Yong Soo Kang

List of Publications by Year
in descending order

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215 papers	13,184 citations	20759 60 h-index	26548 107 g-index
220 all docs	220 docs citations	220 times ranked	15843 citing authors

#	Article	IF	Citations
1	Synthesis of Graphene and Its Applications: A Review. Critical Reviews in Solid State and Materials Sciences, 2010, 35, 52-71.	6.8	1,443
2	Photoinduced Giant Dielectric Constant in Lead Halide Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2014, 5, 2390-2394.	2.1	629
3	Slow Dynamic Processes in Lead Halide Perovskite Solar Cells. Characteristic Times and Hysteresis. Journal of Physical Chemistry Letters, 2014, 5, 2357-2363.	2.1	609
4	Interfacial Degradation of Planar Lead Halide Perovskite Solar Cells. ACS Nano, 2016, 10, 218-224.	7.3	427
5	Properties of Contact and Bulk Impedances in Hybrid Lead Halide Perovskite Solar Cells Including Inductive Loop Elements. Journal of Physical Chemistry C, 2016, 120, 8023-8032.	1.5	407
6	Synthesis and characterization of sulfonated polyimide membranes for direct methanol fuel cell. Journal of Membrane Science, 2003, 220, 31-45.	4.1	294
7	Zeolite-filled polyimide membrane containing 2,4,6-triaminopyrimidine. Journal of Membrane Science, 2001, 188, 151-163.	4.1	238
8	Dye-sensitized nanocrystalline solar cells based on composite polymer electrolytes containing fumed silica nanoparticles. Chemical Communications, 2004, , 1662.	2.2	202
9	Membrane formation by water vapor induced phase inversion. Journal of Membrane Science, 1999, 156, 169-178.	4.1	190
10	Amplifying Chargeâ€Transfer Characteristics of Graphene for Triiodide Reduction in Dyeâ€Sensitized Solar Cells. Advanced Functional Materials, 2011, 21, 3729-3736.	7.8	181
11	Micropatterning of semicrystalline poly(vinylidene fluoride) (PVDF) solutions. European Polymer Journal, 2005, 41, 1002-1012.	2.6	169
12	Influence of the addition of PVP on the morphology of asymmetric polyimide phase inversion membranes: effect of PVP molecular weight. Journal of Membrane Science, 2004, 236, 203-207.	4.1	160
13	Highly efficient and stable dye-sensitized solar cells based on SnO₂nanocrystals prepared by microwave-assisted synthesis. Energy and Environmental Science, 2012, 5, 5392-5400.	15.6	154
14	Fixation of Nanosized Proton Transport Channels in Membranesâ€. Macromolecules, 2003, 36, 3228-3234.	2.2	141
15	Exploring Interfacial Events in Gold-Nanocluster-Sensitized Solar Cells: Insights into the Effects of the Cluster Size and Electrolyte on Solar Cell Performance. Journal of the American Chemical Society, 2016, 138, 390-401.	6.6	137
16	Highly charged proton exchange membranes prepared by using water soluble polymer blends for fuel cells. Journal of Membrane Science, 2005, 247, 127-135.	4.1	135
17	Synergistic Catalytic Effect of a Composite (CoS/PEDOT:PSS) Counter Electrode on Triiodide Reduction in Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2011, 3, 1838-1843.	4.0	135
18	Dye-sensitized solar cells based on composite solid polymer electrolytes. Chemical Communications, 2005, , 889.	2.2	129

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19	Synthesis of graphene-CoS electro-catalytic electrodes for dye sensitized solar cells. Carbon, 2012, 50, 4815-4821.	5.4	127
20	Structural characterization and gas-transport properties of brominated matrimid polyimide. Journal of Polymer Science Part A, 2002, 40, 4193-4204.	2.5	126
21	Nitrogen and sulfur co-doped graphene counter electrodes with synergistically enhanced performance for dye-sensitized solar cells. Journal of Materials Chemistry A, 2014, 2, 12232-12239.	5.2	125
22	Ultraâ€High Proton/Vanadium Selectivity for Hydrophobic Polymer Membranes with Intrinsic Nanopores for Redox Flow Battery. Advanced Energy Materials, 2016, 6, 1600517.	10.2	123
23	Effects of compositions on properties of PEOâ€“KIâ€“I2 salts polymer electrolytes for DSSC. Solid State Ionics, 2006, 177, 1091-1097.	1.3	116
24	Spectroscopic Interpretation of Silver Ion Complexation with Propylene in Silver Polymer Electrolytes. Journal of Physical Chemistry B, 2002, 106, 2786-2790.	1.2	107
25	Structural characterization and surface modification of sulfonated polystyreneâ€“(ethyleneâ€“butylene)â€“styrene triblock proton exchange membranes. Journal of Membrane Science, 2003, 214, 245-257.	4.1	105
26	Oligomer Approaches for Solid-State Dye-Sensitized Solar Cells Employing Polymer Electrolytes. Journal of Physical Chemistry C, 2007, 111, 5222-5228.	1.5	104
27	The performance of coupled (CdS:CdSe) quantum dot-sensitized TiO2 nanofibrous solar cells. Electrochemistry Communications, 2009, 11, 2220-2224.	2.3	103
28	Effect of HNO3 functionalization on large scale graphene for enhanced tri-iodide reduction in dye-sensitized solar cells. Journal of Materials Chemistry, 2012, 22, 20490.	6.7	103
29	Quantum Dot Based Heterostructures for Unassisted Photoelectrochemical Hydrogen Generation. Advanced Energy Materials, 2013, 3, 176-182.	10.2	101
30	Fabrication of SrTiO3â€“TiO2 heterojunction photoanode with enlarged pore diameter for dye-sensitized solar cells. Journal of Materials Chemistry A, 2013, 1, 11820.	5.2	100
31	Synergistic Metalâ€“Metal Oxide Nanoparticles Supported Electrocatalytic Graphene for Improved Photoelectrochemical Glucose Oxidation. ACS Applied Materials & Interfaces, 2014, 6, 4864-4871.	4.0	100
32	Interaction with Olefins of the Partially Polarized Surface of Silver Nanoparticles Activated byp-Benzoquinone and Its Implications for Facilitated Olefin Transport. Advanced Materials, 2007, 19, 475-479.	11.1	93
33	Phase behavior and mechanism of membrane formation for polyimide/DMSO/water system. Journal of Membrane Science, 2001, 187, 47-55.	4.1	91
34	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
35	Role of Polymer Matrix in Polymer/Silver Complexes for Structure, Interactions, and Facilitated Olefin Transport. Macromolecules, 2003, 36, 6183-6188.	2.2	87
36	Effects of silica nanoparticle and GPTMS addition on TEOS-based stone consolidants. Journal of Cultural Heritage, 2009, 10, 214-221.	1.5	87

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37	Solution properties of poly(amic acid)â€“NMP containing LiCl and their effects on membrane morphologies. Journal of Membrane Science, 2002, 196, 267-277.	4.1	84
38	Doping of donor-acceptor polymers with long side chains via solution mixing for advancing thermoelectric properties. Nano Energy, 2019, 58, 585-595.	8.2	83
39	Factors affecting the performance of supercapacitors assembled with polypyrrole/multi-walled carbon nanotube composite electrodes. Electrochimica Acta, 2012, 78, 649-655.	2.6	82
40	New Insights into the Coordination Mode of Silver Ions Dissolved in Poly(2-ethyl-2-oxazoline) and Its Relation to Facilitated Olefin Transportâ€. Macromolecules, 2002, 35, 5250-5255.	2.2	79
41	Exploring Graphene Quantum Dots/TiO2 interface in photoelectrochemical reactions: Solar to fuel conversion. Electrochimica Acta, 2016, 187, 249-255.	2.6	79
42	Facilitated transport of ethylene across polymer membranes containing silver salt: effect of HBF4 on the photoreduction of silver ions. Journal of Membrane Science, 2003, 212, 283-288.	4.1	78
43	Graphene synthesis and application for solar cells. Journal of Materials Research, 2014, 29, 299-319.	1.2	77
44	Polymer Electrolyte Membranes Containing Silver Ion for Facilitated Olefin Transport. Macromolecules, 2000, 33, 3185-3186.	2.2	73
45	Band gap engineering in PbS nanostructured thin films from near-infrared down to visible range by in situ Cd-doping. Journal of Alloys and Compounds, 2010, 495, 234-237.	2.8	72
46	Nanocomposite Coatings on Biomedical Grade Stainless Steel for Improved Corrosion Resistance and Biocompatibility. ACS Applied Materials & Interfaces, 2012, 4, 5134-5141.	4.0	72
47	Hg2+-selective fluoroionophoric behavior of pyrene appended diazatetrathia-crown ether. Tetrahedron Letters, 2006, 47, 497-500.	0.7	71
48	High Open Circuit Voltage Quantum Dot Sensitized Solar Cells Manufactured with ZnO Nanowire Arrays and Si/ZnO Branched Hierarchical Structures. Journal of Physical Chemistry Letters, 2011, 2, 1984-1990.	2.1	71
49	Coordination structure of various ligands in crosslinked PVA to silver ions for facilitated olefin transport. Chemical Communications, 2002, , 2732-2733.	2.2	69
50	Self-assembled CdS quantum dots-sensitized TiO2 nanospheroidal solar cells: Structural and charge transport analysis. Electrochimica Acta, 2009, 55, 113-117.	2.6	69
51	Phase separation of polymer casting solution by nonsolvent vapor. Journal of Membrane Science, 2004, 245, 103-112.	4.1	68
52	Toward Higher Energy Conversion Efficiency for Solid Polymer Electrolyte Dye-Sensitized Solar Cells: Ionic Conductivity and TiO₂ Pore-Filling. Journal of Physical Chemistry Letters, 2014, 5, 1249-1258.	2.1	68
53	Title is missing!. Macromolecular Rapid Communications, 2002, 23, 753-756.	2.0	67
54	Poly(vinylpyrrolidone)/KF electrolyte membranes for facilitated CO2 transport. Chemical Communications, 2013, 49, 10181.	2.2	65

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55	Efficient Light Harvesting with Micropatterned 3D Pyramidal Photoanodes in Dyeâ€Sensitized Solar Cells. Advanced Materials, 2013, 25, 3111-3116.	11.1	65
56	Synthesis, structure and gas permeation of polymerized ionic liquid graft copolymer membranes. Journal of Membrane Science, 2013, 443, 54-61.	4.1	65
57	Complexation Mechanism of Olefin with Silver Ions Dissolved in a Polymer Matrix and its Effect on Facilitated Olefin Transport. Chemistry - A European Journal, 2002, 8, 650-654.	1.7	64
58	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
59	Role of Transient Cross-Links for Transport Properties in Silverâ^'Polymer Electrolytes. Macromolecules, 2001, 34, 6052-6055.	2.2	61
60	Facilitated CO2 transport membranes utilizing positively polarized copper nanoparticles. Chemical Communications, 2012, 48, 5298.	2.2	61
61	Facilitated Olefin Transport by Reversible Olefin Coordination to Silver Ions in a Dry Cellulose Acetate Membrane. Chemistry - A European Journal, 2001, 7, 1525-1529.	1.7	60
62	Robust mesocellular carbon foam counter electrode for quantum-dot sensitized solar cells. Electrochemistry Communications, 2011, 13, 34-37.	2.3	60
63	Revelation of Facilitated Olefin Transport through Silver-Polymer Complex Membranes Using Anion Complexation. Macromolecules, 2003, 36, 4577-4581.	2.2	59
64	Anatase TiO2 spheres with high surface area and mesoporous structure via a hydrothermal process for dye-sensitized solar cells. Electrochimica Acta, 2010, 55, 4637-4641.	2.6	59
65	A PEDOT-reinforced exfoliated graphite composite as a Pt- and TCO-free flexible counter electrode for polymer electrolyte dye-sensitized solar cells. Journal of Materials Chemistry A, 2013, 1, 1048-1054.	5.2	59
66	CO2 separation membranes using ionic liquids in a Nafion matrix. Journal of Membrane Science, 2010, 363, 72-79.	4.1	58
67	Facile synthesis of highly branched jacks-like ZnO nanorods and their applications in dye-sensitized solar cells. Materials Research Bulletin, 2011, 46, 1473-1479.	2.7	58
68	Highly stabilized silver polymer electrolytes and their application to facilitated olefin transport membranes. Journal of Membrane Science, 2004, 236, 163-169.	4.1	57
69	Olefin-induced dissolution of silver salts physically dispersed in inert polymers and their application to olefin/paraffin separation. Journal of Membrane Science, 2004, 241, 403-407.	4.1	56
70	Dye-sensitized solar cells based on crosslinked poly(ethylene glycol) electrolytes. Journal of Photochemistry and Photobiology A: Chemistry, 2006, 183, 15-21.	2.0	56
71	Effects of a surfactant-templated nanoporous TiO2 interlayer on dye-sensitized solar cells. Journal of Applied Physics, 2007, 101, 084312.	1.1	56
72	Chemical Effects of Tin Oxide Nanoparticles in Polymer Electrolytes-Based Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2014, 118, 16510-16517.	1.5	56

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73	Development of thin anion-exchange pore-filled membranes for high diffusion dialysis performance. Journal of Membrane Science, 2013, 447, 80-86.	4.1	54
74	Formation of Silver Nanoparticles Induced by Poly(2,6-dimethyl-1,4-phenylene oxide). Langmuir, 2001, 17, 5817-5820.	1.6	52
75	Effect of phthalates on the stability and performance of AgBF4-PVP membranes for olefin/paraffin separation. Chemical Communications, 2001, , 2046-2047.	2.2	52
76	Analysis of facilitated transport in solid membranes with fixed site carriers 1. Single RC circuit model. Journal of Membrane Science, 1996, 109, 149-157.	4.1	51
77	Phase behavior and morphological studies of polyimide/PVP/solvent/water systems by phase inversion. Journal of Applied Polymer Science, 2001, 81, 3481-3488.	1.3	51
78	Dye-sensitized solar cells with quasi-solid-state cross-linked polymer electrolytes containing aluminum oxide. Electrochimica Acta, 2011, 56, 2031-2035.	2.6	51
79	Surface Energyâ€Ł evel Tuning of Silver Nanoparticles for Facilitated Olefin Transport. Angewandte Chemie - International Edition, 2011, 50, 2982-2985.	7.2	50
80	Surface modification of polyimide and polysulfone membranes by ion beam for gas separation. Journal of Applied Polymer Science, 2000, 75, 1554-1560.	1.3	49
81	Pore-filled anion-exchange membranes for non-aqueous redox flow batteries with dual-metal-complex redox shuttles. Journal of Membrane Science, 2014, 454, 44-50.	4.1	49
82	Density functional theory studies on the dissociation energies of metallic salts: relationship between lattice and dissociation energies. Journal of Computational Chemistry, 2001, 22, 827-834.	1.5	48
83	Analysis of the Glass Transition Behavior of Polymerâ^'Salt Complexes:Â An Extended Configurational Entropy Model. Journal of Physical Chemistry B, 2003, 107, 5901-5905.	1.2	48
84	Ultrathin polypyrrole nanosheets doped with HCl as counter electrodes in dye-sensitized solar cells. Journal of Materials Chemistry A, 2014, 2, 859-865.	5.2	47
85	Reversible olefin complexation by silver ions in dry poly(vinyl methyl ketone) membrane and its application to olefin/paraffin separations. Chemical Communications, 2000, , 1261-1262.	2.2	46
86	CO2-philic PBEM-g-POEM comb copolymer membranes: Synthesis, characterization and CO2/N2 separation. Journal of Membrane Science, 2016, 502, 191-201.	4.1	46
87	Preparation and Characterization of Polysulfones Containing Both Hexafluoroisopropylidene and Trimethylsilyl Groups as Gas Separation Membrane Materialsâ€. Macromolecules, 2004, 37, 1403-1410.	2.2	45
88	Control of Ionic Interactions in Silver Saltâ^'Polymer Complexes with Ionic Liquids:â€‰ Implications for Facilitated Olefin Transport. Chemistry of Materials, 2006, 18, 1789-1794.	3.2	45
89	Nanocomposite silver polymer electrolytes as facilitated olefin transport membranes. Journal of Membrane Science, 2006, 285, 102-107.	4.1	45
90	Spectroscopic Studies for Molecular Structure and Complexation of Silver Polymer Electrolytes. Macromolecules, 2000, 33, 4932-4935.	2.2	44

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91	Zwitterionic Silver Complexes as Carriers for Facilitated-Transport Composite Membranes. Angewandte Chemie - International Edition, 2004, 43, 3053-3056.	7.2	44
92	Electrochemical and in vitro bioactivity of polypyrrole/ceramic nanocomposite coatings on 316L SS bio-implants. Materials Science and Engineering C, 2014, 43, 76-85.	3.8	42
93	Anomalous temperature dependence of facilitated propylene transport in silver polymer electrolyte membranes. Journal of Membrane Science, 2003, 227, 197-206.	4.1	41
94	Dye-sensitized solar cells using ion-gel electrolytes for long-term stability. Journal of Power Sources, 2012, 201, 395-401.	4.0	41
95	Gold Nanoparticle Patterns on Polymer Films in the Presence of Poly(amidoamine) Dendrimers. Langmuir, 2002, 18, 8246-8249.	1.6	40
96	Analysis of facilitated transport in polymeric membrane with fixed site carrier 2. Series RC circuit model. Journal of Membrane Science, 1996, 109, 159-163.	4.1	37
97	Nanocomposite membranes containing positively polarized gold nanoparticles for facilitated olefin transport. Journal of Membrane Science, 2008, 321, 90-93.	4.1	37
98	High-efficiency solid-state polymer electrolyte dye-sensitized solar cells with a bi-functional porous layer. Journal of Materials Chemistry A, 2014, 2, 17746-17750.	5.2	37
99	Metalâ€“organic frameworks grown on a porous planar template with an exceptionally high surface area: promising nanofiller platforms for CO₂ separation. Journal of Materials Chemistry A, 2017, 5, 22500-22505.	5.2	37
100	Molecular Model and Analysis of Glass Transition Temperatures for Polymerâ^'Diluentâ^'Salt Systems. Macromolecules, 2000, 33, 3161-3165.	2.2	36
101	N-Ion-implanted TiO2 photoanodes in quantum dot-sensitized solar cells. Nanoscale, 2012, 4, 2416.	2.8	36
102	Printable ternary component polymer-gel electrolytes for long-term stable dye-sensitized solar cells. Electrochimica Acta, 2014, 145, 217-223.	2.6	36
103	Preparation and Characterization of Dendrimer Layers on Poly(dimethylsiloxane) Films. Macromolecules, 2001, 34, 6631-6636.	2.2	35
104	Dye-sensitized solar cells employing non-volatile electrolytes based on oligomer solvent. Journal of Photochemistry and Photobiology A: Chemistry, 2008, 195, 198-204.	2.0	35
105	Dual-Function Au@Y2O3:Eu3+ Smart Film for Enhanced Power Conversion Efficiency and Long-Term Stability of Perovskite Solar Cells. Scientific Reports, 2017, 7, 6849.	1.6	35
106	Effect of Plasticizers on the Formation of Silver Nanoparticles in Polymer Electrolyte Membranes for Olefin/Paraffin Separation. Chemistry of Materials, 2002, 14, 2134-2139.	3.2	34
107	Synthesis of silver halide nanocomposites templated by amphiphilic graft copolymer and their use as olefin carrier for facilitated transport membranes. Journal of Membrane Science, 2009, 339, 49-56.	4.1	34
108	Quasi-solid-state dye-sensitized solar cells assembled with polymeric ionic liquid and poly(3,4-ethylenedioxythiophene) counter electrode. Electrochemistry Communications, 2013, 34, 1-4.	2.3	34

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109	Interfacial engineering of quantum dot-sensitized TiO2 fibrous electrodes for futuristic photoanodes in photovoltaic applications. Journal of Materials Chemistry, 2012, 22, 14228.	6.7	32
110	Three-dimensional Gd-doped TiO₂ fibrous photoelectrodes for efficient visible light-driven photocatalytic performance. RSC Advances, 2014, 4, 11750-11757.	1.7	31
111	Silver polymer electrolyte membranes for facilitated olefint transport: carrier properties, transport mechanism and separation performance. Macromolecular Research, 2004, 12, 145-155.	1.0	30
112	High temperature proton exchange membranes based on triazoles attached onto SBA-15 type mesoporous silica. Journal of Membrane Science, 2010, 357, 1-5.	4.1	30
113	Density Functional Theory Studies on the Reaction Mechanisms of Silver Ions with Ethylene in Facilitated Transport Membranes:Â A Modeling Study. Journal of Physical Chemistry A, 2001, 105, 9024-9028.	1.1	29
114	Effect of the polymer matrix on the formation of silver nanoparticles in polymerâ€“silver salt complex membranes. Journal of Polymer Science, Part B: Polymer Physics, 2006, 44, 1168-1178.	2.4	29
115	Facilitated olefin transport through room temperature ionic liquids for separation of olefin/paraffin mixtures. Journal of Membrane Science, 2012, 423-424, 159-164.	4.1	29
116	Surface Modification of TiO₂ Photoanodes with Fluorinated Self-Assembled Monolayers for Highly Efficient Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2015, 7, 25741-25747.	4.0	29
117	An artificial solid interphase with polymers of intrinsic microporosity for highly stable Li metal anodes. Chemical Communications, 2019, 55, 6313-6316.	2.2	29
118	?-complexes of polystyrene with silver salts and their use as facilitated olefin transport membranes. Journal of Polymer Science, Part B: Polymer Physics, 2004, 42, 2263-2269.	2.4	28
119	The structural transitions of Ï€-complexes of poly(styrene-b-butadiene-b-styrene) block copolymers with silver salts and their relation to facilitated olefin transport. Journal of Membrane Science, 2006, 281, 369-376.	4.1	26
120	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
121	An electrochemical, in vitro bioactivity, and quantum chemical approach to nanostructured copolymer coatings for orthopedic applications. Journal of Materials Science, 2014, 49, 4067-4080.	1.7	26
122	Enhanced photocatalytic performance at a Au/Nâ€“TiO₂hollow nanowire array by a combination of light scattering and reduced recombination. Physical Chemistry Chemical Physics, 2014, 16, 17748-17755.	1.3	26
123	Matrix effect of mixedâ€matrix membrane containing <scp>CO</scp>₂â€selective <scp>MOF</scp>s. Journal of Applied Polymer Science, 2016, 133, .	1.3	26
124	Thermodynamic Model of the Glass Transition Behavior for Miscible Polymer Blends. Macromolecules, 2006, 39, 1297-1299.	2.2	25
125	Liquid Crystals Embedded in Polymeric Electrolytes for Quasiâ€Solid State Dyeâ€Sensitized Solar Cell Applications. Macromolecular Chemistry and Physics, 2009, 210, 1844-1850.	1.1	25
126	Ionic interaction behavior and facilitated olefin transport in poly(n-vinyl pyrrolidone):Silver triflate electrolytes; Effect of molecular weight. Journal of Polymer Science, Part B: Polymer Physics, 2002, 40, 1813-1820.	2.4	24

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127	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
128	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
129	Plasmon-enhanced photocurrent in quasi-solid-state dye-sensitized solar cells by the inclusion of gold/silica coreâ€“shell nanoparticles in a TiO2 photoanode. Journal of Materials Chemistry A, 2013, 1, 12627.	5.2	24
130	Anchor-Functionalized Push-Pull-Substituted Bis(tridentate) Ruthenium(II) Polypyridine Chromophores: Photostability and Evaluation as Photosensitizers. European Journal of Inorganic Chemistry, 2014, 2014, 2720-2734.	1.0	24
131	Origin of high open-circuit voltage in solid state dye-sensitized solar cells employing polymer electrolyte. Nano Energy, 2016, 28, 455-461.	8.2	24
132	Nanocomposite polymer electrolytes containing silica nanoparticles: Comparison between poly(ethylene glycol) and poly(ethylene oxide) dimethyl ether. Journal of Applied Polymer Science, 2007, 106, 4083-4090.	1.3	23
133	Fabrication and chargeâ€transfer characteristics of CdS QDs sensitized vertically grown flowerâ€like ZnO solar cells with CdSe cosensitizers. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 474-479.	0.8	23
134	Dye-sensitized solar cells employing amphiphilic poly(ethylene glycol) electrolytes. Journal of Photochemistry and Photobiology A: Chemistry, 2011, 217, 169-176.	2.0	23
135	Metallic copper incorporated ionic liquids toward maximizing CO2 separation properties. Separation and Purification Technology, 2013, 112, 49-53.	3.9	23
136	Structure and coordination properties of facilitated olefin transport membranes consisting of crosslinked poly(vinyl alcohol) and silver hexafluoroantimonate. Journal of Polymer Science, Part B: Polymer Physics, 2004, 42, 621-628.	2.4	22
137	Successful demonstration of an efficient Iâ¯/(SeCN)2redox mediator for dye-sensitized solar cells. Physical Chemistry Chemical Physics, 2012, 14, 469-472.	1.3	22
138	Formation of a crystalline nanotubeâ€“nanoparticle hybrid by post water-treatment of a thin amorphous TiO2 layer on a TiO2 nanotube array as an efficient photoanode in dye-sensitized solar cells. Journal of Materials Chemistry A, 2013, 1, 4370.	5.2	22
139	Sub-5 nm Graphene Oxide Nanofilm with Exceptionally High H⁺/V Selectivity for Vanadium Redox Flow Battery. ACS Applied Energy Materials, 2019, 2, 4590-4596.	2.5	22
140	Enhanced CO2 carrier activity of potassium cation with fluorosilicate anions for facilitated transport membranes. Journal of Membrane Science, 2014, 466, 357-360.	4.1	21
141	New CO2 separation membranes containing gas-selective Cu-MOFs. Journal of Membrane Science, 2014, 467, 67-72.	4.1	20
142	Nafion composite membranes containing rod-shaped polyrotaxanes for direct methanol fuel cells. Macromolecular Research, 2006, 14, 214-219.	1.0	19
143	Direct molecular interaction of CO2 with KTFSI dissolved in Pebax 2533 and their use in facilitated CO2 transport membranes. Journal of Membrane Science, 2018, 548, 358-362.	4.1	19
144	Efficient Performance of Electrostatic Spray-Deposited TiO2 Blocking Layers in Dye-Sensitized Solar Cells after Swift Heavy Ion Beam Irradiation. Nanoscale Research Letters, 2011, 6, 30.	3.1	18

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145	Accelerated CO2 transport on surface of AgO nanoparticles in ionic liquid BMIMBF4. Scientific Reports, 2015, 5, 16362.	1.6	18
146	Strongly Coupled Cyclometalated Ruthenium Triarylamine Chromophores as Sensitizers for DSSCs. Chemistry - A European Journal, 2016, 22, 8915-8928.	1.7	18
147	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
148	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
149	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
150	Wavelength conversion effect-assisted dye-sensitized solar cells for enhanced solar light harvesting. Journal of Materials Chemistry A, 2016, 4, 11908-11915.	5.2	17
151	Solid-state oligomer electrolyte with amineâ€“acid interaction for dye-sensitized solar cells. Journal of Power Sources, 2008, 183, 812-816.	4.0	16
152	Influence of salts on ionic diffusion in oligomer electrolytes and its implication in dye-sensitized solar cells. Journal of Photochemistry and Photobiology A: Chemistry, 2008, 194, 148-151.	2.0	16
153	Efficient binary organic thiolate/disulfide redox mediators in dye-sensitized solar cells based on a carbon black counter electrode. Journal of Materials Chemistry A, 2013, 1, 233-236.	5.2	16
154	Dual facilitated transport of CO2 using electrospun composite membranes containing Ionic liquid. Journal of Membrane Science, 2015, 479, 77-84.	4.1	16
155	Changes in facilitated transport behavior of silver polymer electrolytes by UV irradiation. Macromolecular Research, 2002, 10, 80-84.	1.0	15
156	Nanoassembly of Block Copolymer Micelle and Graphene Oxide to Multilayer Coatings. Industrial & Engineering Chemistry Research, 2011, 50, 3095-3099.	1.8	15
157	Threshold silver concentration for facilitated olefin transport in polymer/silver salt membranes. Journal of Polymer Research, 2012, 19, 1.	1.2	15
158	Synthesis of poly(3,4-ethylene dioxythiophene)/ammonium vanadate nanofiber composites for counter electrode of dye-sensitized solar cells. Electrochimica Acta, 2017, 245, 607-614.	2.6	15
159	Triumphing over Charge Transfer Limitations of PEDOT Nanofiber Reduction Catalyst by 1,2-Ethanedithiol Doping for Quantum Dot Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 1877-1884.	4.0	15
160	Unusual facilitated olefin transport through polymethacrylate/silver salt complexes. Macromolecular Research, 2003, 11, 375-381.	1.0	14
161	Synthesis of new pH-sensitive amphiphilic block copolymers and study for the micellization using a fluorescence probe. Macromolecular Research, 2008, 16, 169-177.	1.0	14
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