Sang Wook Kang

List of Publications by Year
in descending order

111 papers	1,685 citations	304602 22 h-index	395590 33 g-index
116 all docs	116 docs citations	116 times ranked	1524 citing authors

#	Article	IF	Citations
1	Blocking chemical warfare agent simulants by graphene oxide/polymer multilayer membrane based on hydrogen bonding and size sieving effect. Journal of Hazardous Materials, 2022, 427, 127884.	6.5	5
2	Accelerated CO2 transport on the surface-tuned Ag nanoparticles by p-benzoquinone. Journal of Industrial and Engineering Chemistry, 2022, 106, 311-316.	2.9	8
3	Thermally stable and highly porous separator based on cellulose acetate by glycolic acid. Polymer, 2022, 242, 124592.	1.8	8
4	Synthesis of surface-tuned polyacrylonitrile particles and its application to CO2 separation. Journal of Industrial and Engineering Chemistry, 2022, 109, 155-160.	2.9	2
5	Stable cellulose-separator with CaO on nanoporous polypropylene by water-treated channels. Polymer, 2022, 247, 124781.	1.8	3
6	Cellulose acetate containing CaO coated on polypropylene for enhanced thermal stability of separator. Chemical Communications, 2021, 57, 4388-4391.	2.2	11
7	Processes to enhance the sensitivity of sensor for 2â€nâ€octylâ€4â€isothiazolinâ€3â€one as biocide. AIChE Journal, 2021, 67, e17224.	1.8	0
8	Development of low-cost process for pore generation in cellulose acetate by utilizing calcium salts. Journal of Industrial and Engineering Chemistry, 2021, 94, 419-424.	2.9	11
9	Effective pore control and enhanced strength of cellulose acetate using polyethylene glycol for improved battery stability. Korean Journal of Chemical Engineering, 2021, 38, 1715-1719.	1.2	6
10	Piezoelectric composite of BaTiO3-coated SnO2 microsphere: Li-ion battery anode with enhanced electrochemical performance based on accelerated Li+ mobility. Journal of Alloys and Compounds, 2021, 870, 159267.	2.8	10
11	Preparation of highly stable cellulose separator by incorporation of lactic acid. Cellulose, 2021, 28, 10055-10063.	2.4	15
12	Interconnected channels through polypropylene and cellulose acetate by utilizing lactic acid for stable separators. Chemical Communications, 2021, 57, 8965-8968.	2.2	7
13	Formation of Water-Channel by Propylene Glycol into Polymer for Porous Materials. Membranes, 2021, 11, 881.	1.4	8
14	Eco-friendly process for facile pore control in thermally stable cellulose acetate utilizing zinc(II) nitrate for water-treatment. Journal of Industrial and Engineering Chemistry, 2020, 81, 88-92.	2.9	13
15	Structural Effect of Ionic Liquid on Long-Term Stability in Poly(ethylene oxide)/Ag Ions/Ag Nanoparticles Composite for Olefin Separation. Macromolecular Research, 2020, 28, 445-449.	1.0	4
16	Highly porous and thermally stable cellulose acetate to utilize hydrated glycerin. Journal of Industrial and Engineering Chemistry, 2020, 91, 79-84.	2.9	27
17	Nanocomposite membranes consisting of poly(ethylene oxide)/ionic liquid/ZnO for CO2 separation. Journal of Industrial and Engineering Chemistry, 2020, 85, 75-80.	2.9	20
18	Preparation of a Cellulose Column for Enhancing the Sensing Efficiency of the Biocide 2-n-Octyl-4-Isothiazolin-3-One. Polymers, 2020, 12, 2712.	2.0	2

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19	Preparation and Characterization of PEBAX-5513/AgBF4/BMIMBF4 Membranes for Olefin/Paraffin Separation. Polymers, 2020, 12, 1550.	2.0	7
20	Spray-assisted layer-by-layer self-assembly of tertiary-amine-stabilized gold nanoparticles and graphene oxide for efficient CO2 capture. Journal of Membrane Science, 2020, 601, 117905.	4.1	23
21	Long-Term Stable 1-butyl-3-methylimidazolium Hexafluorophosphate/Ag Metal Composite Membranes for Facilitated Olefin Transport. Membranes, 2020, 10, 191.	1.4	1
22	Facile pore control by NMP-dipping method with water-pressure. Korean Journal of Chemical Engineering, 2020, 37, 2064-2067.	1.2	1
23	Enhanced Olefin Transport by SiO2 Particles for Polymer/Ag Metal/Electron Acceptor Composite Membranes. Polymers, 2020, 12, 2316.	2.0	1
24	CO2 Separation with Polymer/Aniline Composite Membranes. Polymers, 2020, 12, 1363.	2.0	10
25	Correlation between Functional Group and Formation of Nanoparticles in PEBAX/Ag Salt/Al Salt Complexes for Olefin Separation. Polymers, 2020, 12, 667.	2.0	7
26	Structural control of polysulfone membrane by using dimethylacetamide and water-pressure for water treatment. Korean Journal of Chemical Engineering, 2020, 37, 1585-1588.	1.2	1
27	Preparation and characterization of porous cellulose acetate with copper (II) nitrate additives for separator applications. Korean Journal of Chemical Engineering, 2020, 37, 921-924.	1.2	2
28	Effect of Ionic Radius in Metal Nitrate on Pore Generation of Cellulose Acetate in Polymer Nanocomposite. Polymers, 2020, 12, 981.	2.0	8
29	Silver Nanowire Networks: Mechano-Electric Properties and Applications. Materials, 2019, 12, 2526.	1.3	43
30	Effect of functional group ratio in PEBAX copolymer on propylene/propane separation for facilitated olefin transport membranes. Scientific Reports, 2019, 9, 11454.	1.6	8
31	Porous cellulose acetate membranes prepared by water pressure-assisted process for water-treatment. Journal of Industrial and Engineering Chemistry, 2019, 78, 421-424.	2.9	22
32	PEBAX-1657/Ag nanoparticles/7,7,8,8-tetracyanoquinodimethane complex for highly permeable composite membranes with long-term stability. Scientific Reports, 2019, 9, 4266.	1.6	12
33	Enhanced Separation Performance of Stabilized Olefin Transport Membranes with High-Molecular-Weight Poly(ethylene oxide). Macromolecular Research, 2019, 27, 511-514.	1.0	4
34	Poly(ethylene oxide)/Ag ions and nanoparticles/1-hexyl-3-methylimidazolium tetrafluoroborate composite membranes with long-term stability for olefin/paraffin separation. RSC Advances, 2019, 9, 4771-4775.	1.7	5
35	CO2 separation using composites consisting of 1-butyl-3-methylimidazolium tetrafluoroborate/CdO/1-aminopyridinium iodide. Scientific Reports, 2019, 9, 16563.	1.6	4
36	Highly selective poly(ethylene oxide)/ionic liquid electrolyte membranes containing CrO3 for CO2/N2 separation. Chemical Engineering Journal, 2019, 356, 312-317.	6.6	42

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37	Hybrid effect of Ag ions and polarized Ag nanoparticles in poly(ethylene oxide)/AgBF 4 /ionic liquid composites for longâ€term stable membranes. Polymer Composites, 2019, 40, 2745-2750.	2.3	7
38	Enhanced Olefin and CO2 Permeance Through Mesopore-Confined Ionic Liquid Membrane. Macromolecular Research, 2019, 27, 250-254.	1.0	4
39	Enhanced CO 2 transport through rodâ€shaped Al 2 O 3 nanoparticles for ionic liquid composite membranes. Polymer Composites, 2019, 40, 2954-2958.	2.3	3
40	Control of gas permeability by transforming the molecular structure of silk fibroin in multilayered nanocoatings for CO2 adsorptive separation. Journal of Membrane Science, 2019, 573, 554-559.	4.1	11
41	Comparison of functional groups in polymer/Ag nanoparticles/electron acceptor composite membranes for olefin/paraffin separation. Polymer Composites, 2019, 40, 1165-1169.	2.3	3
42	Preparation of PEBAX-5513/Ag Nanoparticles/7,7,8,8-tetracyanoquinodimethane Composites for Olefin Separation and Analysis of Anions. Membrane Journal, 2019, 29, 246-251.	0.2	0
43	Porous Cellulose Acetate by Specific Solvents with Water Pressure Treatment for Applications to Separator and Membranes. Macromolecular Research, 2018, 26, 630-633.	1.0	10
44	Highly permeable PEBAX-1657 membranes to have long-term stability for facilitated olefin transport. Chemical Engineering Journal, 2018, 333, 276-279.	6.6	31
45	Highly permeable and selective CO2 separation membrane to utilize 5-hydroxyisophthalic acid in poly(ethylene oxide) matrix. Chemical Engineering Journal, 2018, 334, 1749-1753.	6.6	26
46	Preparation of Nanoporous Polymer Membranes Utilizing Water Pressure and Solvent Mixtures. Journal of Nanoscience and Nanotechnology, 2018, 18, 7151-7154.	0.9	1
47	CO₂ Separation Membranes Consisting of Ionic Liquid/CdO Composites. Journal of Nanoscience and Nanotechnology, 2018, 18, 5817-5821.	0.9	8
48	Evaluation the separation performance of various gases for polysulfone hollow fiber membrane module as a function of stage cut. Macromolecular Research, 2017, 25, 352-356.	1.0	10
49	Facile control of nanoporosity in Cellulose Acetate using Nickel(II) nitrate additive and water pressure treatment for highly efficient battery gel separators. Scientific Reports, 2017, 7, 1287.	1.6	25
50	Highly CO 2 selective membranes by potassium cations as carriers for facilitated transport with Ag 2 O particles and free ions in ionic liquid. Chemical Engineering Journal, 2017, 320, 29-33.	6.6	12
51	1-Butyl-3-methylimidazolium tetrafluoroborate/zinc oxide composite membrane for high CO 2 separation performance. Chemical Engineering Journal, 2017, 320, 50-54.	6.6	28
52	Highly Permeable Graphene Oxide/Polyelectrolytes Hybrid Thin Films for Enhanced CO2/N2 Separation Performance. Scientific Reports, 2017, 7, 456.	1.6	36
53	Highly permeable ionic liquid 1-butyl-3-methylimidazoliumtetrafluoroborate (BMIMBF₄)/CuO composite membrane for CO₂separation. RSC Advances, 2017, 7, 33568-33571.	1.7	12
54	Effect of Ag 2 O nanoparticles on long-term stable polymer/AgBF 4 /Al(NO 3) 3 complex membranes for olefin/paraffin separation. Chemical Engineering Journal, 2017, 327, 500-504.	6.6	20

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55	Durable poly(vinyl alcohol)/AgBF4/Al(NO3)3 complex membrane with high permeance for propylene/propane separation. Separation and Purification Technology, 2017, 174, 39-43.	3.9	18
56	1-Butyl-3-methylimidazolium tetrafluoroborate/Al2O3 Composite Membrane for CO2 Separation. Membrane Journal, 2017, 27, 226-231.	0.2	5
57	Water treatment by polysulfone membrane modified with tetrahydrofuran and water pressure. Macromolecular Research, 2016, 24, 1020-1023.	1.0	15
58	CO 2 separation through poly(vinylidene fluoride-co-hexafluoropropylene) membrane by selective ion channel formed by tetrafluoroboric acid. Chemical Engineering Journal, 2016, 306, 1189-1192.	6.6	12
59	Effect of 4-hydroxybenzoic acid on CO2 separation performance of poly(ethylene oxide) membrane. Macromolecular Research, 2016, 24, 1111-1114.	1.0	15
60	Highly selective polymer electrolyte membranes consisting of poly(2-ethyl-2-oxazoline) and Cu(NO3)2 for SF6 separation. Scientific Reports, 2016, 6, 20430.	1.6	6
61	Activated Ag ions and enhanced gas transport by incorporation of KIT-6 for facilitated olefin transport membranes. Journal of Membrane Science, 2016, 513, 95-100.	4.1	18
62	1-Methyl-3-octylimidazolium tetrafluoroborate/AgO nanoparticles composite membranes for facilitated gas transport. Korean Journal of Chemical Engineering, 2016, 33, 666-668.	1.2	9
63	Role of LiBF₄ in Ionic Liquid Membranes for Facilitated CO₂ Transport. Journal of Nanoscience and Nanotechnology, 2016, 16, 2832-2835.	0.9	12
64	Pore formation in crystalline polymer film with organic solvent and water-pressure for applications to water-treatment and separator. Chemical Engineering Journal, 2016, 283, 869-872.	6.6	0
65	Control of nanoporous polymer matrix by an ionic liquid and water pressure for applications to water-treatment and separator. Chemical Engineering Journal, 2016, 284, 37-40.	6.6	12
66	Accelerated CO2 transport on surface of AgO nanoparticles in ionic liquid BMIMBF4. Scientific Reports, 2015, 5, 16362.	1.6	18
67	Highly permeable and stabilized olefin transport membranes based on a poly(ethylene oxide) matrix and Al(NO3)3. Journal of Membrane Science, 2015, 474, 273-276.	4.1	24
68	Cost-effective facilitated olefin transport membranes consisting of polymer/AgCF3SO3/Al(NO3)3 with long-term stability. Journal of Membrane Science, 2015, 495, 61-64.	4.1	17
69	Highly permeable ionic liquid membrane by both facilitated transport and the increase of diffusivity through porous materials. RSC Advances, 2015, 5, 69698-69701.	1.7	10
70	The platform effect of graphene oxide on CO2 transport on copper nanocomposites in ionic liquids. Chemical Engineering Journal, 2014, 251, 343-347.	6.6	17
71	Highly permeable poly(ethylene oxide) with silver nanoparticles for facilitated olefin transport. RSC Advances, 2014, 4, 4905.	1.7	12
72	Facilitated CO2 transport and barrier effect through ionic liquid modified with cyanuric chloride. RSC Advances, 2014, 4, 16917.	1.7	12

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73	Olefin separation via charge transfer and dipole formation at the silver nanoparticleâ€“tetracyanoquinoid interface. RSC Advances, 2014, 4, 30156-30161.	1.7	14
74	A strong linear correlation between the surface charge density on Ag nanoparticles and the amount of propylene adsorbed. Journal of Materials Chemistry A, 2014, 2, 6987.	5.2	6
75	Activated copper nanoparticles by 1-butyl-3-methyl imidazolium nitrate for CO2 separation. Chemical Engineering Journal, 2014, 252, 263-266.	6.6	20
76	Surface tuned copper nanoparticles by 1-methyl-3-octylimidazolium tetrafluoroborate and its applications to facilitated CO2 transport. Chemical Engineering Journal, 2014, 235, 252-256.	6.6	16
77	Molecular interactions of polyimides with single-walled carbon nanotubes. Polymer Chemistry, 2013, 4, 290-295.	1.9	12
78	Synthesis of Monodisperse Copper Nanoparticles by Utilizing 1-Butyl-3-methylimidazolium Nitrate and Its Role as Counteranion in Ionic Liquid in the Formation of Nanoparticles. Industrial & Engineering Chemistry Research, 2013, 52, 794-797.	1.8	17
79	Metallic copper incorporated ionic liquids toward maximizing CO2 separation properties. Separation and Purification Technology, 2013, 112, 49-53.	3.9	23
80	Enhanced Electrical Properties of Epoxy Resin with High Adhesion. Industrial & Engineering Chemistry Research, 2013, 52, 15713-15717.	1.8	7
81	Facile synthesis of Cu nanoparticles by utilizing ethanolammonium sulfate for facilitated gas transport. Chemical Engineering Journal, 2013, 228, 642-645.	6.6	2
82	Poly(vinylpyrrolidone)/KF electrolyte membranes for facilitated CO2 transport. Chemical Communications, 2013, 49, 10181.	2.2	65
83	Suppression of silver ion reduction by Al(NO3)3 complex and its application to highly stabilized olefin transport membranes. Journal of Membrane Science, 2013, 445, 156-159.	4.1	28
84	Synthesis of Poly(vinyl chloride)-<i>g</i>-Poly(ionic liquid) and Its Application to Tuning Surface for Copper Nanoparticles. Industrial & Engineering Chemistry Research, 2013, 52, 9607-9611.	1.8	7
85	Insulin release bio-platform from all nano-container assembled thin films. Materials Science and Engineering C, 2012, 32, 1988-1992.	3.8	8
86	Facilitated CO2 transport membranes utilizing positively polarized copper nanoparticles. Chemical Communications, 2012, 48, 5298.	2.2	61
87	Threshold silver concentration for facilitated olefin transport in polymer/silver salt membranes. Journal of Polymer Research, 2012, 19, 1.	1.2	15
88	Poly(oxyethylene methacrylate)â€“poly(4-vinyl pyridine) comb-like polymer electrolytes for solid-state dye-sensitized solar cells. Journal of Solid State Electrochemistry, 2012, 16, 513-520.	1.2	10
89	Nanoassembly of Block Copolymer Micelle and Graphene Oxide to Multilayer Coatings. Industrial & Engineering Chemistry Research, 2011, 50, 3095-3099.	1.8	15
90	Nano-container assembled thin films with time-programmed release of hydrophobic dyes. Journal of Polymer Research, 2011, 18, 2005-2009.	1.2	5

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91	Effect of 1-butyl-3-methylimidazolium nitrate on separation properties of polymer/AgNO3 membranes for propylene/propane mixtures: Comparison between poly(2-ethyl-2-oxazoline) and poly(ethylene) Tj ETQq1 1 0.784314 rgBT /Overlock	1.0	3
92	Synthesis of highly positively polarized silver nanoparticles in poly(ethylene phthalate)/AgBF4 composite. Macromolecular Research, 2011, 19, 413-416.	1.0	2
93	Highly polarized anatase TiO2 nanoparticles by poly(ethylene phthalate). Macromolecular Research, 2011, 19, 948-950.	1.0	2
94	Surface Energyâ€Level Tuning of Silver Nanoparticles for Facilitated Olefin Transport. Angewandte Chemie - International Edition, 2011, 50, 2982-2985.	7.2	50
95	Effect of ionic liquids on dissociation of copper flake into copper nanoparticles and its application to facilitated olefin transport membranes. Journal of Membrane Science, 2011, 374, 43-48.	4.1	24
96	Silver nanoparticles stabilized by crosslinked poly(vinyl pyrrolidone) and its application for facilitated olefin transport. Journal of Colloid and Interface Science, 2011, 353, 83-86.	5.0	24
97	Role of p-benzoquinone for dispersion of silver nanoparticles in silver-polymer nanocomposite membranes. Macromolecular Research, 2010, 18, 705-708.	1.0	5
98	Surface modification of silica nanoparticles with hydrophilic polymers. Journal of Industrial and Engineering Chemistry, 2010, 16, 517-522.	2.9	106
99	Effect of coordination number on the formation of silver nanoparticles in polymer/silver salt complex membranes. Journal of Industrial and Engineering Chemistry, 2010, 16, 896-900.	2.9	1
100	Facile fabrication of colloidal particles based on the electrostatic aggregation of block copolymer micelles. Chemical Engineering Journal, 2010, 165, 354-357.	6.6	4
101	Enhanced olefin carrier activity of clean surface silver nanoparticles for facilitated transport membranes. Journal of Membrane Science, 2009, 332, 1-5.	4.1	25
102	Behavior of Inorganic Nanoparticles in Silver Polymer Electrolytes and Their Effects on Silver Ion Activity for Facilitated Olefin Transport. Industrial & Engineering Chemistry Research, 2009, 48, 8650-8654.	1.8	11
103	Effect of the polarity of silver nanoparticles induced by ionic liquids on facilitated transport for the separation of propylene/propane mixtures. Journal of Membrane Science, 2008, 322, 281-285.	4.1	62
104	Novel Application of Partially Positively Charged Silver Nanoparticles for Facilitated Transport in Olefin/Paraffin Separation Membranes. Chemistry of Materials, 2008, 20, 1308-1311.	3.2	89
105	Polarized Silver Nanoparticles by Ionic Liquid and Its Application to Facilitated Olefin Transport Membranes. Materials Research Society Symposia Proceedings, 2007, 1006, 12.	0.1	0
106	Propylene sorption and coordinative interactions for poly(<i>N</i>â€vinyl pyrrolidoneâ€<i>co</i>â€vinyl) Tj ETQq0 0 0 rgBT /Overlock 1 2263-2269.	2.4	10
107	Ionic liquid as a solvent and the long-term separation performance in a polymer/silver salt complex membrane. Macromolecular Research, 2007, 15, 167-172.	1.0	26
108	Novel composite membranes comprising silver salts physically dispersed in poly(ethylene-co-propylene) for the separation of propylene/propane. Macromolecular Research, 2007, 15, 343-347.	1.0	10

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109	Chemical Activation of AgNO3to Form Olefin Complexes Induced by Strong Coordinative Interactions with Phthalate Oxygens of Poly(ethylene phthalate). Industrial & Engineering Chemistry Research, 2006, 45, 4011-4014.	1.8	13
110	Complexation of phthalate oxygens in poly(ethylene phthalate) with silver ions and its effect on the formation of silver nanoparticles. Journal of Polymer Science, Part B: Polymer Physics, 2004, 42, 3344-3350.	2.4	11
111	Enhancement of facilitated olefin transport by amino acid in silverâ€"polymer complex membranes. Chemical Communications, 2003, , 768-769.	2.2	11