

# Mohammed J Al-Marri

## List of Publications by Year in descending order

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189  
papers

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41323

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53190

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#	ARTICLE	IF	CITATIONS
1	Effect of nickel on combustion synthesized copper/ fumed $\text{SiO}_2$ catalyst for selective reduction of $\text{CO}_2$ to $\text{CO}$ . International Journal of Energy Research, 2022, 46, 441-451.	2.2	8
2	Walnut shell based adsorbents: A review study on preparation, mechanism, and application. Journal of Water Process Engineering, 2022, 45, 102527.	2.6	44
3	New method of kinetic modeling for $\text{CO}_2$ absorption into blended amine systems: A case of MEA/EAE/3DEA1P trisolvant blends. AIChE Journal, 2022, 68, .	1.8	18
4	A study of kinetics, equilibrium solubility, speciation and thermodynamics of $\text{CO}_2$ absorption into benzylamine (BZA) solution. Chemical Engineering Science, 2022, 251, 117452.	1.9	10
5	Theoretical and experimental studies of highly efficient all-solid Z-scheme $\text{TiO}_2/\text{TiC/g-C}_3\text{N}_4$ for photocatalytic $\text{CO}_2$ reduction via dry reforming of methane. Catalysis Science and Technology, 2022, 12, 2804-2818.	2.1	9
6	An experimental/computational study of steric hindrance effects on $\text{CO}_2$ absorption in (non)aqueous amine solutions. AIChE Journal, 2022, 68, .	1.8	10
7	Molecular dynamics of $\text{CH}_4/\text{CO}_2$ on calcite for enhancing gas recovery. Canadian Journal of Chemical Engineering, 2022, 100, 3184-3195.	0.9	2
8	Study of Non-Noble-Metal-Based Metal-Nitrogen-Carbon Catalysts for Formic Acid Dehydrogenation. ACS Sustainable Chemistry and Engineering, 2022, 10, 4599-4609.	3.2	9
9	Experimental and Theoretical Studies of Ultrafine Pd-Based Biochar Catalyst for Dehydrogenation of Formic Acid and Application of In Situ Hydrogenation. ACS Applied Materials & Interfaces, 2022, 14, 17282-17295.	4.0	10
10	Efficient nickel-based catalysts for amine regeneration of $\text{CO}_2$ capture: From experimental to calculations verifications. AIChE Journal, 2022, 68, .	1.8	10
11	Kinetics of $\text{CO}_2$ absorption into ethanolamine+water+ethanol system mechanism, role of water, and kinetic model. Chemical Engineering Science, 2022, 259, 117732.	1.9	8
12	Experimental Measurement and Modeling Prediction of Mass Transfer in a Hollow Fiber Membrane Contactor Using Tertiary Amine Solutions for $\text{CO}_2$ Absorption. Industrial & Engineering Chemistry Research, 2022, 61, 9632-9643.	1.8	8
13	Study of Direct Synthesis of DMC from $\text{CO}_2$ and Methanol on $\text{CeO}_2$ : Theoretical Calculation and Experiment. Industrial & Engineering Chemistry Research, 2022, 61, 10804-10817.	1.8	10
14	$\text{CO}_2$ enhanced gas recovery and sequestration in depleted gas reservoirs: A review. Journal of Petroleum Science and Engineering, 2021, 196, 107685.	2.1	125
15	Selective preparation and reaction kinetics of dimethyl carbonate from alcoholysis of methyl carbamate with methanol over ZnAl-LDO. Reaction Chemistry and Engineering, 2021, 6, 1854-1868.	1.9	6
16	Distinct photodynamics of $\text{Fe}^{\text{II}}\text{-N}$ and $\text{Fe}^{\text{II}}\text{-C}$ pseudoisomeric iron ( $\text{Fe}^{\text{II}}$ ) complexes. Chemical Communications, 2021, 57, 6640-6643.	2.2	23
17	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. Industrial & Engineering Chemistry Research, 2021, 60, 2698-2709.	1.8	8
18	Impact of clays on $\text{CO}_2$ adsorption and enhanced gas recovery in sandstone reservoirs. International Journal of Greenhouse Gas Control, 2021, 106, 103286.	2.3	15

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19	Theoretical studies of methane adsorption on Silica-Kaolinite interface for shale reservoir application. <i>Applied Surface Science</i> , 2021, 546, 149164.	3.1	23
20	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> , 2021, 60, 6249-6261.	1.8	1
21	Application of "coordinative 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
22	Ab-Initio Molecular Dynamics investigation of gas adsorption on $\alpha$ -quartz (001) for CO <sub>2</sub> enhanced natural gas recovery. <i>Journal of Petroleum Science and Engineering</i> , 2021, 205, 108963.	2.1	2
23	Phosphorus-doped h-boron nitride as an efficient metal-free catalyst for direct dehydrogenation of ethylbenzene. <i>Catalysis Science and Technology</i> , 2021, 11, 5590-5597.	2.1	7
24	Applied Artificial Neural Network for Hydrogen Sulfide Solubility in Natural Gas Purification. <i>ACS Omega</i> , 2021, 6, 31321-31329.	1.6	3
25	CO <sub>2</sub> Adsorption Behavior of 3-Aminopropyltrimethoxysilane-Functionalized Attapulgite with the Grafting Modification Method. <i>Industrial &amp; Engineering Chemistry Research</i> , 2021, 60, 17150-17161.	1.8	9
26	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
27	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> , 2020, 6, 385-391.	1.3	8
28	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
29	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> , 2020, 95, 649-664.	1.6	7
30	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> , 2020, 95, 27-39.	1.6	9
31	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
32	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
33	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> , 2020, 34, 672-682.	2.5	10
34	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
35	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. <i>Applied Energy</i> , 2020, 259, 114179.	5.1	58
36	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> , 2020, 22, 27605-27616.	1.3	8

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37	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.	1.8	32
38	Efficient Metal-Organic Framework-Derived Cu-Zr Oxygen Carriers with an Enhanced Reduction Reaction Rate for Chemical Looping Air Separation. ACS Sustainable Chemistry and Engineering, 2020, 8, 14795-14806.	3.2	10
39	Ab Initio Molecular Dynamics Investigation of CH <sub>4</sub> /CO <sub>2</sub> Adsorption on Calcite: Improving the Enhanced Gas Recovery Process. ACS Omega, 2020, 5, 30226-30236.	1.6	6
40	Comparative kinetics of homogeneous reaction of CO <sub>2</sub> and unloaded/loaded amine using stopped-flow technique: A case study of MDEA solution. Separation and Purification Technology, 2020, 242, 116833.	3.9	4
41	Scalable surface engineering of commercial metal foams for defect-rich hydroxides towards improved oxygen evolution. Journal of Materials Chemistry A, 2020, 8, 12603-12612.	5.2	23
42	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.	3.2	28
43	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.	1.9	14
44	Carbon dioxide EGR and sequestration in mature and immature shale: Adsorption study. Journal of Petroleum Science and Engineering, 2020, 188, 106923.	2.1	12
45	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.	2.3	24
46	A theoretical study of gas adsorption on $\alpha$ -quartz (001) for CO <sub>2</sub> enhanced natural gas recovery. Applied Surface Science, 2020, 525, 146472.	3.1	10
47	Synthesis of fumed silica supported Ni catalyst for carbon dioxide conversion to methane. , 2020, 10, 715-724.		7
48	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
49	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.	1.8	16
50	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.	2.5	29
51	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. Applied Energy, 2019, 252, 113440.	5.1	40
52	Study on Diffusivity of CO <sub>2</sub> in Oil-Saturated Porous Media under High Pressure and Temperature. Energy & Fuels, 2019, 33, 11364-11372.	2.5	12
53	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.	1.8	30
54	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.	2.1	19

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55	High-dimensional exciton-vibrational wave-packet dynamics in the FMO complex. influence of site-specific spectral densities. EPJ Web of Conferences, 2019, 205, 10010.	0.1	1
56	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.	2.3	29
57	Effect of fuel content on the electrocatalytic methanol oxidation performance of Pt/ZnO nanoparticles synthesized by solution combustion. Applied Surface Science, 2019, 492, 73-81.	3.1	12
58	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
59	Analysis of equilibrium CO <sub>2</sub> solubility and thermodynamic models for aqueous 1-(2-hydroxyethyl)piperidine solution. AIChE Journal, 2019, 65, e16605.	1.8	13
60	Expeditious and highly efficient synthesis of propargylamines using a Pd-Cu nanowires catalyst under solvent-free conditions. Applied Organometallic Chemistry, 2019, 33, e4917.	1.7	16
61	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
62	Highly Efficient Hydrogen Generation from a Formic Acid/Triethanolamine System Using a Pd-Based Catalyst and Correlation for Apparent Activation Energy Estimation. Industrial & Engineering Chemistry Research, 2019, 58, 22984-22995.	1.8	11
63	Galvanic Exchange as a Novel Method for Carbon Nitride Supported CoAg Catalyst Synthesis for Oxygen Reduction and Carbon Dioxide Conversion. Catalysts, 2019, 9, 860.	1.6	12
64	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.	1.8	18
65	CO <sub>2</sub> Adsorption on Premodified Li/Al Hydrotalcite Impregnated with Polyethylenimine. Industrial & Engineering Chemistry Research, 2019, 58, 1177-1189.	1.8	18
66	Kinetics and new mechanism study of CO <sub>2</sub> absorption into water and tertiary amine solutions stopped-flow technique. AIChE Journal, 2019, 65, 652-661.	1.8	20
67	Experimental and theoretical studies on the mechanical and structural changes imposed by the variation of clay loading on poly(vinyl alcohol)/cloisite® 93A nanocomposites. Journal of Vinyl and Additive Technology, 2019, 25, 172-181.	1.8	11
68	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.	2.3	15
69	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
70	Zn-enriched PtZn nanoparticle electrocatalysts synthesized by solution combustion for ethanol oxidation reaction in an alkaline medium. MRS Communications, 2018, 8, 411-419.	0.8	10
71	Investigation mechanism of DEA as an activator on aqueous MEA solution for postcombustion CO <sub>2</sub> capture. AIChE Journal, 2018, 64, 2515-2525.	1.8	38
72	Synthesis, characterization and performance of Pd-based core-shell methane oxidation nano-catalysts. Journal of Natural Gas Science and Engineering, 2018, 55, 625-633.	2.1	9

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73	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> , 2018, 2018, 1347-1351.	1.2	5
74	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
75	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
76	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
77	Cleaning of ceramic membranes for produced water filtration. <i>Journal of Petroleum Science and Engineering</i> , 2018, 166, 283-289.	2.1	52
78	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
79	Inter-phase charge and energy transfer in Ruddlesden-Popper 2D perovskites: critical role of the spacing cations. <i>Journal of Materials Chemistry A</i> , 2018, 6, 6244-6250.	5.2	94
80	A comparative kinetics study of CO <sub>2</sub> absorption into aqueous DEEA/MEA and DMEA/MEA blended solutions. <i>AIChE Journal</i> , 2018, 64, 1350-1358.	1.8	72
81	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
82	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> , 2018, 57, 16862-16874.	1.8	17
83	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> , 2018, 57, 17496-17503.	1.8	10
84	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
85	Reprint of "The effect of site-specific spectral densities on the high-dimensional exciton-vibrational dynamics in the FMO complex". <i>Chemical Physics</i> , 2018, 509, 163-169.	0.9	0
86	Investigation of hydrodynamic performance and effective mass transfer area for Sulzer DX structured packing. <i>AIChE Journal</i> , 2018, 64, 3625-3637.	1.8	10
87	SO <sub>4</sub> <sup>2-</sup> /ZrO <sub>2</sub> supported on $\gamma$ -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> , 2018, 64, 3988-4001.	1.8	54
88	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
89	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
90	Synthesis and characterization of poly(vinyl alcohol): Cloisite <sup>®</sup> 20A nanocomposites. <i>Journal of Vinyl and Additive Technology</i> , 2017, 23, 181-187.	1.8	11

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91	Density, Viscosity, and N <sub>2</sub> O Solubility of Aqueous 2-(Methylamino)ethanol Solution. Journal of Chemical & Engineering Data, 2017, 62, 129-140.	1.0	33
92	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
93	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.	0.9	13
94	Analysis of solubility, absorption heat and kinetics of CO <sub>2</sub> absorption into 1-(2-hydroxyethyl)pyrrolidine solvent. Chemical Engineering Science, 2017, 162, 120-130.	1.9	40
95	Dynamic Exergy Method for Evaluating the Control and Operation of Oxy-Combustion Boiler Island Systems. Environmental Science & Technology, 2017, 51, 725-732.	4.6	14
96	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
97	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
98	Amine regeneration tests on MEA, DEA, and MMEA with respect to carbamate stability analyses. Canadian Journal of Chemical Engineering, 2017, 95, 1471-1479.	0.9	12
99	Time-resolved terahertz spectroscopy reveals the influence of charged sensitizing quantum dots on the electron dynamics in ZnO. Physical Chemistry Chemical Physics, 2017, 19, 6006-6012.	1.3	6
100	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. Chemical Engineering Science, 2017, 170, 16-25.	1.9	9
101	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
102	Kinetics and mechanism study of homogeneous reaction of CO <sub>2</sub> and blends of diethanolamine and monoethanolamine using the stopped-flow technique. Chemical Engineering Journal, 2017, 316, 592-600.	6.6	40
103	Bimetallic Au-Pd nanochain networks: facile synthesis and promising application in biaryl synthesis. New Journal of Chemistry, 2017, 41, 3894-3899.	1.4	14
104	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.	2.1	173
105	A Novel Model for Correlation and Prediction of the Equilibrium CO <sub>2</sub> Solubility in Seven Tertiary Solvents. Energy Procedia, 2017, 105, 4476-4481.	1.8	6
106	The development of kinetics model for CO <sub>2</sub> absorption into tertiary amines containing carbonic anhydrase. AIChE Journal, 2017, 63, 4933-4943.	1.8	17
107	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
108	Modeling of CO <sub>2</sub> equilibrium solubility in a novel Diethylamino-Propanol Solvent. AIChE Journal, 2017, 63, 4465-4475.	1.8	15

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109	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
110	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
111	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
112	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
113	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> , 2017, 31, 3069-3080.	2.5	7
114	A new model for correlation and prediction of equilibrium CO <sub>2</sub> solubility in N-methylpiperidinol solvent. <i>AIChE Journal</i> , 2017, 63, 3395-3403.	1.8	34
115	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> , 2017, 13, 110-116.	2.3	7
116	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
117	The effect of site-specific spectral densities on the high-dimensional exciton-vibrational dynamics in the FMO complex. <i>Chemical Physics</i> , 2017, 497, 10-16.	0.9	9
118	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
119	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
120	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
121	Analysis of CO <sub>2</sub> Solubility and Absorption Heat into Aqueous 1-Diethylamino-2-propanol. <i>Energy Procedia</i> , 2017, 114, 873-879.	1.8	0
122	Regeneration Energy Analysis of Aqueous Tri@Solvent Blends Containing @Amino@Methyl@Propanol (AMP), Methyl-diethanolamine (MDEA) and Diethylenetriamine (DETA) for Carbon Dioxide (CO <sub>2</sub> ) Capture. <i>Energy Procedia</i> , 2017, 114, 2039-2046.	1.8	17
123	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
124	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> , 2017, 31, 13883-13891.	2.5	48
125	Study of Ion Speciation of CO <sub>2</sub> Absorption into Aqueous 1-Dimethylamino-2-propanol Solution Using the NMR Technique. <i>Industrial &amp; Engineering Chemistry Research</i> , 2017, 56, 8697-8704.	1.8	4
126	A comprehensive review of electrocoagulation for water treatment: Potentials and challenges. <i>Journal of Environmental Management</i> , 2017, 186, 24-41.	3.8	565



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127	Corrosion Behavior of API X100 Steel Material in a Hydrogen Sulfide Environment. <i>Metals</i> , 2017, 7, 109.	1.0	17
128	An Experimental and Kinetic Study of the Sorption of Carbon Dioxide onto Amine-Treated Oil Fly Ash. <i>Journal of Chemistry</i> , 2016, 2016, 1-11.	0.9	8
129	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
130	Multi-layer multi-configuration time-dependent Hartree (ML-MCTDH) approach to the correlated exciton-vibrational dynamics in the FMO complex. <i>Journal of Chemical Physics</i> , 2016, 144, 185101.	1.2	72
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