sub> Adsorption on Premodified Li/Al Hydrotalcite Impregnated with Polyethylenimine. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2019</b> , 58, 1177-1189	3.9	12
125	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> , <b>2019</b> , 65, 652-661	3.6	14
124	Experimental and theoretical studies on the mechanical and structural changes imposed by the variation of clay loading on poly(vinyl alcohol)/cloisite <sup>®</sup> 93A nanocomposites. <i>Journal of Vinyl and Additive Technology</i> , <b>2019</b> , 25, 172-181	2	9
123	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> , <b>2018</b> , 71, 1-8	4.2	8
122	Premodified Sepiolite Functionalized with Triethylenetetramine as an Effective and Inexpensive Adsorbent for CO <sub>2</sub> Capture. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2018</b> , 57, 6189-6200	3.9	39
121	Zn-enriched PtZn nanoparticle electrocatalysts synthesized by solution combustion for ethanol oxidation reaction in an alkaline medium. <i>MRS Communications</i> , <b>2018</b> , 8, 411-419	2.7	8
120	Investigation mechanism of DEA as an activator on aqueous MEA solution for postcombustion CO <sub>2</sub> capture. <i>AIChE Journal</i> , <b>2018</b> , 64, 2515-2525	3.6	24
119	Synthesis, characterization and performance of Pd-based core-shell methane oxidation nano-catalysts. <i>Journal of Natural Gas Science and Engineering</i> , <b>2018</b> , 55, 625-633	4.6	9
118	A Rapid and Highly Efficient Method for the Synthesis of Benzofulvenes via CsOH-Catalyzed Condensation of Indene and Aldehydes. <i>European Journal of Organic Chemistry</i> , <b>2018</b> , 2018, 1347-1351	3.2	4
117	Toward to efficient CO <sub>2</sub> capture solvent design by analyzing the effect of substituent type connected to N-atom. <i>Energy</i> , <b>2018</b> , 144, 1064-1072	7.9	19
116	A study of film thickness and hydrodynamic entrance length in liquid laminar film flow along a vertical tube. <i>AIChE Journal</i> , <b>2018</b> , 64, 2078-2088	3.6	13
115	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> , <b>2018</b> , 218, 417-429	10.7	70
114	Cleaning of ceramic membranes for produced water filtration. <i>Journal of Petroleum Science and Engineering</i> , <b>2018</b> , 166, 283-289	4.4	33
113	Impact of Surfactant on the Retention of CO <sub>2</sub> and Methane in Carbonate Reservoirs. <i>Energy &amp; Fuels</i> , <b>2018</b> , 32, 5355-5363	4.1	11
112	Inter-phase charge and energy transfer in Ruddlesden-Popper 2D perovskites: critical role of the spacing cations. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 6244-6250	13	70
111	SO <sub>4</sub> <sup>2-</sup> /ZrO <sub>2</sub> supported on γ-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. <i>AIChE Journal</i> , <b>2018</b> , 64, 3988-4001	3.6	28
110	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> , <b>2018</b> , 229, 562-576	10.7	64

109	Air-stable Bis(pentamethylcyclopentadienyl) Zirconium Perfluorooctanesulfonate as an Efficient and Recyclable Catalyst for the Synthesis of N-substituted Amides. <i>ChemCatChem</i> , <b>2018</b> , 10, 3532-3538	5.2	25
108	A comparative kinetics study of CO <sub>2</sub> absorption into aqueous DEEA/MEA and DMEA/MEA blended solutions. <i>AIChE Journal</i> , <b>2018</b> , 64, 1350-1358	3.6	39
107	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> , <b>2018</b> , 79, 83-90	4.2	15
106	Experimental and Theoretical Studies on Mass Transfer Performance for CO <sub>2</sub> Absorption into Aqueous N,N-Dimethylethanolamine Solution in the Polytetrafluoroethylene Hollow-Fiber Membrane Contactor. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2018</b> , 57, 16862-16874	3.9	6
105	Study of Equilibrium Solubility, Heat of Absorption, and Speciation of CO <sub>2</sub> Absorption into Aqueous 2-Methylpiperazine (2MPZ) Solution. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2018</b> , 57, 17496-17503	3.9	7
104	Active and Stable Methane Oxidation Nano-Catalyst with Highly-Ionized Palladium Species Prepared by Solution Combustion Synthesis. <i>Catalysts</i> , <b>2018</b> , 8, 66	4	10
103	Reprint of "The effect of site-specific spectral densities on the high-dimensional exciton-vibrational dynamics in the FMO complex" <i>Chemical Physics</i> , <b>2018</b> , 509, 163-169	2.3	
102	Investigation of hydrodynamic performance and effective mass transfer area for Sulzer DX structured packing. <i>AIChE Journal</i> , <b>2018</b> , 64, 3625-3637	3.6	8
101	Synthesis and characterization of poly(vinyl alcohol): Cloisite® 20A nanocomposites. <i>Journal of Vinyl and Additive Technology</i> , <b>2017</b> , 23, 181-187	2	10
100	Density, Viscosity, and N <sub>2</sub> O Solubility of Aqueous 2-(Methylamino)ethanol Solution. <i>Journal of Chemical &amp; Engineering Data</i> , <b>2017</b> , 62, 129-140	2.8	27
99	Advancement and new perspectives of using formulated reactive amine blends for post-combustion carbon dioxide (CO <sub>2</sub> ) capture technologies. <i>Petroleum</i> , <b>2017</b> , 3, 10-36	4.1	45
98	Effect of the support on physicochemical properties and catalytic performance of cobalt based nano-catalysts in Fischer-Tropsch reaction. <i>Materials Today Communications</i> , <b>2017</b> , 10, 67-71	2.5	11
97	Analysis of solubility, absorption heat and kinetics of CO <sub>2</sub> absorption into 1-(2-hydroxyethyl)pyrrolidine solvent. <i>Chemical Engineering Science</i> , <b>2017</b> , 162, 120-130	4.4	34
96	Dynamic Exergy Method for Evaluating the Control and Operation of Oxy-Combustion Boiler Island Systems. <i>Environmental Science &amp; Technology</i> , <b>2017</b> , 51, 725-732	10.3	12
95	Controlled growth of Cu <sub>2</sub> O thin films by electrodeposition approach. <i>Materials Science in Semiconductor Processing</i> , <b>2017</b> , 63, 203-211	4.3	43
94	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. <i>Chemical Engineering Science</i> , <b>2017</b> , 170, 26-35	4.4	61
93	Amine regeneration tests on MEA, DEA, and MMEA with respect to carbamate stability analyses. <i>Canadian Journal of Chemical Engineering</i> , <b>2017</b> , 95, 1471-1479	2.3	11
92	Time-resolved terahertz spectroscopy reveals the influence of charged sensitizing quantum dots on the electron dynamics in ZnO. <i>Physical Chemistry Chemical Physics</i> , <b>2017</b> , 19, 6006-6012	3.6	5

91	Reaction kinetics of the absorption of carbon dioxide (CO <sub>2</sub> ) in aqueous solutions of sterically hindered secondary alkanolamines using the stopped-flow technique. <i>Chemical Engineering Science</i> , <b>2017</b> , 170, 16-25	4.4	5
90	Mass transfer performance and correlations for CO <sub>2</sub> absorption into aqueous blended of DEEA/MEA in a random packed column. <i>AIChE Journal</i> , <b>2017</b> , 63, 3048-3057	3.6	46
89	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> , <b>2017</b> , 316, 592-600	14.7	32
88	Bimetallic AuPd nanochain networks: facile synthesis and promising application in biaryl synthesis. <i>New Journal of Chemistry</i> , <b>2017</b> , 41, 3894-3899	3.6	12
87	Size- and Wavelength-Dependent Two-Photon Absorption Cross-Section of CsPbBr Perovskite Quantum Dots. <i>Journal of Physical Chemistry Letters</i> , <b>2017</b> , 8, 2316-2321	6.4	136
86	A Novel Model for Correlation and Predication of the Equilibrium CO <sub>2</sub> Solubility in Seven Tertiary Solvents. <i>Energy Procedia</i> , <b>2017</b> , 105, 4476-4481	2.3	3
85	The development of kinetics model for CO <sub>2</sub> absorption into tertiary amines containing carbonic anhydrase. <i>AIChE Journal</i> , <b>2017</b> , 63, 4933-4943	3.6	12
84	Investigation of CO <sub>2</sub> Regeneration in Single and Blended Amine Solvents with and without Catalyst. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2017</b> , 56, 7656-7664	3.9	45
83	Modeling of CO <sub>2</sub> equilibrium solubility in a novel 1-Diethylamino-2-Propanol Solvent. <i>AIChE Journal</i> , <b>2017</b> , 63, 4465-4475	3.6	13
82	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> , <b>2017</b> , 63, 47-58	4.2	14
81	Kinetics of CO <sub>2</sub> Adsorption/Desorption of Polyethyleneimine-Mesoporous Silica. <i>Chemical Engineering and Technology</i> , <b>2017</b> , 40, 1802-1809	2	11
80	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> , <b>2017</b> , 63, 77-85	4.2	16
79	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> , <b>2017</b> , 202, 673-684	10.7	91
78	Development of Ion Speciation Plots for Three Promising Tertiary Amine-CO <sub>2</sub> -H <sub>2</sub> O Systems Using the pH Method and the <sup>13</sup> C NMR Method. <i>Energy &amp; Fuels</i> , <b>2017</b> , 31, 3069-3080	4.1	5
77	A new model for correlation and prediction of equilibrium CO <sub>2</sub> solubility in N-methyl-4-piperidinol solvent. <i>AIChE Journal</i> , <b>2017</b> , 63, 3395-3403	3.6	22
76	Optimized Long-Range Corrected Density Functionals for Electronic and Optical Properties of Bare and Ligated CdSe Quantum Dots. <i>Journal of Chemical Theory and Computation</i> , <b>2017</b> , 13, 110-116	6.4	7
75	The analysis of solubility, absorption kinetics of CO <sub>2</sub> absorption into aqueous 1-diethylamino-2-propanol solution. <i>AIChE Journal</i> , <b>2017</b> , 63, 2694-2704	3.6	30
74	The effect of site-specific spectral densities on the high-dimensional exciton-vibrational dynamics in the FMO complex. <i>Chemical Physics</i> , <b>2017</b> , 497, 10-16	2.3	8

73	Corrosion Behavior of API X100 Steel Material in a Hydrogen Sulfide Environment. <i>Metals</i> , <b>2017</b> , 7, 109	2.3	13
72	Analysis of the reduction of energy cost by using MEA-MDEA-PZ solvent for post-combustion carbon dioxide capture (PCC). <i>Applied Energy</i> , <b>2017</b> , 205, 1002-1011	10.7	73
71	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> , <b>2017</b> , 31, 11099-11108	4.1	25
70	PdZn nanoparticle electrocatalysts synthesized by solution combustion for methanol oxidation reaction in an alkaline medium. <i>RSC Advances</i> , <b>2017</b> , 7, 42709-42717	3.7	14
69	Analysis of CO <sub>2</sub> Solubility and Absorption Heat into Aqueous 1-Diethylamino-2-propanol. <i>Energy Procedia</i> , <b>2017</b> , 114, 873-879	2.3	
68	Regeneration Energy Analysis of Aqueous TriSolvent Blends Containing 2-Amino-2-Methyl-1-Propanol (AMP), Methyl-diethanolamine (MDEA) and Diethylenetriamine (DETA) for Carbon Dioxide (CO <sub>2</sub> ) Capture. <i>Energy Procedia</i> , <b>2017</b> , 114, 2039-2046	2.3	7
67	Multilayer-MCTDH approach to the energy transfer dynamics in the LH <sub>2</sub> antenna complex. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , <b>2017</b> , 50, 184001	1.3	18
66	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. <i>Energy &amp; Fuels</i> , <b>2017</b> , 31, 13883-13891	4.1	26
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- 1 An experimental/computational study of steric hindrance effects on CO<sub>2</sub> absorption in (non)aqueous amine solutions. *AIChE Journal*,

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