

List of Publications by Citations

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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.

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|--------------------|--------------------------|----------------|-----------------|
| 266 papers | 13,038 citations | 58 h-index | 105 g-index |
| 276 ext. papers | 15,132 ext. citations | 6.9 avg, IF | 6.79 L-index |

| # | Paper | IF | Citations |
|-----|---|------|-----------|
| 266 | Carbon capture and storage (CCS): the way forward. <i>Energy and Environmental Science</i> , 2018 , 11, 1062-1136 | 17.8 | 1368 |
| 265 | Extraction of oil from microalgae for biodiesel production: A review. <i>Biotechnology Advances</i> , 2012 , 30, 709-32 | 17.8 | 688 |
| 264 | Oil extraction from microalgae for biodiesel production. <i>Bioresource Technology</i> , 2011 , 102, 178-85 | 11 | 496 |
| 263 | CO2 capture by adsorption: Materials and process development. <i>International Journal of Greenhouse Gas Control</i> , 2007 , 1, 11-18 | 4.2 | 320 |
| 262 | General and controllable synthesis of novel mesoporous magnetic iron oxide@carbon encapsulates for efficient arsenic removal. <i>Advanced Materials</i> , 2012 , 24, 485-91 | 24 | 283 |
| 261 | Highly specific enrichment of glycopeptides using boronic acid-functionalized mesoporous silica. <i>Analytical Chemistry</i> , 2009 , 81, 503-8 | 7.8 | 270 |
| 260 | Capture of CO2 from high humidity flue gas by vacuum swing adsorption with zeolite 13X. <i>Adsorption</i> , 2008 , 14, 415-422 | 2.6 | 239 |
| 259 | Microalgal cell disruption for biofuel development. <i>Applied Energy</i> , 2012 , 91, 116-121 | 10.7 | 237 |
| 258 | Discriminative separation of gases by a "molecular trapdoor" mechanism in chabazite zeolites. <i>Journal of the American Chemical Society</i> , 2012 , 134, 19246-53 | 16.4 | 226 |
| 257 | Alkali and alkaline-earth cation exchanged chabazite zeolites for adsorption based CO2 capture. <i>Microporous and Mesoporous Materials</i> , 2008 , 111, 478-487 | 5.3 | 220 |
| 256 | Effect of process parameters on power requirements of vacuum swing adsorption technology for CO2 capture from flue gas. <i>Energy Conversion and Management</i> , 2008 , 49, 346-356 | 10.6 | 215 |
| 255 | Ordered mesoporous platinum@graphitic carbon embedded nanophase as a highly active, stable, and methanol-tolerant oxygen reduction electrocatalyst. <i>Journal of the American Chemical Society</i> , 2012 , 134, 2236-45 | 16.4 | 193 |
| 254 | Facile Synthesis of Hierarchically Porous Carbons from Dual Colloidal Crystal/Block Copolymer Template Approach. <i>Chemistry of Materials</i> , 2007 , 19, 3271-3277 | 9.6 | 193 |
| 253 | Comprehensive study of pore evolution, mesostructural stability, and simultaneous surface functionalization of ordered mesoporous carbon (FDU-15) by wet oxidation as a promising adsorbent. <i>Langmuir</i> , 2010 , 26, 10277-86 | 4 | 181 |
| 252 | Capture of CO2 from flue gas streams with zeolite 13X by vacuum-pressure swing adsorption. <i>Adsorption</i> , 2008 , 14, 575-582 | 2.6 | 172 |
| 251 | Structured adsorbents in gas separation processes. <i>Separation and Purification Technology</i> , 2010 , 70, 243-256 | 8.3 | 168 |
| 250 | One-step hydrothermal synthesis of ordered mesostructured carbonaceous monoliths with hierarchical porosities. <i>Chemical Communications</i> , 2008 , 2641-3 | 5.8 | 167 |

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| 249 | Post-enrichment of nitrogen in soft-templated ordered mesoporous carbon materials for highly efficient phenol removal and CO ₂ capture. <i>Journal of Materials Chemistry</i> , 2012 , 22, 11379 | | 143 |
| 248 | Adsorption technology for CO ₂ separation and capture: a perspective. <i>Adsorption</i> , 2014 , 20, 225-231 | 2.6 | 135 |
| 247 | Ordered mesoporous crystalline gamma-Al ₂ O ₃ with variable architecture and porosity from a single hard template. <i>Journal of the American Chemical Society</i> , 2010 , 132, 12042-50 | 16.4 | 129 |
| 246 | Porous platinum nanowire arrays for direct ethanol fuel cell applications. <i>Chemical Communications</i> , 2009 , 195-7 | 5.8 | 127 |
| 245 | Oxidation kinetics of ammonia and ammonia-methanol mixtures in supercritical water in the temperature range 530-700.degree.C at 246 bar. <i>Industrial & Engineering Chemistry Research</i> , 1991 , 30, 1745-1754 | 3.9 | 125 |
| 244 | Preparation of ZIF-8 membranes supported on ceramic hollow fibers from a concentrated synthesis gel. <i>Journal of Membrane Science</i> , 2011 , 385-386, 187-193 | 9.6 | 122 |
| 243 | Preparation of activated carbons from corncob with large specific surface area by a variety of chemical activators and their application in gas storage. <i>Chemical Engineering Journal</i> , 2010 , 162, 883-892 | 14.7 | 118 |
| 242 | Critical review of kinetic data for the oxidation of methanol in supercritical water. <i>Journal of Supercritical Fluids</i> , 2005 , 34, 249-286 | 4.2 | 117 |
| 241 | Recent progress on fabrication methods of polymeric thin film gas separation membranes for CO ₂ capture. <i>Journal of Membrane Science</i> , 2019 , 572, 38-60 | 9.6 | 115 |
| 240 | Fundamental kinetics of methane oxidation in supercritical water. <i>Energy & Fuels</i> , 1991 , 5, 411-419 | 4.1 | 112 |
| 239 | Optimum structured adsorbents for gas separation processes. <i>Chemical Engineering Science</i> , 2009 , 64, 5182-5191 | 4.4 | 110 |
| 238 | Advanced adsorbents based on MgO and K ₂ CO ₃ for capture of CO ₂ at elevated temperatures. <i>International Journal of Greenhouse Gas Control</i> , 2011 , 5, 634-639 | 4.2 | 106 |
| 237 | A new simplified pressure/vacuum swing adsorption model for rapid adsorbent screening for CO ₂ capture applications. <i>International Journal of Greenhouse Gas Control</i> , 2013 , 15, 16-31 | 4.2 | 104 |
| 236 | Cycle development and design for CO ₂ capture from flue gas by vacuum swing adsorption. <i>Environmental Science & Technology</i> , 2008 , 42, 563-9 | 10.3 | 101 |
| 235 | CO ₂ Capture by Temperature Swing Adsorption: Use of Hot CO ₂ -Rich Gas for Regeneration. <i>Industrial & Engineering Chemistry Research</i> , 2016 , 55, 703-713 | 3.9 | 98 |
| 234 | Mechanical cell disruption for lipid extraction from microalgal biomass. <i>Bioresource Technology</i> , 2013 , 140, 53-63 | 11 | 97 |
| 233 | Competition of CO ₂ /H ₂ O in adsorption based CO ₂ capture. <i>Energy Procedia</i> , 2009 , 1, 1123-1130 | 2.3 | 94 |
| 232 | Continuous assembly of a polymer on a metal-organic framework (CAP on MOF): a 30 nm thick polymeric gas separation membrane. <i>Energy and Environmental Science</i> , 2018 , 11, 544-550 | 35.4 | 93 |

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|-----|---|------|----|
| 231 | A comparison of multicomponent electrosorption in capacitive deionization and membrane capacitive deionization. <i>Water Research</i> , 2018 , 131, 100-109 | 12.5 | 84 |
| 230 | Ordered mesoporous graphitized pyrolytic carbon materials: synthesis, graphitization, and electrochemical properties. <i>Journal of Materials Chemistry</i> , 2012 , 22, 8835 | | 80 |
| 229 | Potential for using municipal solid waste as a resource for bioenergy with carbon capture and storage (BECCS). <i>International Journal of Greenhouse Gas Control</i> , 2018 , 68, 1-15 | 4.2 | 77 |
| 228 | Direct electrodeposition of porous gold nanowire arrays for biosensing applications. <i>ChemPhysChem</i> , 2009 , 10, 436-41 | 3.2 | 73 |
| 227 | Determination of Composition Range for Molecular Trapdoor Effect in Chabazite Zeolite. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 12841-12847 | 3.8 | 70 |
| 226 | Two-dimensional nanosheet-based gas separation membranes. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 23169-23196 | 13 | 70 |
| 225 | Silica-templated synthesis of ordered mesoporous tungsten carbide/graphitic carbon composites with nanocrystalline walls and high surface areas via a temperature-programmed carburization route. <i>Small</i> , 2009 , 5, 2738-49 | 11 | 69 |
| 224 | Fast solution-adaptive finite volume method for PSA/VSA cycle simulation; 1 single step simulation. <i>Computers and Chemical Engineering</i> , 2000 , 23, 1701-1712 | 4 | 69 |
| 223 | Revised global kinetic measurements of methanol oxidation in supercritical water. <i>Industrial & Engineering Chemistry Research</i> , 1993 , 32, 236-239 | 3.9 | 69 |
| 222 | Ultrathin Metal-Organic Framework Nanosheets as a Gutter Layer for Flexible Composite Gas Separation Membranes. <i>ACS Nano</i> , 2018 , 12, 11591-11599 | 16.7 | 68 |
| 221 | Effects of amino functionality on uptake of CO ₂ , CH ₄ and selectivity of CO ₂ /CH ₄ on titanium based MOFs. <i>Fuel</i> , 2015 , 160, 318-327 | 7.1 | 67 |
| 220 | Adsorption characteristics of a fully exchanged potassium chabazite zeolite prepared from decomposition of zeolite Y. <i>Microporous and Mesoporous Materials</i> , 2009 , 117, 497-507 | 5.3 | 66 |
| 219 | Binary adsorption equilibrium of carbon dioxide and water vapor on activated alumina. <i>Langmuir</i> , 2009 , 25, 10666-75 | 4 | 66 |
| 218 | High temperature materials for CO ₂ capture. <i>Energy Procedia</i> , 2009 , 1, 623-630 | 2.3 | 65 |
| 217 | Improved removal capacity of magnetite for Cr(VI) by electrochemical reduction. <i>Journal of Hazardous Materials</i> , 2019 , 374, 26-34 | 12.8 | 64 |
| 216 | Effects of water vapour on CO ₂ capture with vacuum swing adsorption using activated carbon. <i>Chemical Engineering Journal</i> , 2013 , 230, 64-72 | 14.7 | 64 |
| 215 | Synthesis of well dispersed polymer grafted metal-organic framework nanoparticles. <i>Chemical Communications</i> , 2015 , 51, 15566-9 | 5.8 | 62 |
| 214 | Carbon monoxide oxidation in supercritical water: the effects of heat transfer and the water-gas shift reaction on observed kinetics. <i>Energy & Fuels</i> , 1992 , 6, 586-597 | 4.1 | 61 |

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| 213 | Anomalous Henry's law behavior of nitrogen and carbon dioxide adsorption on alkali-exchanged chabazite zeolites. <i>Separation and Purification Technology</i> , 2009 , 67, 336-343 | 8.3 | 60 |
| 212 | Cage and Window Effects in the Adsorption of n-Alkanes on Chabazite and SAPO-34. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 16593-16599 | 3.8 | 60 |
| 211 | Comparison of Traditional and Structured Adsorbents for CO ₂ Separation by Vacuum-Swing Adsorption. <i>Industrial & Engineering Chemistry Research</i> , 2010 , 49, 4832-4841 | 3.9 | 59 |
| 210 | Increasing both selectivity and permeability of mixed-matrix membranes: Sealing the external surface of porous MOF nanoparticles. <i>Journal of Membrane Science</i> , 2017 , 535, 350-356 | 9.6 | 58 |
| 209 | One-pot generation of mesoporous carbon supported nanocrystalline calcium oxides capable of efficient CO ₂ capture over a wide range of temperatures. <i>Physical Chemistry Chemical Physics</i> , 2011 , 13, 2495-503 | 3.6 | 58 |
| 208 | Adsorption and Separation of C ₁ -C ₈ Alcohols on SAPO-34. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 8117-8125 | 3.8 | 53 |
| 207 | Synthesis of uniform periodic mesoporous organosilica hollow spheres with large-pore size and efficient encapsulation capacity for toluene and the large biomolecule bovine serum albumin. <i>Microporous and Mesoporous Materials</i> , 2010 , 132, 543-551 | 5.3 | 53 |
| 206 | Synthesis, characterization and hydrogen storage properties of microporous carbons templated by cation exchanged forms of zeolite Y with propylene and butylene as carbon precursors. <i>Microporous and Mesoporous Materials</i> , 2007 , 102, 159-170 | 5.3 | 52 |
| 205 | Direct electrodeposition of Pt nanotube arrays and their enhanced electrocatalytic activities. <i>Electrochemistry Communications</i> , 2009 , 11, 190-193 | 5.1 | 48 |
| 204 | Entropic effects and isosteric heats of nitrogen and carbon dioxide adsorption on chabazite zeolites. <i>Microporous and Mesoporous Materials</i> , 2010 , 132, 22-30 | 5.3 | 48 |
| 203 | Simultaneous biogas purification and CO ₂ capture by vacuum swing adsorption using zeolite NaUSY. <i>Chemical Engineering Journal</i> , 2018 , 334, 2593-2602 | 14.7 | 48 |
| 202 | Direct electrodeposition of gold nanotube arrays for sensing applications. <i>Journal of Materials Chemistry</i> , 2008 , 18, 463-467 | | 47 |
| 201 | Improved methanol yield and selectivity from CO ₂ hydrogenation using a novel Cu-ZnO-ZrO ₂ catalyst supported on Mg-Al layered double hydroxide (LDH). <i>Journal of CO₂ Utilization</i> , 2019 , 29, 57-64 | 7.6 | 47 |
| 200 | Effect of the addition of polyvinylpyrrolidone as a pore-former on microstructure and mechanical strength of porous alumina ceramics. <i>Ceramics International</i> , 2013 , 39, 7551-7556 | 5.1 | 46 |
| 199 | Application of the reaction engineering approach (REA) for modeling intermittent drying under time-varying humidity and temperature. <i>Chemical Engineering Science</i> , 2011 , 66, 2149-2156 | 4.4 | 46 |
| 198 | Tuning the morphology of bismuth ferrite nano- and microcrystals: from sheets to fibers. <i>Small</i> , 2007 , 3, 1523-8 | 11 | 45 |
| 197 | Modelling and evaluation of dual-reflux pressure swing adsorption cycles: Part I. Mathematical models. <i>Chemical Engineering Science</i> , 2006 , 61, 7223-7233 | 4.4 | 44 |
| 196 | The CIDES process: Fractionation of concentrated microalgal paste for co-production of biofuel, nutraceuticals, and high-grade protein feed. <i>Algal Research</i> , 2016 , 19, 299-306 | 5 | 43 |

- 195 Zeolite synthesis from waste fly ash and its application in CO₂ capture from flue gas streams. *Adsorption*, **2011**, 17, 795-800 2.6 42
- 194 Effect of flue gas impurities on CO₂ capture performance from flue gas at coal-fired power stations by vacuum swing adsorption. *Energy Procedia*, **2009**, 1, 1115-1122 2.3 42
- 193 Functionalized UiO-66 by Single and Binary (OH)₂ and NO₂ Groups for Uptake of CO₂ and CH₄. *Industrial & Engineering Chemistry Research*, **2016**, 55, 7924-7932 3.9 40
- 192 Potassium Chabazite: A Potential Nanocontainer for Gas Encapsulation. *Journal of Physical Chemistry C*, **2010**, 114, 22025-22031 3.8 39
- 191 Opportunities for application of BECCS in the Australian power sector. *Applied Energy*, **2018**, 224, 615-635 5.7 39
- 190 Converting 3D rigid metal-organic frameworks (MOFs) to 2D flexible networks via ligand exchange for enhanced CO₂/N₂ and CH₄/N₂ separation. *Chemical Communications*, **2015**, 51, 14716-9 5.8 38
- 189 The role of water on postcombustion CO₂ capture by vacuum swing adsorption: Bed layering and purge to feed ratio. *AIChE Journal*, **2014**, 60, 673-689 3.6 38
- 188 Ordered micro-porous carbon molecular sieves containing well-dispersed platinum nanoparticles for hydrogen storage. *Microporous and Mesoporous Materials*, **2009**, 119, 39-46 5.3 38
- 187 Formation and photocatalytic properties of bismuth ferrite submicrocrystals with tunable morphologies. *New Journal of Chemistry*, **2011**, 35, 937 3.6 37
- 186 MOF Scaffold for a High-Performance Mixed-Matrix Membrane. *Angewandte Chemie - International Edition*, **2018**, 57, 8597-8602 16.4 37
- 185 Temperature-regulated guest admission and release in microporous materials. *Nature Communications*, **2017**, 8, 15777 17.4 36
- 184 Remediation of heavy metal contaminated soils by organic acid extraction and electrochemical adsorption. *Environmental Pollution*, **2020**, 264, 114745 9.3 36
- 183 Preparation of Activated Carbons with Large Specific Surface Areas from Biomass Corn cob and Their Adsorption Equilibrium for Methane, Carbon Dioxide, Nitrogen, and Hydrogen. *Industrial & Engineering Chemistry Research*, **2011**, 50, 9286-9294 3.9 36
- 182 Synthesis of Carbonaceous Poly(furfuryl alcohol) Membrane for Water Desalination. *Industrial & Engineering Chemistry Research*, **2010**, 49, 4175-4180 3.9 36
- 181 Infrared and convective drying of thin layer of polyvinyl alcohol (PVA)/glycerol/water mixture—the reaction engineering approach (REA). *Chemical Engineering and Processing: Process Intensification*, **2010**, 49, 348-357 3.7 36
- 180 A metal-ion-assisted assembly approach to synthesize disulfide-bridged periodical mesoporous organosilicas with high sulfide contents and efficient adsorption. *Applied Surface Science*, **2010**, 256, 5334-5342 6.7 36
- 179 Advances in carbon capture, utilization and storage. *Applied Energy*, **2020**, 278, 115627 10.7 36
- 178 Performance of mesoporous silicas (MCM-41 and SBA-15) and carbon (CMK-3) in the removal of gas-phase naphthalene: adsorption capacity, rate and regenerability. *RSC Advances*, **2016**, 6, 21193-21203 3.7 36

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| 177 | Postcombustion Carbon Capture Using Thin-Film Composite Membranes. <i>Accounts of Chemical Research</i> , 2019 , 52, 1905-1914 | 24.3 | 35 |
| 176 | The use of reduced copper metal-organic frameworks to facilitate CuAAC click chemistry. <i>Chemical Communications</i> , 2016 , 52, 12226-12229 | 5.8 | 35 |
| 175 | One-step fabrication of ZIF-8/polymer composite spheres by a phase inversion method for gas adsorption. <i>Colloid and Polymer Science</i> , 2013 , 291, 2711-2717 | 2.4 | 35 |
| 174 | Intermittent Drying of Mango Tissues: Implementation of the Reaction Engineering Approach. <i>Industrial & Engineering Chemistry Research</i> , 2011 , 50, 1089-1098 | 3.9 | 35 |
| 173 | Structured zeolite NaX coatings on ceramic cordierite monolith supports for PSA applications. <i>Microporous and Mesoporous Materials</i> , 2010 , 130, 38-48 | 5.3 | 35 |
| 172 | Fast Finite-Volume Method for PSA/VSA Cycle Simulation Experimental Validation. <i>Industrial & Engineering Chemistry Research</i> , 2001 , 40, 3217-3224 | 3.9 | 35 |
| 171 | High-throughput CO ₂ capture using PIM-1@MOF based thin film composite membranes. <i>Chemical Engineering Journal</i> , 2020 , 396, 125328 | 14.7 | 35 |
| 170 | Multi-objective optimisation of a hybrid vacuum swing adsorption and low-temperature post-combustion CO ₂ capture. <i>Journal of Cleaner Production</i> , 2016 , 111, 193-203 | 10.3 | 34 |
| 169 | Direct synthesis of hierarchical LTA zeolite via a low crystallization and growth rate technique in presence of cetyltrimethylammonium bromide. <i>Journal of Colloid and Interface Science</i> , 2012 , 382, 1-12 | 9.3 | 34 |
| 168 | Synthesis of Ordered Mesoporous Carbon Materials with Semi-Graphitized Walls via Direct In-situ Silica-Confined Thermal Decomposition of CH ₄ and Their Hydrogen Storage Properties. <i>Topics in Catalysis</i> , 2009 , 52, 12-26 | 2.3 | 33 |
| 167 | Zinc/ZnO core-shell hexagonal nanodisk dendrites and their photoluminescence. <i>Acta Materialia</i> , 2007 , 55, 5039-5044 | 8.4 | 33 |
| 166 | Life cycle analysis (LCA) of low emission methanol and di-methyl ether (DME) derived from natural gas. <i>Fuel</i> , 2018 , 220, 871-878 | 7.1 | 32 |
| 165 | High-performance Cu adsorption of birnessite using electrochemically controlled redox reactions. <i>Journal of Hazardous Materials</i> , 2018 , 354, 107-115 | 12.8 | 32 |
| 164 | Adsorption of CO ₂ , N ₂ , and CH ₄ in Cs-exchanged chabazite: a combination of van der Waals density functional theory calculations and experiment study. <i>Journal of Chemical Physics</i> , 2014 , 140, 084705 | 3.9 | 31 |
| 163 | Dual mode roll-up effect in multicomponent non-isothermal adsorption processes with multilayered bed packing. <i>Chemical Engineering Science</i> , 2011 , 66, 1825-1834 | 4.4 | 31 |
| 162 | Mathematical modeling of intermittent and convective drying of rice and coffee using the reaction engineering approach (REA). <i>Journal of Food Engineering</i> , 2011 , 105, 638-646 | 6 | 31 |
| 161 | Enhancing plasticization-resistance of mixed-matrix membranes with exceptionally high CO ₂ /CH ₄ selectivity through incorporating ZSM-25 zeolite. <i>Journal of Membrane Science</i> , 2019 , 583, 23-30 | 9.6 | 30 |
| 160 | Effects of feed gas concentration, temperature and process parameters on vacuum swing adsorption performance for CO ₂ capture. <i>Chemical Engineering Journal</i> , 2015 , 265, 47-57 | 14.7 | 30 |

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| 159 | SiC nanofiber reinforced porous ceramic hollow fiber membranes. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 5841 | 13 | 30 |
| 158 | Modelling the kinetics of lipid extraction from wet microalgal concentrate: A novel perspective on a classical process. <i>Chemical Engineering Journal</i> , 2014 , 242, 234-253 | 14.7 | 29 |
| 157 | Modelling and evaluation of dual reflux pressure swing adsorption cycles: Part II. Productivity and energy consumption. <i>Chemical Engineering Science</i> , 2006 , 61, 7234-7239 | 4.4 | 29 |
| 156 | Sr-LSX zeolite for air separation. <i>Chemical Engineering Journal</i> , 2019 , 362, 482-486 | 14.7 | 29 |
| 155 | An optimal trapdoor zeolite for exclusive admission of CO at industrial carbon capture operating temperatures. <i>Chemical Communications</i> , 2018 , 54, 3134-3137 | 5.8 | 28 |
| 154 | Effect of water vapor from power station flue gas on CO ₂ capture by vacuum swing adsorption with activated carbon. <i>Journal of Fuel Chemistry and Technology</i> , 2011 , 39, 169-174 | 1.8 | 28 |
| 153 | Modeling of Drying of Food Materials with Thickness of Several Centimeters by the Reaction Engineering Approach (REA). <i>Drying Technology</i> , 2011 , 29, 961-973 | 2.6 | 28 |
| 152 | CO ₂ capture using a novel hybrid monolith (H-ZSM5/activated carbon) as adsorbent by combined vacuum and electric swing adsorption (VESA). <i>Chemical Engineering Journal</i> , 2019 , 358, 707-717 | 14.7 | 28 |
| 151 | Impact of operating parameters on CO ₂ capture using carbon monolith by Electrical Swing Adsorption technology (ESA). <i>Chemical Engineering Journal</i> , 2017 , 327, 441-453 | 14.7 | 27 |
| 150 | Improvement of MCDI operation and design through experiment and modelling: Regeneration with brine and optimum residence time. <i>Desalination</i> , 2017 , 417, 36-51 | 10.3 | 26 |
| 149 | Upgrading Biogas at Low Pressure by Vacuum Swing Adsorption. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 404-413 | 3.9 | 26 |
| 148 | A numerical modelling study of SO ₂ adsorption on activated carbons with new rate equations. <i>Chemical Engineering Journal</i> , 2018 , 353, 858-866 | 14.7 | 25 |
| 147 | Zeolite monoliths with hierarchical designed pore network structure: Synthesis and performance. <i>Chemical Engineering Journal</i> , 2013 , 223, 48-58 | 14.7 | 25 |
| 146 | Micro-channel development and hydrogen adsorption properties in templated microporous carbons containing platinum nanoparticles. <i>Carbon</i> , 2011 , 49, 1305-1317 | 10.4 | 25 |
| 145 | One-step fabrication of ordered PtCu alloy nanotube arrays for ethanol electrooxidation. <i>Materials Letters</i> , 2010 , 64, 1169-1172 | 3.3 | 25 |
| 144 | Biogas upgrading through kinetic separation of carbon dioxide and methane over Rb- and Cs-ZK-5 zeolites. <i>RSC Advances</i> , 2014 , 4, 62511-62524 | 3.7 | 24 |
| 143 | Optimal design of engineered gas adsorbents: Pore-scale level. <i>Chemical Engineering Science</i> , 2012 , 69, 270-278 | 4.4 | 24 |
| 142 | The effect of wall porosity and zeolite film thickness on the dynamic behavior of adsorbents in the form of coated monoliths. <i>Separation and Purification Technology</i> , 2011 , 81, 191-199 | 8.3 | 24 |

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|-----|---|------|----|
| 141 | Adsorption of xylene isomers on ordered hexagonal mesoporous FDU-15 polymer and carbon materials. <i>Adsorption</i> , 2009 , 15, 123-132 | 2.6 | 24 |
| 140 | Optimization of synthesis procedures for structured PSA adsorbents. <i>Adsorption</i> , 2008 , 14, 687-693 | 2.6 | 24 |
| 139 | Intensified Biobutanol Recovery by using Zeolites with Complementary Selectivity. <i>ChemSusChem</i> , 2017 , 10, 2968-2977 | 8.3 | 23 |
| 138 | Promoting CO ₂ hydrogenation to methanol by incorporating adsorbents into catalysts: Effects of hydrotalcite. <i>Chemical Engineering Journal</i> , 2019 , 378, 122052 | 14.7 | 23 |
| 137 | Temperature controlled invertible selectivity for adsorption of N ₂ and CH ₄ by molecular trapdoor chabazites. <i>Chemical Communications</i> , 2014 , 50, 4544-6 | 5.8 | 23 |
| 136 | Synthesis of large-pore phenyl-bridged mesoporous organosilica with thick walls by evaporation-induced self-assembly for efficient benzene adsorption. <i>Journal of Colloid and Interface Science</i> , 2010 , 346, 429-35 | 9.3 | 23 |
| 135 | Assessment of ZIF materials for CO ₂ capture from high pressure natural gas streams. <i>Chemical Engineering Journal</i> , 2015 , 280, 486-493 | 14.7 | 22 |
| 134 | A Sustainability Framework for Bioenergy with Carbon Capture and Storage (BECCS) Technologies. <i>Energy Procedia</i> , 2017 , 114, 6044-6056 | 2.3 | 22 |
| 133 | Performance of mesoporous silicas and carbon in adsorptive removal of phenanthrene as a typical gaseous polycyclic aromatic hydrocarbon. <i>Microporous and Mesoporous Materials</i> , 2017 , 239, 9-18 | 5.3 | 22 |
| 132 | Simple, Accurate and Robust Modeling of Various Systems of Drying of Foods and Biomaterials: A Demonstration of the Feasibility of the Reaction Engineering Approach (REA). <i>Drying Technology</i> , 2011 , 29, 1519-1528 | 2.6 | 22 |
| 131 | Synthesis of biomorphic zeolite honeycomb monoliths with 16 000 cells per square inch. <i>Journal of Materials Chemistry</i> , 2009 , 19, 8372 | | 22 |
| 130 | Hydrogen adsorption in transition metal carbon nano-structures. <i>Adsorption</i> , 2008 , 14, 265-274 | 2.6 | 22 |
| 129 | Mass-transfer models for rapid pressure swing adsorption simulation. <i>AIChE Journal</i> , 2006 , 52, 3126-3145 | 5.6 | 22 |
| 128 | Synthesis of a novel hybrid adsorbent which combines activated carbon and zeolite NaUSY for CO ₂ capture by electric swing adsorption (ESA). <i>Chemical Engineering Journal</i> , 2018 , 336, 659-668 | 14.7 | 22 |
| 127 | Practical separation performance evaluation of coal mine methane upgrading with carbon molecular sieves. <i>Chemical Engineering Journal</i> , 2019 , 367, 295-303 | 14.7 | 21 |
| 126 | Li+/ZSM-25 Zeolite as a CO ₂ Capture Adsorbent with High Selectivity and Improved Adsorption Kinetics, Showing CO ₂ -Induced Framework Expansion. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 18933-18941 | 3.8 | 21 |
| 125 | Synthesis of mesoporous LaPO ₄ nanostructures with controllable morphologies. <i>New Journal of Chemistry</i> , 2009 , 33, 1657 | 3.6 | 21 |
| 124 | Application of the reaction engineering approach (REA) to model cyclic drying of thin layers of polyvinyl alcohol (PVA)/glycerol/water mixture. <i>Chemical Engineering Science</i> , 2010 , 65, 5193-5203 | 4.4 | 21 |

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| 123 | Pressure Drop in a Packed Bed under Nonadsorbing and Adsorbing Conditions. <i>Industrial & Engineering Chemistry Research</i> , 2005 , 44, 7234-7241 | 3.9 | 21 |
| 122 | The effect of nitrogen depletion on the cell size, shape, density and gravitational settling of <i>Nannochloropsis salina</i> , <i>Chlorella</i> sp. (marine) and <i>Haematococcus pluvialis</i> . <i>Algal Research</i> , 2019 , 39, 101454 | 5 | 20 |
| 121 | A comparative study on conversion of porous and non-porous metal-organic frameworks (MOFs) into carbon-based composites for carbon dioxide capture. <i>Polyhedron</i> , 2016 , 120, 30-35 | 2.7 | 20 |
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