

Ki-Bong Lee

List of Publications by Year in descending order

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173
papers

6,079
citations

66250

44
h-index

107981

68
g-index

174
all docs

174
docs citations

174
times ranked

6437
citing authors

#	ARTICLE	IF	CITATIONS
1	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> , 2022, 105, 563-570.	2.9	9
2	Comparison of preparation methods for improving coke resistance of Ni-Ru/MgAl ₂ O ₄ catalysts in dry reforming of methane for syngas production. <i>Energy Sources, Part A: Recovery, Utilization and Environmental Effects</i> , 2022, 44, 10755-10765.	1.2	2
3	Co-liquefaction of mixed biomass feedstocks for bio-oil production: A critical review. <i>Renewable and Sustainable Energy Reviews</i> , 2022, 154, 111814.	8.2	33
4	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> , 2022, 426, 127816.	6.5	15
5	Weldable and Reprocessable Shape Memory Epoxy Vitrimer Enabled by Controlled Formulation for Extrusion-Based 4D Printing Applications. <i>Advanced Engineering Materials</i> , 2022, 24, .	1.6	11
6	Sustainability-inspired upcycling of waste polyethylene terephthalate plastic into porous carbon for CO ₂ capture. <i>Green Chemistry</i> , 2022, 24, 1494-1504.	4.6	51
7	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.	6.6	6
8	Influence of Supports on the Catalytic Activity and Coke Resistance of Ni Catalyst in Dry Reforming of Methane. <i>Catalysts</i> , 2022, 12, 216.	1.6	6
9	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.	2.9	4
10	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.	6.6	9
11	Diamond in the rough: Polishing waste polyethylene terephthalate into activated carbon for CO ₂ capture. <i>Science of the Total Environment</i> , 2022, 834, 155262.	3.9	4
12	Molecular dynamics simulations of asphaltene aggregation in heavy oil system for the application to solvent deasphalting. <i>Fuel</i> , 2022, 323, 124171.	3.4	8
13	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.	6.6	10
14	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.	10.8	67
15	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.	3.9	4
16	Filter quality factors of fibrous filters with different fiber diameter. <i>Aerosol Science and Technology</i> , 2021, 55, 154-166.	1.5	13
17	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.	6.6	8
18	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.	2.9	0

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19	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.	2.9	4
20	Water gas shift and sorption-enhanced water gas shift reactions using hydrothermally synthesized novel Cu-Mg-Al hydrotalcite-based catalysts for hydrogen production. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 145, 111064.	8.2	18
21	Controlling the Structural Robustness of Zirconium-Based Metal Organic Frameworks for Efficient Adsorption on Tetracycline Antibiotics. <i>Water (Switzerland)</i> , 2021, 13, 1869.	1.2	13
22	Applied Machine Learning for Prediction of CO ₂ Adsorption on Biomass Waste-Derived Porous Carbons. <i>Environmental Science & Technology</i> , 2021, 55, 11925-11936.	4.6	132
23	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.	2.5	8
24	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.	6.6	14
25	Preparation of PTFE-glass composite filter with low surface free energy by sandblasting. <i>Surfaces and Interfaces</i> , 2021, 26, 101381.	1.5	5
26	Review on upgrading organic waste to value-added carbon materials for energy and environmental applications. <i>Journal of Environmental Management</i> , 2021, 296, 113128.	3.8	45
27	An efficient process for sustainable and scalable hydrogen production from green ammonia. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 152, 111562.	8.2	38
28	Standing wave design and optimization of a tandem size-exclusion simulated moving bed process for high-throughput recovery of neogaroheptaose from neogaroooligosaccharides. <i>Separation and Purification Technology</i> , 2021, 276, 119039.	3.9	2
29	A review on biomass-derived CO ₂ adsorption capture: Adsorbent, adsorber, adsorption, and advice. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 152, 111708.	8.2	47
30	Gasification biochar from biowaste (food waste and wood waste) for effective CO ₂ adsorption. <i>Journal of Hazardous Materials</i> , 2020, 391, 121147.	6.5	132
31	Solving two environmental problems simultaneously: Scalable production of carbon microsheets from structured packing peanuts with tailored microporosity for efficient CO ₂ capture. <i>Chemical Engineering Journal</i> , 2020, 379, 122219.	6.6	32
32	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.	3.9	5
33	Selective removal of SO ₂ from coal-fired flue gas by alkaline solvents using a membrane contactor. <i>Chemical Engineering and Processing: Process Intensification</i> , 2020, 147, 107772.	1.8	13
34	Enhanced Carbon Dioxide Decomposition Using Activated SrFeO ₃ . <i>Catalysts</i> , 2020, 10, 1278.	1.6	3
35	Effects of Sulfuric Acid Treatment on the Performance of Ga-Al ₂ O ₃ for the Hydrolytic Decomposition of 1,1,1,2-Tetrafluoroethane (HFC-134a). <i>Catalysts</i> , 2020, 10, 766.	1.6	4
36	Effect of Ba impregnation on Al ₂ O ₃ catalyst for 1-octene production by 1-octanol dehydration. <i>Fuel</i> , 2020, 281, 118791.	3.4	10

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37	Effect of surface properties controlled by Ce addition on CO ₂ methanation over Ni/Ce/Al ₂ O ₃ catalyst. International Journal of Hydrogen Energy, 2020, 45, 24595-24603.	3.8	61
38	Developing self-activated lignosulfonate-based porous carbon material for ethylene adsorption. Journal of the Taiwan Institute of Chemical Engineers, 2020, 115, 315-320.	2.7	13
39	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. Chemical Engineering Journal, 2020, 397, 125404.	6.6	103
40	Upcycling of waste polyethylene terephthalate plastic bottles into porous carbon for CF ₄ adsorption. Environmental Pollution, 2020, 265, 114868.	3.7	54
41	Valorization of waste polyethylene terephthalate plastic into N-doped microporous carbon for CO ₂ capture through a one-pot synthesis. Journal of Hazardous Materials, 2020, 399, 123010.	6.5	85
42	Solving two environmental issues simultaneously: Waste polyethylene terephthalate plastic bottle-derived microporous carbons for capturing CO ₂ . Chemical Engineering Journal, 2020, 397, 125350.	6.6	98
43	Introduction of cross-linking agents to enhance the performance and chemical stability of polyethyleneimine-impregnated CO ₂ adsorbents: Effect of different alkyl chain lengths. Chemical Engineering Journal, 2020, 398, 125531.	6.6	21
44	Carbon dioxide capture in biochar produced from pine sawdust and paper mill sludge: Effect of porous structure and surface chemistry. Science of the Total Environment, 2020, 739, 139845.	3.9	91
45	Study of activation mechanism for dual model pore structured carbon based on effects of molecular weight of petroleum pitch. Journal of Industrial and Engineering Chemistry, 2020, 88, 251-259.	2.9	17
46	CF ₄ adsorption on porous carbon derived from silicon carbide. Microporous and Mesoporous Materials, 2020, 306, 110373.	2.2	16
47	Prevention of deactivation of HZSM-5 by mixing with NaZSM-5 in catalytic reaction of methylcyclohexane. Catalysis Today, 2020, 358, 116-121.	2.2	5
48	Sustainable gasification biochar as a high efficiency adsorbent for CO ₂ capture: A facile method to designer biochar fabrication. Renewable and Sustainable Energy Reviews, 2020, 124, 109785.	8.2	107
49	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. Applied Surface Science, 2020, 511, 145398.	3.1	8
50	Simultaneous Removal of CO ₂ and H ₂ S from Biogas by Blending Amine Absorbents: A Performance Comparison Study. Energy & Fuels, 2020, 34, 1992-2000.	2.5	29
51	Improving the mechanical strength of carbon-carbon composites by oxidative stabilization. Journal of Materials Research and Technology, 2020, 9, 16513-16521.	2.6	14
52	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. Separation and Purification Technology, 2020, 248, 116922.	3.9	1
53	Introduction of chemically bonded zirconium oxide in CaO-based high-temperature CO ₂ sorbents for enhanced cyclic sorption. Chemical Engineering Journal, 2019, 355, 850-857.	6.6	80
54	Experimental Study on the Selective Removal of SO ₂ from a Ship Exhaust Gas Stream Using a Membrane Contactor. Industrial & Engineering Chemistry Research, 2019, 58, 14897-14905.	1.8	20

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55	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.	2.9	5
56	Production of linear α -olefin 1-octene via dehydration of 1-octanol over Al ₂ O ₃ catalyst. <i>Fuel</i> , 2019, 256, 115957.	3.4	11
57	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.	3.9	20
58	Effect of carbonization temperature on the physical properties and CO ₂ adsorption behavior of petroleum coke-derived porous carbon. <i>Fuel</i> , 2019, 248, 85-92.	3.4	68
59	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.	1.4	19
60	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.	1.8	41
61	Effects of pressure-controlled reaction and blending of PFO and FCC-DO for mesophase pitch. <i>Carbon Letters</i> , 2019, 29, 203-212.	3.3	13
62	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.	2.9	5
63	Impregnation of hydrotalcite with NaNO ₃ for enhanced high-temperature CO ₂ sorption uptake. <i>Chemical Engineering Journal</i> , 2019, 356, 964-972.	6.6	16
64	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.	3.3	148
65	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.	2.9	20
66	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.	2.7	7
67	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.	3.9	25
68	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.	2.7	3
69	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.	6.6	30
70	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.	6.6	30
71	Development of a cost-effective CO ₂ adsorbent from petroleum coke via KOH activation. <i>Applied Surface Science</i> , 2018, 429, 62-71.	3.1	105
72	Phosphorous recovery from sewage sludge using calcium silicate hydrates. <i>Chemosphere</i> , 2018, 193, 1087-1093.	4.2	77

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73	Chemically activated microporous carbons derived from petroleum coke: Performance evaluation for CF ₄ adsorption. <i>Chemical Engineering Journal</i> , 2018, 336, 297-305.	6.6	54
74	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.	0.5	4
75	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.	6.6	51
76	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.	2.6	71
77	Double-Layer Structured CO ₂ Adsorbent Functionalized with Modified Polyethyleneimine for High Physical and Chemical Stability. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 21213-21223.	4.0	26
78	Predictive Guide for Collective CO ₂ Adsorption Properties of Mg ⁺ Al Mixed Oxides. <i>ChemSusChem</i> , 2017, 10, 1701-1709.	3.6	11
79	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.	5.1	30
80	Mechanical strength improvement of aluminum foam-reinforced matrix for molten carbonate fuel cells. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 16235-16243.	3.8	16
81	Enhanced Lithium- and Sodium-Ion Storage in an Interconnected Carbon Network Comprising Electronegative Fluorine. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 18790-18798.	4.0	38
82	A titanium carbide-derived novel tetrafluoromethane adsorbent with outstanding adsorption performance. <i>Chemical Engineering Journal</i> , 2017, 311, 227-235.	6.6	21
83	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.	2.6	27
84	Chemical Absorption of Carbon Dioxide Using Aqueous Piperidine Derivatives. <i>Chemical Engineering and Technology</i> , 2017, 40, 2266-2273.	0.9	10
85	Simultaneous Sodium Hydroxide Production by Membrane Electrolysis and Carbon Dioxide Capture. <i>Chemical Engineering and Technology</i> , 2017, 40, 2204-2211.	0.9	4
86	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.	5.1	42
87	High-Performance Self-Cross-Linked PGP ⁺ POEM Comb Copolymer Membranes for CO ₂ Capture. <i>Macromolecules</i> , 2017, 50, 8938-8947.	2.2	28
88	MgCO ₃ -crystal-containing mixed matrix membranes with enhanced CO ₂ permselectivity. <i>Chemical Engineering Journal</i> , 2017, 307, 503-512.	6.6	22
89	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.	1.2	82
90	PEDOT-PSS embedded comb copolymer membranes with improved CO ₂ capture. <i>Journal of Membrane Science</i> , 2016, 518, 21-30.	4.1	20

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91	Effect of pH-controlled synthesis on the physical properties and intermediate-temperature CO ₂ sorption behaviors of Mg double salt-based sorbents. <i>Chemical Engineering Journal</i> , 2016, 294, 439-446.	6.6	32
92	Secondary Crystal Growth on a Cracked Hydrotalcite-Based Film Synthesized by the Sol-Gel Method. <i>Inorganic Chemistry</i> , 2016, 55, 4206-4210.	1.9	4
93	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.	1.5	114
94	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.	1.8	7
95	CO ₂ Capture in the Sustainable Wheat-Derived Activated Microporous Carbon Compartments. <i>Scientific Reports</i> , 2016, 6, 34590.	1.6	119
96	Kinetic analysis using thermogravimetric analysis for nonisothermal pyrolysis of vacuum residue. <i>Journal of Thermal Analysis and Calorimetry</i> , 2016, 126, 933-941.	2.0	21
97	Adsorption behaviors of sugars and sulfuric acid on activated porous carbon. <i>Journal of Industrial and Engineering Chemistry</i> , 2016, 34, 21-26.	2.9	10
98	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.	4.1	46
99	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.	1.8	36
100	High-Temperature CO ₂ Sorption on Hydrotalcite Having a High Mg/Al Molar Ratio. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 5763-5767.	4.0	79
101	Effect of Ionic Surfactants on Improving Deasphalting Selectivity in a Nonpolar System. <i>Energy & Fuels</i> , 2016, 30, 2076-2083.	2.5	11
102	Porous carbon based on polyvinylidene fluoride: Enhancement of CO ₂ adsorption by physical activation. <i>Carbon</i> , 2016, 99, 354-360.	5.4	84
103	Solvent recovery in solvent deasphalting process for economical vacuum residue upgrading. <i>Korean Journal of Chemical Engineering</i> , 2016, 33, 265-270.	1.2	18
104	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.	2.2	28
105	Enhanced Oxidation Stability of VO ₂ by Coating SiO ₂ Layer for Smart Window Applications. <i>Nanoscience and Nanotechnology Letters</i> , 2016, 8, 510-513.	0.4	2
106	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.	4.0	27
107	Kinetic Analysis of Secondary Crystal Growth for Hydrotalcite Film Formation. <i>Crystal Growth and Design</i> , 2015, 15, 884-890.	1.4	9
108	Development of rare earth element-doped Ni-Ba(Ce/Zr)O ₃ cermet for hydrogen-permeable membranes. <i>Journal of Industrial and Engineering Chemistry</i> , 2015, 29, 194-198.	2.9	6

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109	CF ₄ Adsorption on Microporous Carbons Prepared by Carbonization of Poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /Over	1.8	26
110	Free-standing, polysilsesquioxane-based inorganic/organic hybrid membranes for gas separations. Journal of Membrane Science, 2015, 475, 384-394.	4.1	37
111	Enhancement of Dispersion of Silica Modified with a Silane Coupling Agent in a Rubber Composite. Journal of Chemical Engineering of Japan, 2014, 47, 159-164.	0.3	5
112	Characteristics of Na ⁺ Mg double salt for high-temperature CO ₂ sorption. Chemical Engineering Journal, 2014, 258, 367-373.	6.6	62
113	Separation of solvent and deasphalted oil for solvent deasphalting process. Fuel Processing Technology, 2014, 119, 204-210.	3.7	41
114	Development of porous carbon nanofibers from electrospun polyvinylidene fluoride for CO ₂ capture. RSC Advances, 2014, 4, 58956-58963.	1.7	45
115	Solvent-assisted amine modification of graphite oxide for CO ₂ adsorption. RSC Advances, 2014, 4, 56707-56712.	1.7	13
116	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. Journal of Chromatography A, 2014, 1365, 106-114.	1.8	12
117	Physical and rheological properties of deasphalted oil produced from solvent deasphalting. Chemical Engineering Journal, 2014, 257, 242-247.	6.6	28
118	Hydrothermal Synthesis of K ₂ CO ₃ -Promoted Hydrotalcite from Hydroxide-Form Precursors for Novel High-Temperature CO ₂ Sorbent. ACS Applied Materials & Interfaces, 2014, 6, 6914-6919.	4.0	46
119	High-temperature CO ₂ sorption on Na ₂ CO ₃ -impregnated layered double hydroxides. Korean Journal of Chemical Engineering, 2014, 31, 1668-1673.	1.2	34
120	Ash-free coal as fuel for direct carbon fuel cell. Science China Chemistry, 2014, 57, 1010-1018.	4.2	13
121	Application of one-body hybrid solid pellets to sorption-enhanced water gas shift reaction for high-purity hydrogen production. International Journal of Hydrogen Energy, 2014, 39, 18128-18134.	3.8	20
122	Effect of operating parameters on methanation reaction for the production of synthetic natural gas. Korean Journal of Chemical Engineering, 2013, 30, 1386-1394.	1.2	29
123	Sorption-enhanced water gas shift reaction using multi-section column for high-purity hydrogen production. International Journal of Hydrogen Energy, 2013, 38, 6065-6071.	3.8	22
124	Adsorption of Carbon Dioxide on 3-Aminopropyl-Triethoxysilane Modified Graphite Oxide. Energy & Fuels, 2013, 27, 3358-3363.	2.5	56
125	Toluene Decomposition by DBD-Type Plasma Combined with Metal Oxide Catalysts Supported on Ferroelectric Materials. Journal of Nanoscience and Nanotechnology, 2013, 13, 4146-4149.	0.9	3
126	Poly(vinylbenzyl chloride-glycidyl methacrylate)/Polyethylene Composite Anion Exchange Membranes for Vanadium Redox Battery Application. Bulletin of the Korean Chemical Society, 2013, 34, 1651-1655.	1.0	1

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127	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.	2.3	45
128	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.	1.2	8
129	Synthesis and gas permeation properties of poly(vinyl chloride)-graft-poly(vinyl pyrrolidone) membranes. <i>Polymers for Advanced Technologies</i> , 2012, 23, 516-521.	1.6	18
130	Adsorption of Phosphate by Amino-Functionalized and Co-condensed SBA-15. <i>Water, Air, and Soil Pollution</i> , 2012, 223, 2551-2562.	1.1	19
131	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.	1.9	87
132	Effect of oil shale retorting temperature on shale oil yield and properties. <i>Fuel</i> , 2012, 95, 131-135.	3.4	118
133	Graphene-based flexible NO ₂ chemical sensors. <i>Thin Solid Films</i> , 2012, 520, 5459-5462.	0.8	72
134	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.	1.3	4
135	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.	1.2	10
136	Study on the Pyrolysis Kinetics of Deasphalted Oil Using Thermogravimetric Analysis. <i>Korean Chemical Engineering Research</i> , 2012, 50, 391-397.	0.2	4
137	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.	3.8	43
138	Templated synthesis of mesoporous aluminas by graft copolymer and their CO ₂ adsorption capacities. <i>Journal of Materials Science</i> , 2011, 46, 4020-4025.	1.7	10
139	Investigation of phosphorous removal from wastewater through ion exchange of mesostructure based on inorganic material. <i>Desalination</i> , 2011, 266, 281-285.	4.0	45
140	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.	1.7	22
141	Improved sorption characteristics of NH ₃ molecules on the solution-processed graphene sheets. <i>Journal of Crystal Growth</i> , 2011, 326, 208-211.	0.7	17
142	Enhancement of thermal conductivity of ethylene glycol based silver nanofluids. <i>Powder Technology</i> , 2011, 208, 7-19.	2.1	158
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