Sang Wook Kang

List of Publications by Year
in descending order

111	1,685	304602	395590
papers	citations	22 h-index	33 g-index

116	116	116	1524
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Surface modification of silica nanoparticles with hydrophilic polymers. Journal of Industrial and Engineering Chemistry, 2010, 16, 517-522.	2.9	106
2	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
3	Poly(vinylpyrrolidone)/KF electrolyte membranes for facilitated CO2 transport. Chemical Communications, 2013, 49, 10181.	2.2	65
4	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
5	Facilitated CO2 transport membranes utilizing positively polarized copper nanoparticles. Chemical Communications, 2012, 48, 5298.	2.2	61
6	Surface Energyâ€Ł evel Tuning of Silver Nanoparticles for Facilitated Olefin Transport. Angewandte Chemie - International Edition, 2011, 50, 2982-2985.	7.2	50
7	Silver Nanowire Networks: Mechano-Electric Properties and Applications. Materials, 2019, 12, 2526.	1.3	43
8	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
9	Highly Permeable Graphene Oxide/Polyelectrolytes Hybrid Thin Films for Enhanced CO2/N2 Separation Performance. Scientific Reports, 2017, 7, 456.	1.6	36
10	Highly permeable PEBAX-1657 membranes to have long-term stability for facilitated olefin transport. Chemical Engineering Journal, 2018, 333, 276-279.	6.6	31
11	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
12	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
13	Highly porous and thermally stable cellulose acetate to utilize hydrated glycerin. Journal of Industrial and Engineering Chemistry, 2020, 91, 79-84.	2.9	27
14	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
15	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
16	Enhanced olefin carrier activity of clean surface silver nanoparticles for facilitated transport membranes. Journal of Membrane Science, 2009, 332, 1-5.	4.1	25
17	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
18	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

#	Article	IF	Citations
19	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
20	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
21	Metallic copper incorporated ionic liquids toward maximizing CO2 separation properties. Separation and Purification Technology, 2013, 112, 49-53.	3.9	23
22	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
23	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
24	Activated copper nanoparticles by 1-butyl-3-methyl imidazolium nitrate for CO2 separation. Chemical Engineering Journal, 2014, 252, 263-266.	6.6	20
25	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
26	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
27	Accelerated CO2 transport on surface of AgO nanoparticles in ionic liquid BMIMBF4. Scientific Reports, 2015, 5, 16362.	1.6	18
28	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
29	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
30	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
31	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
32	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
33	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
34	Nanoassembly of Block Copolymer Micelle and Graphene Oxide to Multilayer Coatings. Industrial & Engineering Chemistry Research, 2011, 50, 3095-3099.	1.8	15
35	Threshold silver concentration for facilitated olefin transport in polymer/silver salt membranes. Journal of Polymer Research, 2012, 19, 1.	1.2	15
36	Water treatment by polysulfone membrane modified with tetrahydrofuran and water pressure. Macromolecular Research, 2016, 24, 1020-1023.	1.0	15

#	Article	IF	Citations
37	Effect of 4-hydroxybenzoic acid on CO2 separation performance of poly(ethylene oxide) membrane. Macromolecular Research, 2016, 24, 1111-1114.	1.0	15
38	Preparation of highly stable cellulose separator by incorporation of lactic acid. Cellulose, 2021, 28, 10055-10063.	2.4	15
39	Olefin separation via charge transfer and dipole formation at the silver nanoparticleâ€“tetracyanoquinoid interface. RSC Advances, 2014, 4, 30156-30161.	1.7	14
40	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
41	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
42	Molecular interactions of polyimides with single-walled carbon nanotubes. Polymer Chemistry, 2013, 4, 290-295.	1.9	12
43	Highly permeable poly(ethylene oxide) with silver nanoparticles for facilitated olefin transport. RSC Advances, 2014, 4, 4905.	1.7	12
44	Facilitated CO2 transport and barrier effect through ionic liquid modified with cyanuric chloride. RSC Advances, 2014, 4, 16917.	1.7	12
45	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
46	Role of LiBF₄ in Ionic Liquid Membranes for Facilitated CO₂ Transport. Journal of Nanoscience and Nanotechnology, 2016, 16, 2832-2835.	0.9	12
47	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
48	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
49	Highly permeable ionic liquid 1-butyl-3-methylimidazoliumtetrafluoroborate (BMIMBF₄)/CuO composite membrane for CO₂separation. RSC Advances, 2017, 7, 33568-33571.	1.7	12
50	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
51	Enhancement of facilitated olefin transport by amino acid in silverâ€“polymer complex membranes. Chemical Communications, 2003, , 768-769.	2.2	11
52	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
53	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
54	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

#	Article	IF	Citations
55	Cellulose acetate containing CaO coated on polypropylene for enhanced thermal stability of separator. Chemical Communications, 2021, 57, 4388-4391.	2.2	11
56	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
57	Propylene sorption and coordinative interactions for poly(Nâ€vinyl pyrrolidoneâ€coâ€vinyl) Tj ETQq1 1 0.784314 rgBT /O 2263-2269.	2.4	10
58	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
59	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
60	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
61	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
62	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
63	CO2 Separation with Polymer/Aniline Composite Membranes. Polymers, 2020, 12, 1363.	2.0	10
64	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
65	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
66	Insulin release bio-platform from all nano-container assembled thin films. Materials Science and Engineering C, 2012, 32, 1988-1992.	3.8	8
67	CO₂ Separation Membranes Consisting of Ionic Liquid/CdO Composites. Journal of Nanoscience and Nanotechnology, 2018, 18, 5817-5821.	0.9	8
68	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
69	Effect of Ionic Radius in Metal Nitrate on Pore Generation of Cellulose Acetate in Polymer Nanocomposite. Polymers, 2020, 12, 981.	2.0	8
70	Formation of Water-Channel by Propylene Glycol into Polymer for Porous Materials. Membranes, 2021, 11, 881.	1.4	8
71	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
72	Thermally stable and highly porous separator based on cellulose acetate by glycolic acid. Polymer, 2022, 242, 124592.	1.8	8

#	Article	IF	Citations
73	Enhanced Electrical Properties of Epoxy Resin with High Adhesion. Industrial & Engineering Chemistry Research, 2013, 52, 15713-15717.	1.8	7
74	Synthesis of Poly(vinyl chloride)-g-Poly(ionic liquid) and Its Application to Tuning Surface for Copper Nanoparticles. Industrial & Engineering Chemistry Research, 2013, 52, 9607-9611.	1.8	7
75	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
76	Preparation and Characterization of PEBAX-5513/AgBF4/BMIMBF4 Membranes for Olefin/Paraffin Separation. Polymers, 2020, 12, 1550.	2.0	7
77	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
78	Interconnected channels through polypropylene and cellulose acetate by utilizing lactic acid for stable separators. Chemical Communications, 2021, 57, 8965-8968.	2.2	7
79	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
80	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
81	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
82	Role of p-benzoquinone for dispersion of silver nanoparticles in silver-polymer nanocomposite membranes. Macromolecular Research, 2010, 18, 705-708.	1.0	5
83	Nano-container assembled thin films with time-programmed release of hydrophobic dyes. Journal of Polymer Research, 2011, 18, 2005-2009.	1.2	5
84	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
85	1-Butyl-3-methylimidazolium tetrafluoroborate/Al2O3 Composite Membrane for CO2 Separation. Membrane Journal, 2017, 27, 226-231.	0.2	5
86	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
87	Facile fabrication of colloidal particles based on the electrostatic aggregation of block copolymer micelles. Chemical Engineering Journal, 2010, 165, 354-357.	6.6	4
88	Enhanced Separation Performance of Stabilized Olefin Transport Membranes with High-Molecular-Weight Poly(ethylene oxide). Macromolecular Research, 2019, 27, 511-514.	1.0	4
89	CO2 separation using composites consisting of 1-butyl-3-methylimidazolium tetrafluoroborate/CdO/1-aminopyridinium iodide. Scientific Reports, 2019, 9, 16563.	1.6	4
90	Enhanced Olefin and CO2 Permeance Through Mesopore-Confined Ionic Liquid Membrane. Macromolecular Research, 2019, 27, 250-254.	1.0	4

#	Article	IF	Citations
91	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
92	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 ETQq0 0 0 rgBT /Overlock 10 Tf 50	3.1	3
93	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
94	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
95	Stable cellulose-separator with CaO on nanoporous polypropylene by water-treated channels. Polymer, 2022, 247, 124781.	1.8	3
96	Synthesis of highly positively polarized silver nanoparticles in poly(ethylene phthalate)/AgBF4 composite. Macromolecular Research, 2011, 19, 413-416.	1.0	2
97	Highly polarized anatase TiO2 nanoparticles by poly(ethylene phthalate). Macromolecular Research, 2011, 19, 948-950.	1.0	2
98	Facile synthesis of Cu nanoparticles by utilizing ethanolammonium sulfate for facilitated gas transport. Chemical Engineering Journal, 2013, 228, 642-645.	6.6	2
99	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
100	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
101	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
102	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
103	Preparation of Nanoporous Polymer Membranes Utilizing Water Pressure and Solvent Mixtures. Journal of Nanoscience and Nanotechnology, 2018, 18, 7151-7154.	0.9	1
104	Long-Term Stable 1-butyl-3-methylimidazolium Hexafluorophosphate/Ag Metal Composite Membranes for Facilitated Olefin Transport. Membranes, 2020, 10, 191.	1.4	1
105	Facile pore control by NMP-dipping method with water-pressure. Korean Journal of Chemical Engineering, 2020, 37, 2064-2067.	1.2	1
106	Enhanced Olefin Transport by SiO2 Particles for Polymer/Ag Metal/Electron Acceptor Composite Membranes. Polymers, 2020, 12, 2316.	2.0	1
107	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
108	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

#	Article	IF	Citations
109	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
110	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
111	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