

Ki-Bong Lee

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.

171
papers

4,112
citations

37
h-index

55
g-index

174
ext. papers

5,051
ext. citations

6.8
avg. IF

6.03
L-index

| # | Paper | IF | Citations |
|-----|---|------|-----------|
| 171 | Sustainability-inspired upcycling of waste polyethylene terephthalate plastic into porous carbon for CO ₂ capture. <i>Green Chemistry</i> , 2022 , | 10 | 8 |
| 170 | Structural changes of hydrotalcite-based Co-containing mixed oxides with calcination temperature and their effects on NO _x adsorption: A combined experimental and DFT study. <i>Chemical Engineering Journal</i> , 2022 , 437, 135209 | 14.7 | 1 |
| 169 | Co-liquefaction of mixed biomass feedstocks for bio-oil production: A critical review. <i>Renewable and Sustainable Energy Reviews</i> , 2022 , 154, 111814 | 16.2 | 5 |
| 168 | Influence of Supports on the Catalytic Activity and Coke Resistance of Ni Catalyst in Dry Reforming of Methane. <i>Catalysts</i> , 2022 , 12, 216 | 4 | 1 |
| 167 | Development of correlations between deasphalted oil yield and Hansen solubility parameters of heavy oil SARA fractions for solvent deasphalting extraction. <i>Journal of Industrial and Engineering Chemistry</i> , 2022 , 107, 456-465 | 6.3 | 1 |
| 166 | One-pot synthesis of novel porous carbon adsorbents derived from poly vinyl chloride for high methane adsorption uptake. <i>Chemical Engineering Journal</i> , 2022 , 440, 135867 | 14.7 | 0 |
| 165 | Diamond in the rough: Polishing waste polyethylene terephthalate into activated carbon for CO capture.. <i>Science of the Total Environment</i> , 2022 , 834, 155262 | 10.2 | 0 |
| 164 | Molecular dynamics simulations of asphaltene aggregation in heavy oil system for the application to solvent deasphalting. <i>Fuel</i> , 2022 , 323, 124171 | 7.1 | 0 |
| 163 | Preparation of copper-loaded porous carbons through hydrothermal carbonization and ZnCl ₂ activation and their application to selective CO adsorption: Experimental and DFT calculation studies. <i>Journal of Hazardous Materials</i> , 2021 , 426, 127816 | 12.8 | 0 |
| 162 | Integration of dry-reforming and sorption-enhanced water gas shift reactions for the efficient production of high-purity hydrogen from anthropogenic greenhouse gases. <i>Journal of Industrial and Engineering Chemistry</i> , 2021 , 105, 563-563 | 6.3 | 2 |
| 161 | Hydrothermal-treatment-based facile one-step preparation of K-promoted NO _x adsorbents derived from hydrotalcite-like compounds. <i>Chemical Engineering Journal</i> , 2021 , 410, 128241 | 14.7 | 2 |
| 160 | Comparison of two adsorbents for simulated-moving-bed separation of galactose and levulinic acid in terms of throughput and desorbent usage. <i>Journal of Industrial and Engineering Chemistry</i> , 2021 , 97, 337-348 | 6.3 | |
| 159 | Effect of the mixing ratio of methylcyclohexane and n-dodecane on the product composition and coke formation in the catalytic decomposition reaction of blended fuels. <i>Journal of Industrial and Engineering Chemistry</i> , 2021 , 98, 389-396 | 6.3 | 1 |
| 158 | Water gas shift and sorption-enhanced water gas shift reactions using hydrothermally synthesized novel CuMgAl hydrotalcite-based catalysts for hydrogen production. <i>Renewable and Sustainable Energy Reviews</i> , 2021 , 145, 111064 | 16.2 | 7 |
| 157 | Controlling the Structural Robustness of Zirconium-Based Metal Organic Frameworks for Efficient Adsorption on Tetracycline Antibiotics. <i>Water (Switzerland)</i> , 2021 , 13, 1869 | 3 | 2 |
| 156 | Facile reactivation of used CaO-based CO ₂ sorbent via physical treatment: Critical relationship between particle size and CO ₂ sorption performance. <i>Chemical Engineering Journal</i> , 2021 , 408, 127234 | 14.7 | 5 |
| 155 | Highly monodisperse sub-nanometer and nanometer Ru particles confined in alkali-exchanged zeolite Y for ammonia decomposition. <i>Applied Catalysis B: Environmental</i> , 2021 , 283, 119627 | 21.8 | 16 |

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| 154 | Optimization of a simulated-moving-bed process for continuous separation of racemic and meso-2,3-butanediol using an efficient optimization tool based on nonlinear standing-wave-design method. <i>Separation and Purification Technology</i> , 2021 , 254, 117597 | 8.3 | 1 |
| 153 | Filter quality factors of fibrous filters with different fiber diameter. <i>Aerosol Science and Technology</i> , 2021 , 55, 154-166 | 3.4 | 3 |
| 152 | Applied Machine Learning for Prediction of CO Adsorption on Biomass Waste-Derived Porous Carbons. <i>Environmental Science & Technology</i> , 2021 , 55, 11925-11936 | 10.3 | 19 |
| 151 | Characterization and Structural Classification of Heteroatom Components of Vacuum-Residue-Derived Asphaltenes Using APPI (+) FT-ICR Mass Spectrometry. <i>Energy & Fuels</i> , 2021 , 35, 13756-13765 | 4.1 | 1 |
| 150 | Mass transfer enhanced CaO pellets for CO ₂ sorption: Utilization of CO ₂ emitted from CaCO ₃ pellets during calcination. <i>Chemical Engineering Journal</i> , 2021 , 421, 129584 | 14.7 | 3 |
| 149 | Preparation of PTFE-glass composite filter with low surface free energy by sandblasting. <i>Surfaces and Interfaces</i> , 2021 , 26, 101381 | 4.1 | 0 |
| 148 | Review on upgrading organic waste to value-added carbon materials for energy and environmental applications. <i>Journal of Environmental Management</i> , 2021 , 296, 113128 | 7.9 | 13 |
| 147 | An efficient process for sustainable and scalable hydrogen production from green ammonia. <i>Renewable and Sustainable Energy Reviews</i> , 2021 , 152, 111562 | 16.2 | 6 |
| 146 | Standing wave design and optimization of a tandem size-exclusion simulated moving bed process for high-throughput recovery of neoagarohexaose from neoagarooligosaccharides. <i>Separation and Purification Technology</i> , 2021 , 276, 119039 | 8.3 | 0 |
| 145 | A review on biomass-derived CO ₂ adsorption capture: Adsorbent, adsorber, adsorption, and advice. <i>Renewable and Sustainable Energy Reviews</i> , 2021 , 152, 111708 | 16.2 | 4 |
| 144 | Developing self-activated lignosulfonate-based porous carbon material for ethylene adsorption. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2020 , 115, 315-320 | 5.3 | 5 |
| 143 | Simple synthesis of spent coffee ground-based microporous carbons using K ₂ CO ₃ as an activation agent and their application to CO ₂ capture. <i>Chemical Engineering Journal</i> , 2020 , 397, 125404 | 14.7 | 39 |
| 142 | Upcycling of waste polyethylene terephthalate plastic bottles into porous carbon for CF adsorption. <i>Environmental Pollution</i> , 2020 , 265, 114868 | 9.3 | 27 |
| 141 | Valorization of waste polyethylene terephthalate plastic into N-doped microporous carbon for CO capture through a one-pot synthesis. <i>Journal of Hazardous Materials</i> , 2020 , 399, 123010 | 12.8 | 26 |
| 140 | Solving two environmental issues simultaneously: Waste polyethylene terephthalate plastic bottle-derived microporous carbons for capturing CO ₂ . <i>Chemical Engineering Journal</i> , 2020 , 397, 125350 | 14.7 | 36 |
| 139 | Introduction of cross-linking agents to enhance the performance and chemical stability of polyethyleneimine-impregnated CO ₂ adsorbents: Effect of different alkyl chain lengths. <i>Chemical Engineering Journal</i> , 2020 , 398, 125531 | 14.7 | 11 |
| 138 | Carbon dioxide capture in biochar produced from pine sawdust and paper mill sludge: Effect of porous structure and surface chemistry. <i>Science of the Total Environment</i> , 2020 , 739, 139845 | 10.2 | 34 |
| 137 | Study of activation mechanism for dual model pore structured carbon based on effects of molecular weight of petroleum pitch. <i>Journal of Industrial and Engineering Chemistry</i> , 2020 , 88, 251-259 | 6.3 | 7 |

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| 136 | CF4 adsorption on porous carbon derived from silicon carbide. <i>Microporous and Mesoporous Materials</i> , 2020 , 306, 110373 | 5.3 | 8 |
| 135 | Prevention of deactivation of HZSM-5 by mixing with NaZSM-5 in catalytic reaction of methylcyclohexane. <i>Catalysis Today</i> , 2020 , 358, 116-121 | 5.3 | 3 |
| 134 | Sustainable gasification biochar as a high efficiency adsorbent for CO2 capture: A facile method to designer biochar fabrication. <i>Renewable and Sustainable Energy Reviews</i> , 2020 , 124, 109785 | 16.2 | 51 |
| 133 | Preparation of HZSM-5 catalysts with different ratios of structure directing agents and their effects on the decomposition of exo-tetrahydrodicyclopentadiene under supercritical conditions and coke formation. <i>Applied Surface Science</i> , 2020 , 511, 145398 | 6.7 | 3 |
| 132 | Simultaneous Removal of CO2 and H2S from Biogas by Blending Amine Absorbents: A Performance Comparison Study. <i>Energy & Fuels</i> , 2020 , 34, 1992-2000 | 4.1 | 14 |
| 131 | Improving the mechanical strength of carbon/carbon composites by oxidative stabilization. <i>Journal of Materials Research and Technology</i> , 2020 , 9, 16513-16521 | 5.5 | 6 |
| 130 | Improving the performances of a simulated-moving-bed process for separation of acetoin and 2,3-butanediol by the use of an adsorbent for minimizing the extent of 2,3-butanediol isomerism. <i>Separation and Purification Technology</i> , 2020 , 248, 116922 | 8.3 | 1 |
| 129 | Comparison of the process performances of a tandem 4-zone SMB and a single-cascade 5-zone SMB for separation of galactose, levulinic acid, and 5-hydroxymethylfurfural in agarose hydrolyzate. <i>Separation and Purification Technology</i> , 2020 , 237, 116357 | 8.3 | 0 |
| 128 | Selective removal of SO2 from coal-fired flue gas by alkaline solvents using a membrane contactor. <i>Chemical Engineering and Processing: Process Intensification</i> , 2020 , 147, 107772 | 3.7 | 9 |
| 127 | Enhanced Carbon Dioxide Decomposition Using Activated SrFeO3. <i>Catalysts</i> , 2020 , 10, 1278 | 4 | 1 |
| 126 | Effects of Sulfuric Acid Treatment on the Performance of Ga-Al2O3 for the Hydrolytic Decomposition of 1,1,1,2-Tetrafluoroethane (HFC-134a). <i>Catalysts</i> , 2020 , 10, 766 | 4 | 2 |
| 125 | Effect of Ba impregnation on Al2O3 catalyst for 1-octene production by 1-octanol dehydration. <i>Fuel</i> , 2020 , 281, 118791 | 7.1 | 4 |
| 124 | Effect of surface properties controlled by Ce addition on CO2 methanation over Ni/Ce/Al2O3 catalyst. <i>International Journal of Hydrogen Energy</i> , 2020 , 45, 24595-24603 | 6.7 | 24 |
| 123 | Gasification biochar from biowaste (food waste and wood waste) for effective CO adsorption. <i>Journal of Hazardous Materials</i> , 2020 , 391, 121147 | 12.8 | 62 |
| 122 | Solving two environmental problems simultaneously: Scalable production of carbon microsheets from structured packing peanuts with tailored microporosity for efficient CO2 capture. <i>Chemical Engineering Journal</i> , 2020 , 379, 122219 | 14.7 | 21 |
| 121 | Production of linear 1-octene via dehydration of 1-octanol over Al2O3 catalyst. <i>Fuel</i> , 2019 , 256, 115957 | 7.1 | 9 |
| 120 | Dependence of the fiber diameter on quality factor of filters fabricated with meta-aramid nanofibers. <i>Separation and Purification Technology</i> , 2019 , 222, 332-341 | 8.3 | 11 |
| 119 | Effect of carbonization temperature on the physical properties and CO2 adsorption behavior of petroleum coke-derived porous carbon. <i>Fuel</i> , 2019 , 248, 85-92 | 7.1 | 35 |

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|-----|---|------|----|
| 118 | Removal of Cu(II) ions from aqueous solutions using petroleum coke-derived microporous carbon: investigation of adsorption equilibrium and kinetics. <i>Adsorption</i> , 2019 , 25, 1205-1218 | 2.6 | 10 |
| 117 | Importance of Exsolution in Transition-Metal (Co, Rh, and Ir)-Doped LaCrO ₃ Perovskite Catalysts for Boosting Dry Reforming of CH ₄ Using CO ₂ for Hydrogen Production. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 6385-6393 | 3.9 | 26 |
| 116 | Effects of pressure-controlled reaction and blending of PFO and FCC-DO for mesophase pitch. <i>Carbon Letters</i> , 2019 , 29, 203-212 | 2.3 | 5 |
| 115 | Introduction of chemically bonded zirconium oxide in CaO-based high-temperature CO ₂ sorbents for enhanced cyclic sorption. <i>Chemical Engineering Journal</i> , 2019 , 355, 850-857 | 14.7 | 38 |
| 114 | Experimental Study on the Selective Removal of SO ₂ from a Ship Exhaust Gas Stream Using a Membrane Contactor. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 14897-14905 | 3.9 | 14 |
| 113 | Correlation verification of process factors and harmful gas adsorption properties for optimization of physical activation parameters of PAN-based carbon fibers. <i>Journal of Industrial and Engineering Chemistry</i> , 2019 , 80, 152-159 | 6.3 | 2 |
| 112 | The first attempt at continuous-mode separation of racemic and meso-2,3-butanediol with high purities using a simulated-moving-bed process. <i>Journal of Industrial and Engineering Chemistry</i> , 2019 , 80, 677-685 | 6.3 | 3 |
| 111 | Impregnation of hydrotalcite with NaNO ₃ for enhanced high-temperature CO ₂ sorption uptake. <i>Chemical Engineering Journal</i> , 2019 , 356, 964-972 | 14.7 | 10 |
| 110 | Pollen-derived porous carbon by KOH activation: Effect of physicochemical structure on CO ₂ adsorption. <i>Journal of CO₂ Utilization</i> , 2019 , 29, 146-155 | 7.6 | 81 |
| 109 | Electrochemical characterization of Raney nickel electrodes prepared by atmospheric plasma spraying for alkaline water electrolysis. <i>Journal of Industrial and Engineering Chemistry</i> , 2019 , 70, 160-168 | 6.3 | 10 |
| 108 | Investigation of Indonesian low rank coals gasification in a fixed bed reactor with K ₂ CO ₃ catalyst loading. <i>Journal of the Energy Institute</i> , 2019 , 92, 904-912 | 5.7 | 5 |
| 107 | Nafion/TiO ₂ nanoparticle decorated thin film composite hollow fiber membrane for efficient removal of SO ₂ gas. <i>Separation and Purification Technology</i> , 2019 , 211, 377-390 | 8.3 | 16 |
| 106 | Fabrication and Operation Characteristics of Electrolyte Impregnated Matrix and Cathode for Molten Carbonate Fuel Cells. <i>International Journal of Precision Engineering and Manufacturing - Green Technology</i> , 2018 , 5, 279-286 | 3.8 | 3 |
| 105 | Synthesis of PVA-g-POEM graft copolymers and their use in highly permeable thin film composite membranes. <i>Chemical Engineering Journal</i> , 2018 , 346, 739-747 | 14.7 | 20 |
| 104 | Selective separation of solvent from deasphalted oil using CO ₂ for heavy oil upgrading process based on solvent deasphalting. <i>Chemical Engineering Journal</i> , 2018 , 331, 389-394 | 14.7 | 15 |
| 103 | Development of a cost-effective CO ₂ adsorbent from petroleum coke via KOH activation. <i>Applied Surface Science</i> , 2018 , 429, 62-71 | 6.7 | 65 |
| 102 | Electrocatalytic effect of NiO nanoparticles evenly distributed on a graphite felt electrode for vanadium redox flow batteries. <i>Electrochimica Acta</i> , 2018 , 278, 226-235 | 6.7 | 46 |
| 101 | Double-Layer Structured CO Adsorbent Functionalized with Modified Polyethyleneimine for High Physical and Chemical Stability. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 21213-21223 | 9.5 | 19 |

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| 100 | Phosphorous recovery from sewage sludge using calcium silicate hydrates. <i>Chemosphere</i> , 2018 , 193, 1087-1093 | 8.4 | 48 |
| 99 | Chemically activated microporous carbons derived from petroleum coke: Performance evaluation for CF ₄ adsorption. <i>Chemical Engineering Journal</i> , 2018 , 336, 297-305 | 14.7 | 34 |
| 98 | Data on the characterization of Raney nickel powder and Raney-nickel-coated electrodes prepared by atmospheric plasma spraying for alkaline water electrolysis. <i>Data in Brief</i> , 2018 , 21, 2059-2062 | 1.2 | 2 |
| 97 | Na ₂ CO ₃ -doped CaO-based high-temperature CO ₂ sorbent and its sorption kinetics. <i>Chemical Engineering Journal</i> , 2018 , 352, 103-109 | 14.7 | 32 |
| 96 | Predictive Guide for Collective CO Adsorption Properties of Mg-Al Mixed Oxides. <i>ChemSusChem</i> , 2017 , 10, 1701-1709 | 8.3 | 8 |
| 95 | Potassium catalyst recovery process and performance evaluation of the recovered catalyst in the K ₂ CO ₃ -catalyzed steam gasification system. <i>Applied Energy</i> , 2017 , 195, 850-860 | 10.7 | 22 |
| 94 | Mechanical strength improvement of aluminum foam-reinforced matrix for molten carbonate fuel cells. <i>International Journal of Hydrogen Energy</i> , 2017 , 42, 16235-16243 | 6.7 | 8 |
| 93 | Enhanced Lithium- and Sodium-Ion Storage in an Interconnected Carbon Network Comprising Electronegative Fluorine. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 18790-18798 | 9.5 | 24 |
| 92 | A titanium carbide-derived novel tetrafluoromethane adsorbent with outstanding adsorption performance. <i>Chemical Engineering Journal</i> , 2017 , 311, 227-235 | 14.7 | 12 |
| 91 | Kinetic study on the nonisothermal pyrolysis of oil sand bitumen and its maltene and asphaltene fractions. <i>Journal of Analytical and Applied Pyrolysis</i> , 2017 , 124, 658-665 | 6 | 20 |
| 90 | Chemical Absorption of Carbon Dioxide Using Aqueous Piperidine Derivatives. <i>Chemical Engineering and Technology</i> , 2017 , 40, 2266-2273 | 2 | 7 |
| 89 | Simultaneous Sodium Hydroxide Production by Membrane Electrolysis and Carbon Dioxide Capture. <i>Chemical Engineering and Technology</i> , 2017 , 40, 2204-2211 | 2 | 4 |
| 88 | Sorption-enhanced water gas shift reaction for high-purity hydrogen production: Application of a Na-Mg double salt-based sorbent and the divided section packing concept. <i>Applied Energy</i> , 2017 , 205, 316-322 | 10.7 | 29 |
| 87 | High-Performance Self-Cross-Linked PGP/PEO Comb Copolymer Membranes for CO ₂ Capture. <i>Macromolecules</i> , 2017 , 50, 8938-8947 | 5.5 | 24 |
| 86 | MgCO ₃ -crystal-containing mixed matrix membranes with enhanced CO ₂ permselectivity. <i>Chemical Engineering Journal</i> , 2017 , 307, 503-512 | 14.7 | 21 |
| 85 | Simplified synthesis of K ₂ CO ₃ -promoted hydrotalcite based on hydroxide-form precursors: Effect of Mg/Al/K ₂ CO ₃ ratio on high-temperature CO ₂ sorption capacity. <i>Korean Journal of Chemical Engineering</i> , 2017 , 34, 1-5 | 2.8 | 71 |
| 84 | Preparation of porous carbons based on polyvinylidene fluoride for CO ₂ adsorption: A combined experimental and computational study. <i>Microporous and Mesoporous Materials</i> , 2016 , 219, 59-65 | 5.3 | 16 |
| 83 | Novel Sorption-Enhanced Methanation with Simultaneous CO ₂ Removal for the Production of Synthetic Natural Gas. <i>Industrial & Engineering Chemistry Research</i> , 2016 , 55, 9244-9255 | 3.9 | 6 |

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|----|--|------|----|
| 82 | CO Capture in the Sustainable Wheat-Derived Activated Microporous Carbon Compartments. <i>Scientific Reports</i> , 2016 , 6, 34590 | 4.9 | 76 |
| 81 | Kinetic analysis using thermogravimetric analysis for nonisothermal pyrolysis of vacuum residue. <i>Journal of Thermal Analysis and Calorimetry</i> , 2016 , 126, 933-941 | 4.1 | 13 |
| 80 | Adsorption behaviors of sugars and sulfuric acid on activated porous carbon. <i>Journal of Industrial and Engineering Chemistry</i> , 2016 , 34, 21-26 | 6.3 | 8 |
| 79 | CO ₂ -philic PBEM-g-POEM comb copolymer membranes: Synthesis, characterization and CO ₂ /N ₂ separation. <i>Journal of Membrane Science</i> , 2016 , 502, 191-201 | 9.6 | 37 |
| 78 | Citrate Sol-Gel Method for the Preparation of Sodium Zirconate for High-Temperature CO ₂ Sorption. <i>Industrial & Engineering Chemistry Research</i> , 2016 , 55, 3833-3839 | 3.9 | 27 |
| 77 | High-Temperature CO ₂ Sorption on Hydrotalcite Having a High Mg/Al Molar Ratio. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 5763-7 | 9.5 | 62 |
| 76 | Effect of Ionic Surfactants on Improving Deasphalting Selectivity in a Nonpolar System. <i>Energy & Fuels</i> , 2016 , 30, 2076-2083 | 4.1 | 9 |
| 75 | Porous carbon based on polyvinylidene fluoride: Enhancement of CO ₂ adsorption by physical activation. <i>Carbon</i> , 2016 , 99, 354-360 | 10.4 | 64 |
| 74 | Solvent recovery in solvent deasphalting process for economical vacuum residue upgrading. <i>Korean Journal of Chemical Engineering</i> , 2016 , 33, 265-270 | 2.8 | 14 |
| 73 | PEDOT-PSS embedded comb copolymer membranes with improved CO ₂ capture. <i>Journal of Membrane Science</i> , 2016 , 518, 21-30 | 9.6 | 14 |
| 72 | Effect of pH-controlled synthesis on the physical properties and intermediate-temperature CO ₂ sorption behaviors of K ⁺ Mg double salt-based sorbents. <i>Chemical Engineering Journal</i> , 2016 , 294, 439-446 | 14.7 | 28 |
| 71 | Secondary Crystal Growth on a Cracked Hydrotalcite-Based Film Synthesized by the Sol-Gel Method. <i>Inorganic Chemistry</i> , 2016 , 55, 4206-10 | 5.1 | 3 |
| 70 | Effect of N-Containing Functional Groups on CO ₂ Adsorption of Carbonaceous Materials: A Density Functional Theory Approach. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 8087-8095 | 3.8 | 67 |
| 69 | Development of rare earth element-doped NiBa(Ce/Zr)O ₃ cermets for hydrogen-permeable membranes. <i>Journal of Industrial and Engineering Chemistry</i> , 2015 , 29, 194-198 | 6.3 | 6 |
| 68 | CF ₄ Adsorption on Microporous Carbons Prepared by Carbonization of Poly(vinylidene fluoride). <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 8561-8568 | 3.9 | 20 |
| 67 | Free-standing, polysilsesquioxane-based inorganic/organic hybrid membranes for gas separations. <i>Journal of Membrane Science</i> , 2015 , 475, 384-394 | 9.6 | 29 |
| 66 | Application of multisection packing concept to sorption-enhanced steam methane reforming reaction for high-purity hydrogen production. <i>Journal of Power Sources</i> , 2015 , 281, 158-163 | 8.9 | 25 |
| 65 | Kinetic Analysis of Secondary Crystal Growth for Hydrotalcite Film Formation. <i>Crystal Growth and Design</i> , 2015 , 15, 884-890 | 3.5 | 7 |

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|----|---|------|----|
| 64 | Development of porous carbon nanofibers from electrospun polyvinylidene fluoride for CO ₂ capture. <i>RSC Advances</i> , 2014 , 4, 58956-58963 | 3.7 | 29 |
| 63 | Solvent-assisted amine modification of graphite oxide for CO ₂ adsorption. <i>RSC Advances</i> , 2014 , 4, 56707-56712 | 3.0 | 10 |
| 62 | Optimal design and experimental validation of a simulated moving bed chromatography for continuous recovery of formic acid in a model mixture of three organic acids from Actinobacillus bacteria fermentation. <i>Journal of Chromatography A</i> , 2014 , 1365, 106-14 | 4.5 | 10 |
| 61 | Physical and rheological properties of deasphalted oil produced from solvent deasphalting. <i>Chemical Engineering Journal</i> , 2014 , 257, 242-247 | 14.7 | 25 |
| 60 | Hydrothermal synthesis of K ₂ CO ₃ -promoted hydrotalcite from hydroxide-form precursors for novel high-temperature CO ₂ sorbent. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 6914-9 | 9.5 | 37 |
| 59 | High-temperature CO ₂ sorption on Na ₂ CO ₃ -impregnated layered double hydroxides. <i>Korean Journal of Chemical Engineering</i> , 2014 , 31, 1668-1673 | 2.8 | 26 |
| 58 | Ash-free coal as fuel for direct carbon fuel cell. <i>Science China Chemistry</i> , 2014 , 57, 1010-1018 | 7.9 | 13 |
| 57 | Application of one-body hybrid solid pellets to sorption-enhanced water gas shift reaction for high-purity hydrogen production. <i>International Journal of Hydrogen Energy</i> , 2014 , 39, 18128-18134 | 6.7 | 17 |
| 56 | Enhancement of Dispersion of Silica Modified with a Silane Coupling Agent in a Rubber Composite. <i>Journal of Chemical Engineering of Japan</i> , 2014 , 47, 159-164 | 0.8 | 4 |
| 55 | Characteristics of NaMg double salt for high-temperature CO ₂ sorption. <i>Chemical Engineering Journal</i> , 2014 , 258, 367-373 | 14.7 | 54 |
| 54 | Separation of solvent and deasphalted oil for solvent deasphalting process. <i>Fuel Processing Technology</i> , 2014 , 119, 204-210 | 7.2 | 29 |
| 53 | Effect of operating parameters on methanation reaction for the production of synthetic natural gas. <i>Korean Journal of Chemical Engineering</i> , 2013 , 30, 1386-1394 | 2.8 | 26 |
| 52 | Sorption-enhanced water gas shift reaction using multi-section column for high-purity hydrogen production. <i>International Journal of Hydrogen Energy</i> , 2013 , 38, 6065-6071 | 6.7 | 21 |
| 51 | Adsorption of Carbon Dioxide on 3-Aminopropyl-Triethoxysilane Modified Graphite Oxide. <i>Energy & Fuels</i> , 2013 , 27, 3358-3363 | 4.1 | 49 |
| 50 | Toluene decomposition by DBD-type plasma combined with metal oxide catalysts supported on ferroelectric materials. <i>Journal of Nanoscience and Nanotechnology</i> , 2013 , 13, 4146-9 | 1.3 | 3 |
| 49 | Poly(vinylbenzyl chloride-glycidyl methacrylate)/Polyethylene Composite Anion Exchange Membranes for Vanadium Redox Battery Application. <i>Bulletin of the Korean Chemical Society</i> , 2013 , 34, 1651-1655 | 1.2 | 1 |
| 48 | Graphene-based flexible NO ₂ chemical sensors. <i>Thin Solid Films</i> , 2012 , 520, 5459-5462 | 2.2 | 63 |
| 47 | Comparison between Ti- and Si-based mesostructures for the removal of phosphorous from aqueous solution. <i>Environmental Progress and Sustainable Energy</i> , 2012 , 31, 100-106 | 2.5 | 4 |

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| 46 | Poly(oxyethylene methacrylate)-poly(4-vinyl pyridine) comb-like polymer electrolytes for solid-state dye-sensitized solar cells. <i>Journal of Solid State Electrochemistry</i> , 2012 , 16, 513-520 | 2.6 | 9 |
| 45 | Graft copolymer templated synthesis of mesoporous MgO/TiO ₂ mixed oxide nanoparticles and their CO ₂ adsorption capacities. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2012 , 414, 75-81 | 5.1 | 38 |
| 44 | Carbon dioxide reforming of methane to synthesis gas over LaNi _{1-x} Cr _x O ₃ perovskite catalysts. <i>Korean Journal of Chemical Engineering</i> , 2012 , 29, 1329-1335 | 2.8 | 7 |
| 43 | Synthesis and gas permeation properties of poly(vinyl chloride)-graft-poly(vinyl pyrrolidone) membranes. <i>Polymers for Advanced Technologies</i> , 2012 , 23, 516-521 | 3.2 | 17 |
| 42 | Adsorption of Phosphate by Amino-Functionalized and Co-condensed SBA-15. <i>Water, Air, and Soil Pollution</i> , 2012 , 223, 2551-2562 | 2.6 | 19 |
| 41 | High-purity hydrogen production through sorption enhanced water gas shift reaction using K ₂ CO ₃ -promoted hydrotalcite. <i>Chemical Engineering Science</i> , 2012 , 73, 431-438 | 4.4 | 79 |
| 40 | Effect of oil shale retorting temperature on shale oil yield and properties. <i>Fuel</i> , 2012 , 95, 131-135 | 7.1 | 99 |
| 39 | Study on the Pyrolysis Kinetics of Deasphalted Oil Using Thermogravimetric Analysis. <i>Korean Chemical Engineering Research</i> , 2012 , 50, 391-397 | | 4 |
| 38 | Composite membranes based on a sulfonated poly(arylene ether sulfone) and proton-conducting hybrid silica particles for high temperature PEMFCs. <i>International Journal of Hydrogen Energy</i> , 2011 , 36, 10891-10900 | 6.7 | 37 |
| 37 | Templated synthesis of mesoporous aluminas by graft copolymer and their CO ₂ adsorption capacities. <i>Journal of Materials Science</i> , 2011 , 46, 4020-4025 | 4.3 | 9 |
| 36 | Investigation of phosphorous removal from wastewater through ion exchange of mesostructure based on inorganic material. <i>Desalination</i> , 2011 , 266, 281-285 | 10.3 | 38 |
| 35 | A new approach for preparation of oil-soluble bimetallic dispersed catalyst from layered ammonium nickel molybdate. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2011 , 176, 606-610 | 3.1 | 19 |
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