

Mohammed J Al-Marri

List of Publications by Citations

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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 | 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 | 8.3 | 743 |
| 179 | A comprehensive review of electrocoagulation for water treatment: Potentials and challenges. <i>Journal of Environmental Management</i> , 2017 , 186, 24-41 | 7.9 | 360 |
| 178 | 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 | 4.2 | 291 |
| 177 | Photo-stability of CsPbBr ₃ perovskite quantum dots for optoelectronic application. <i>Science China Materials</i> , 2016 , 59, 719-727 | 7.1 | 149 |
| 176 | Electrostatic phase separation: A review. <i>Chemical Engineering Research and Design</i> , 2015 , 96, 177-195 | 5.5 | 143 |
| 175 | Size- and Wavelength-Dependent Two-Photon Absorption Cross-Section of CsPbBr Perovskite Quantum Dots. <i>Journal of Physical Chemistry Letters</i> , 2017 , 8, 2316-2321 | 6.4 | 136 |
| 174 | Enhancing oil removal from water using ferric oxide nanoparticles doped carbon nanotubes adsorbents. <i>Chemical Engineering Journal</i> , 2016 , 293, 90-101 | 14.7 | 125 |
| 173 | Review on current advances, future challenges and consideration issues for post-combustion CO ₂ capture using amine-based absorbents. <i>Chinese Journal of Chemical Engineering</i> , 2016 , 24, 278-288 | 3.2 | 113 |
| 172 | Trap States and Their Dynamics in Organometal Halide Perovskite Nanoparticles and Bulk Crystals. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 3077-3084 | 3.8 | 105 |
| 171 | Comprehensive mass transfer and reaction kinetics studies of CO ₂ absorption into aqueous solutions of blended MDEA/MEA. <i>Chemical Engineering Journal</i> , 2012 , 209, 501-512 | 14.7 | 94 |
| 170 | A study of structure-activity relationships of commercial tertiary amines for post-combustion CO ₂ capture. <i>Applied Energy</i> , 2016 , 184, 219-229 | 10.7 | 93 |
| 169 | Reduction of energy requirement of CO ₂ desorption from a rich CO ₂ -loaded MEA solution by using solid acid catalysts. <i>Applied Energy</i> , 2017 , 202, 673-684 | 10.7 | 91 |
| 168 | Carbon dioxide (CO ₂) 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 | 4.6 | 78 |
| 167 | Experimental study on the solvent regeneration of a CO ₂ -loaded MEA solution using single and hybrid solid acid catalysts. <i>AIChE Journal</i> , 2016 , 62, 753-765 | 3.6 | 78 |
| 166 | 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 | 10.7 | 73 |
| 165 | Evaluating CO ₂ desorption performance in CO ₂ -loaded aqueous tri-solvent blend amines with and without solid acid catalysts. <i>Applied Energy</i> , 2018 , 218, 417-429 | 10.7 | 70 |
| 164 | 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 | 13 | 70 |

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| 163 | High Excitation Intensity Opens a New Trapping Channel in Organic-Inorganic Hybrid Perovskite Nanoparticles. <i>ACS Energy Letters</i> , 2016 , 1, 1154-1161 | 20.1 | 65 |
| 162 | Experimental study on mass transfer and prediction using artificial neural network for CO ₂ absorption into aqueous DETA. <i>Chemical Engineering Science</i> , 2013 , 100, 195-202 | 4.4 | 65 |
| 161 | Solubility, absorption heat and mass transfer studies of CO ₂ absorption into aqueous solution of 1-dimethylamino-2-propanol. <i>Fuel</i> , 2015 , 144, 121-129 | 7.1 | 64 |
| 160 | Reducing energy consumption of CO ₂ desorption in CO ₂ -loaded aqueous amine solution using Al ₂ O ₃ /HZSM-5 bifunctional catalysts. <i>Applied Energy</i> , 2018 , 229, 562-576 | 10.7 | 64 |
| 159 | Investigation of Mass-Transfer Performance for CO ₂ Absorption into Diethylenetriamine (DETA) in a Randomly Packed Column. <i>Industrial & Engineering Chemistry Research</i> , 2012 , 51, 12058-12064 | 3.9 | 63 |
| 158 | Synthesis of new amines for enhanced carbon dioxide (CO ₂) capture performance: The effect of chemical structure on equilibrium solubility, cyclic capacity, kinetics of absorption and regeneration, and heats of absorption and regeneration. <i>Separation and Purification Technology</i> , 2016 , 147, 27-40 | 8.3 | 63 |
| 157 | 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 ₂) capture. <i>Chemical Engineering Science</i> , 2017 , 170, 26-35 | 4.4 | 61 |
| 156 | The size and performance of offshore produced water oil-removal technologies for reinjection. <i>Separation and Purification Technology</i> , 2014 , 134, 241-246 | 8.3 | 59 |
| 155 | ¹³ C NMR Spectroscopy of a Novel Amine Species in the DEAB-CO ₂ -H ₂ O system: VLE Model. <i>Industrial & Engineering Chemistry Research</i> , 2012 , 51, 8608-8615 | 3.9 | 58 |
| 154 | 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 | 3.9 | 57 |
| 153 | Kinetics of CO ₂ absorption into a novel 1-diethylamino-2-propanol solvent using stopped-flow technique. <i>AIChE Journal</i> , 2014 , 60, 3502-3510 | 3.6 | 56 |
| 152 | Ceramic membrane filtration of produced water: Impact of membrane module. <i>Separation and Purification Technology</i> , 2016 , 165, 214-221 | 8.3 | 56 |
| 151 | Carbon dioxide (CO ₂) capture performance of aqueous tri-solvent blends containing 2-amino-2-methyl-1-propanol (AMP) and methyldiethanolamine (MDEA) promoted by diethylenetriamine (DETA). <i>International Journal of Greenhouse Gas Control</i> , 2016 , 53, 292-304 | 4.2 | 54 |
| 150 | Study of Formation of Bicarbonate Ions in CO ₂ -Loaded Aqueous Single 1DMA2P and MDEA Tertiary Amines and Blended MEA/1DMA2P and MEA/MDEA Amines for Low Heat of Regeneration. <i>Industrial & Engineering Chemistry Research</i> , 2016 , 55, 3710-3717 | 3.9 | 51 |
| 149 | Part 5b: Solvent chemistry: reaction kinetics of CO ₂ absorption into reactive amine solutions. <i>Carbon Management</i> , 2012 , 3, 201-220 | 3.3 | 51 |
| 148 | Mass transfer performance and correlations for CO ₂ absorption into aqueous blended of DEEA/MEA in a random packed column. <i>AIChE Journal</i> , 2017 , 63, 3048-3057 | 3.6 | 46 |
| 147 | Reducing Energy Penalty of CO Capture Using Fe Promoted SO/ZrO/MCM-41 Catalyst. <i>Environmental Science & Technology</i> , 2019 , 53, 6094-6102 | 10.3 | 46 |
| 146 | Advancement and new perspectives of using formulated reactive amine blends for post-combustion carbon dioxide (CO ₂) capture technologies. <i>Petroleum</i> , 2017 , 3, 10-36 | 4.1 | 45 |

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| 145 | Investigation of CO ₂ Regeneration in Single and Blended Amine Solvents with and without Catalyst. <i>Industrial & Engineering Chemistry Research</i> , 2017 , 56, 7656-7664 | 3.9 | 45 |
| 144 | Electrocoalescence of water drop trains in oil under constant and pulsatile electric fields. <i>Chemical Engineering Research and Design</i> , 2015 , 104, 658-668 | 5.5 | 45 |
| 143 | Direct Experimental Evidence for Photoinduced Strong-Coupling Polarons in Organolead Halide Perovskite Nanoparticles. <i>Journal of Physical Chemistry Letters</i> , 2016 , 7, 4535-4539 | 6.4 | 44 |
| 142 | Controlled growth of Cu ₂ O thin films by electrodeposition approach. <i>Materials Science in Semiconductor Processing</i> , 2017 , 63, 203-211 | 4.3 | 43 |
| 141 | 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 ₂ capture using monoethanolamine. <i>International Journal of Greenhouse Gas Control</i> , 2014 , 24, 87-97 | 4.2 | 43 |
| 140 | Catalytic evaluation of nickel nanoparticles in methane steam reforming. <i>International Journal of Hydrogen Energy</i> , 2016 , 41, 22876-22885 | 6.7 | 42 |
| 139 | In situ DRIFTS Studies on Cu, Ni and CuNi catalysts for Ethanol Decomposition Reaction. <i>Catalysis Letters</i> , 2016 , 146, 778-787 | 2.8 | 40 |
| 138 | Premodified Sepiolite Functionalized with Triethylenetetramine as an Effective and Inexpensive Adsorbent for CO ₂ Capture. <i>Industrial & Engineering Chemistry Research</i> , 2018 , 57, 6189-6200 | 3.9 | 39 |
| 137 | CO ₂ enhanced gas recovery and sequestration in depleted gas reservoirs: A review. <i>Journal of Petroleum Science and Engineering</i> , 2021 , 196, 107685 | 4.4 | 39 |
| 136 | A comparative kinetics study of CO ₂ absorption into aqueous DEEA/MEA and DMEA/MEA blended solutions. <i>AIChE Journal</i> , 2018 , 64, 1350-1358 | 3.6 | 39 |
| 135 | Intercalation of ionic liquids into bentonite: Swelling and rheological behaviors. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2016 , 507, 141-151 | 5.1 | 37 |
| 134 | Cobalt oxide nanopowder synthesis using cellulose assisted combustion technique. <i>Ceramics International</i> , 2016 , 42, 12771-12777 | 5.1 | 37 |
| 133 | Zeolite catalyst-aided tri-solvent blend amine regeneration: An alternative pathway to reduce the energy consumption in amine-based CO ₂ capture process. <i>Applied Energy</i> , 2019 , 240, 827-841 | 10.7 | 35 |
| 132 | Heat transfer enhancement of nanofluids using iron nanoparticles decorated carbon nanotubes. <i>Applied Thermal Engineering</i> , 2016 , 107, 1008-1018 | 5.8 | 35 |
| 131 | Analysis of solubility, absorption heat and kinetics of CO ₂ absorption into 1-(2-hydroxyethyl)pyrrolidine solvent. <i>Chemical Engineering Science</i> , 2017 , 162, 120-130 | 4.4 | 34 |
| 130 | CO ₂ absorption kinetics of scaled-up polyethylenimine-functionalized mesoporous silica sorbent. <i>Langmuir</i> , 2015 , 31, 3569-76 | 4 | 34 |
| 129 | Effects of flue gas composition on carbon steel (1020) corrosion in MEA-based CO ₂ capture process. <i>International Journal of Greenhouse Gas Control</i> , 2013 , 19, 340-349 | 4.2 | 34 |
| 128 | Cleaning of ceramic membranes for produced water filtration. <i>Journal of Petroleum Science and Engineering</i> , 2018 , 166, 283-289 | 4.4 | 33 |

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| 127 | Kinetics and mechanism study of homogeneous reaction of CO ₂ and blends of diethanolamine and monoethanolamine using the stopped-flow technique. <i>Chemical Engineering Journal</i> , 2017 , 316, 592-600 | 14.7 | 32 |
| 126 | The analysis of solubility, absorption kinetics of CO ₂ absorption into aqueous 1-diethylamino-2-propanol solution. <i>AIChE Journal</i> , 2017 , 63, 2694-2704 | 3.6 | 30 |
| 125 | CO ₂ absorption kinetics of 4-diethylamine-2-butanol solvent using stopped-flow technique. <i>Separation and Purification Technology</i> , 2014 , 136, 81-87 | 8.3 | 30 |
| 124 | SO ₄ ²⁻ /ZrO ₂ supported on γ-Al ₂ O ₃ as a catalyst for CO ₂ desorption from CO ₂ -loaded monoethanolamine solutions. <i>AIChE Journal</i> , 2018 , 64, 3988-4001 | 3.6 | 28 |
| 123 | Density, Viscosity, and N ₂ O Solubility of Aqueous 2-(Methylamino)ethanol Solution. <i>Journal of Chemical & Engineering Data</i> , 2017 , 62, 129-140 | 2.8 | 27 |
| 122 | Evaluation of Different Factors on Enhanced Oil Recovery of Heavy Oil Using Different Alkali Solutions. <i>Energy & Fuels</i> , 2016 , 30, 3860-3869 | 4.1 | 27 |
| 121 | Effect of Amine Activators on Aqueous N,N-Diethylethanolamine Solution for Postcombustion CO ₂ Capture. <i>Energy & Fuels</i> , 2016 , 30, 7481-7488 | 4.1 | 27 |
| 120 | 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 | 3.6 | 26 |
| 119 | Experimental Studies on the Effect of Tertiary Amine Promoters in Aqueous Monoethanolamine (MEA) Solutions on the Absorption/Stripping Performances in Post-combustion CO ₂ Capture. <i>Energy & Fuels</i> , 2017 , 31, 13883-13891 | 4.1 | 26 |
| 118 | Catalytic performance and mechanism of SO ₄ ²⁻ /ZrO ₂ /SBA-15 catalyst for CO ₂ desorption in CO ₂ -loaded monoethanolamine solution. <i>Applied Energy</i> , 2020 , 259, 114179 | 10.7 | 26 |
| 117 | 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 | 5.2 | 25 |
| 116 | Enhancing CO ₂ desorption performance in rich MEA solution by addition of SO ₄ ²⁻ /ZrO ₂ /SiO ₂ bifunctional catalyst. <i>Applied Energy</i> , 2019 , 252, 113440 | 10.7 | 25 |
| 115 | Toward Efficient CO ₂ Capture Solvent Design by Analyzing the Effect of Chain Lengths and Amino Types to the Absorption Capacity, Bicarbonate/Carbamate, and Cyclic Capacity. <i>Energy & Fuels</i> , 2017 , 31, 11099-11108 | 4.1 | 25 |
| 114 | Experimental study of the kinetics of the homogenous reaction of CO ₂ into a novel aqueous 3-diethylamino-1,2-propanediol solution using the stopped-flow technique. <i>Chemical Engineering Journal</i> , 2015 , 270, 485-495 | 14.7 | 24 |
| 113 | Investigation mechanism of DEA as an activator on aqueous MEA solution for postcombustion CO ₂ capture. <i>AIChE Journal</i> , 2018 , 64, 2515-2525 | 3.6 | 24 |
| 112 | Gold-Catalyzed Intermolecular Oxidation of Terminal Alkynes: Simple and Efficient Synthesis of α-Mesyloxy Ketones. <i>Synlett</i> , 2013 , 24, 1809-1812 | 2.2 | 24 |
| 111 | Amine-based CO ₂ capture aided by acid-basic bifunctional catalyst: Advancement of amine regeneration using metal modified MCM-41. <i>Chemical Engineering Journal</i> , 2020 , 383, 123077 | 14.7 | 24 |
| 110 | Analysis of partial electrocoalescence by Level-Set and finite element methods. <i>Chemical Engineering Research and Design</i> , 2016 , 114, 180-189 | 5.5 | 23 |

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| 109 | A new model for correlation and prediction of equilibrium CO ₂ solubility in N-methyl-4-piperidinol solvent. <i>AIChE Journal</i> , 2017 , 63, 3395-3403 | 3.6 | 22 |
| 108 | Reaction Kinetics of Carbon Dioxide (CO ₂) with Diethylenetriamine and 1-Amino-2-propanol in Nonaqueous Solvents Using Stopped-Flow Technique. <i>Industrial & Engineering Chemistry Research</i> , 2016 , 55, 7307-7317 | 3.9 | 22 |
| 107 | Comparison of Overall Gas-Phase Mass Transfer Coefficient for CO ₂ Absorption between Tertiary Amines in a Randomly Packed Column. <i>Chemical Engineering and Technology</i> , 2015 , 38, 1435-1443 | 2 | 20 |
| 106 | Part 5a: Solvent chemistry: NMR analysis and studies for amine-CO ₂ -H ₂ O systems with vapor-liquid equilibrium modeling for CO ₂ capture processes. <i>Carbon Management</i> , 2012 , 3, 185-200 | 3.3 | 20 |
| 105 | Toward to efficient CO ₂ capture solvent design by analyzing the effect of substituent type connected to N-atom. <i>Energy</i> , 2018 , 144, 1064-1072 | 7.9 | 19 |
| 104 | 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 | 1.3 | 18 |
| 103 | Theoretical modeling of the mass transfer performance of CO ₂ absorption into DEAB solution in hollow fiber membrane contactor. <i>Journal of Membrane Science</i> , 2020 , 593, 117439 | 9.6 | 18 |
| 102 | Impact of the Inter- and Intramolecular Tertiary Amino Group on the Primary Amino Group in the CO ₂ Absorption Process. <i>Industrial & Engineering Chemistry Research</i> , 2016 , 55, 7210-7217 | 3.9 | 17 |
| 101 | New Insights and Assessment of Primary Alkanolamine/Sulfolane Biphasic Solutions for Post-combustion CO ₂ Capture: Absorption, Desorption, Phase Separation, and Technological Process. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 20461-20471 | 3.9 | 17 |
| 100 | Thermodynamics and ANN models for prediction of the equilibrium CO ₂ solubility in aqueous 3-dimethylamino-1-propanol solution. <i>International Journal of Greenhouse Gas Control</i> , 2017 , 63, 77-85 | 4.2 | 16 |
| 99 | 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 | 4.4 | 16 |
| 98 | Modified Heterogeneous Catalyst-Aided Regeneration of CO ₂ Capture Amines: A Promising Perspective for a Drastic Reduction in Energy Consumption. <i>ACS Sustainable Chemistry and Engineering</i> , 2020 , 8, 9526-9536 | 8.3 | 16 |
| 97 | 1D absorption kinetics modeling of CO ₂ -DEAB-H ₂ O system. <i>International Journal of Greenhouse Gas Control</i> , 2013 , 12, 390-398 | 4.2 | 16 |
| 96 | Experimental Study of Regeneration Performance of Aqueous N,N-Diethylethanolamine Solution in a Column Packed with Dixon Ring Random Packing. <i>Industrial & Engineering Chemistry Research</i> , 2016 , 55, 8519-8526 | 3.9 | 16 |
| 95 | Comparative kinetics of carbon dioxide (CO ₂) 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 | 4.2 | 15 |
| 94 | Optimized process configuration for CO ₂ recovery from crude synthesis gas via a rectisol wash process. <i>International Journal of Greenhouse Gas Control</i> , 2018 , 79, 83-90 | 4.2 | 15 |
| 93 | 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 | 4.2 | 14 |
| 92 | PdZn nanoparticle electrocatalysts synthesized by solution combustion for methanol oxidation reaction in an alkaline medium. <i>RSC Advances</i> , 2017 , 7, 42709-42717 | 3.7 | 14 |

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| 91 | Kinetics and new mechanism study of CO ₂ absorption into water and tertiary amine solutions by stopped-Flow technique. <i>AIChE Journal</i> , 2019 , 65, 652-661 | 3.6 | 14 |
| 90 | Modeling of CO ₂ equilibrium solubility in a novel 1-Diethylamino-2-Propanol Solvent. <i>AIChE Journal</i> , 2017 , 63, 4465-4475 | 3.6 | 13 |
| 89 | 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 | 3.1 | 13 |
| 88 | Corrosion Behavior of API X100 Steel Material in a Hydrogen Sulfide Environment. <i>Metals</i> , 2017 , 7, 109 | 2.3 | 13 |
| 87 | 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 | 3.6 | 13 |
| 86 | Dynamic Exergy Method for Evaluating the Control and Operation of Oxy-Combustion Boiler Island Systems. <i>Environmental Science & Technology</i> , 2017 , 51, 725-732 | 10.3 | 12 |
| 85 | Bimetallic AuPd nanochain networks: facile synthesis and promising application in biaryl synthesis. <i>New Journal of Chemistry</i> , 2017 , 41, 3894-3899 | 3.6 | 12 |
| 84 | The development of kinetics model for CO ₂ absorption into tertiary amines containing carbonic anhydrase. <i>AIChE Journal</i> , 2017 , 63, 4933-4943 | 3.6 | 12 |
| 83 | Experimental studies on mass transfer performance for CO ₂ 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 | 4.2 | 12 |
| 82 | 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 | 13 | 12 |
| 81 | 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 | 6.7 | 12 |
| 80 | 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 | 4.6 | 12 |
| 79 | Linear dynamics modelling of droplet deformation in a pulsatile electric field. <i>Chemical Engineering Research and Design</i> , 2016 , 114, 162-170 | 5.5 | 12 |
| 78 | CO ₂ Adsorption on Premodified Li/Al Hydrotalcite Impregnated with Polyethylenimine. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 1177-1189 | 3.9 | 12 |
| 77 | 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 | 2.5 | 11 |
| 76 | 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 | 2.3 | 11 |
| 75 | Kinetics of CO ₂ Adsorption/Desorption of Polyethyleneimine-Mesoporous Silica. <i>Chemical Engineering and Technology</i> , 2017 , 40, 1802-1809 | 2 | 11 |
| 74 | Impact of Surfactant on the Retention of CO ₂ and Methane in Carbonate Reservoirs. <i>Energy & Fuels</i> , 2018 , 32, 5355-5363 | 4.1 | 11 |

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| 73 | Better Choice of Tertiary Alkanolamines for Postcombustion CO ₂ Capture: Structure with Linear Alkanol Chain Instead of Branched. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 15344-15352 | 3.9 | 11 |
| 72 | Characterization and Correlations of CO ₂ Absorption Performance into Aqueous Amine Blended Solution of Monoethanolamine (MEA) and N,N-Dimethylethanolamine (DMEA) in a Packed Column. <i>Energy & Fuels</i> , 2019 , 33, 7614-7625 | 4.1 | 11 |
| 71 | Straightforward and Highly Efficient Synthesis of α -Acetoxy Ketones through Gold-Catalyzed Intermolecular Oxidation of Terminal Alkynes. <i>Synthesis</i> , 2013 , 45, 2605-2611 | 2.9 | 11 |
| 70 | A theoretical study of gas adsorption on calcite for CO ₂ enhanced natural gas recovery. <i>Applied Surface Science</i> , 2020 , 504, 144575 | 6.7 | 11 |
| 69 | Synthesis and characterization of poly(vinyl alcohol): Cloisite \square 20A nanocomposites. <i>Journal of Vinyl and Additive Technology</i> , 2017 , 23, 181-187 | 2 | 10 |
| 68 | Effect of rock mineralogy on Hot-CO ₂ injection for enhanced gas recovery. <i>Journal of Natural Gas Science and Engineering</i> , 2019 , 72, 103030 | 4.6 | 10 |
| 67 | Pd Nanoclusters-Based Catalysts with Schiff Base Modifying Carrier for CO ₂ Hydrogenation to Formic Acid. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 44-52 | 3.9 | 10 |
| 66 | The comparative kinetics study of CO ₂ 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 | 14.7 | 10 |
| 65 | Distinct photodynamics of N and C pseudoisomeric iron(II) complexes. <i>Chemical Communications</i> , 2021 , 57, 6640-6643 | 5.8 | 10 |
| 64 | Active and Stable Methane Oxidation Nano-Catalyst with Highly-Ionized Palladium Species Prepared by Solution Combustion Synthesis. <i>Catalysts</i> , 2018 , 8, 66 | 4 | 10 |
| 63 | 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 | 6.7 | 9 |
| 62 | 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 | 4.6 | 9 |
| 61 | Experimental and theoretical studies on the mechanical and structural changes imposed by the variation of clay loading on poly(vinyl alcohol)/cloisite \square 93A nanocomposites. <i>Journal of Vinyl and Additive Technology</i> , 2019 , 25, 172-181 | 2 | 9 |
| 60 | 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 | 2.3 | 8 |
| 59 | Analysis for the speciation in CO ₂ loaded aqueous MEDA and MAPA solution using ¹³ C NMR technology. <i>International Journal of Greenhouse Gas Control</i> , 2018 , 71, 1-8 | 4.2 | 8 |
| 58 | Zn-enriched PtZn nanoparticle electrocatalysts synthesized by solution combustion for ethanol oxidation reaction in an alkaline medium. <i>MRS Communications</i> , 2018 , 8, 411-419 | 2.7 | 8 |
| 57 | Flocculation and viscoelastic behavior of industrial papermaking suspensions. <i>Korean Journal of Chemical Engineering</i> , 2016 , 33, 448-455 | 2.8 | 8 |
| 56 | A novel reactive 4-diethylamino-2-butanol solvent for capturing CO ₂ in the aspect of absorption capacity, cyclic capacity, mass transfer, and reaction kinetics. <i>Energy Procedia</i> , 2013 , 37, 477-484 | 2.3 | 8 |

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| 55 | 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 | 2.3 | 8 |
| 54 | Investigation of hydrodynamic performance and effective mass transfer area for Sulzer DX structured packing. <i>AIChE Journal</i> , 2018 , 64, 3625-3637 | 3.6 | 8 |
| 53 | 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 | 6.4 | 7 |
| 52 | Analysis of equilibrium CO ₂ solubility and thermodynamic models for aqueous 1-(2-hydroxyethyl)-piperidine solution. <i>AIChE Journal</i> , 2019 , 65, e16605 | 3.6 | 7 |
| 51 | Carbon dioxide EGR and sequestration in mature and immature shale: Adsorption study. <i>Journal of Petroleum Science and Engineering</i> , 2020 , 188, 106923 | 4.4 | 7 |
| 50 | A theoretical study of gas adsorption on Quartz (001) for CO ₂ enhanced natural gas recovery. <i>Applied Surface Science</i> , 2020 , 525, 146472 | 6.7 | 7 |
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