Sung-Kon Kim

List of Publications by Year
in descending order

60 papers	2,288 citations	218677 26 h-index	214800 47 g-index
62 all docs	62 docs citations	62 times ranked	3326 citing authors

#	Article	IF	Citations
1	Simple, green organic acid-based hydrometallurgy for waste-to-energy storage devices: Recovery of NiMnCoC2O4 as an electrode material for pseudocapacitor from spent LiNiMnCoO2 batteries. Journal of Hazardous Materials, 2022, 424, 127481.	12.4	24
2	Optical humidity sensors based on lead-free Cu-based perovskite nanomaterials. Nanoscale Advances, 2022, 4, 3309-3317.	4.6	7
3	Laser Scribing of Fluorinated Polyimide Films to Generate Microporous Structures for High-Performance Micro-supercapacitor Electrodes. ACS Applied Energy Materials, 2021, 4, 208-214.	5.1	39
4	Integrated photo-rechargeable supercapacitors formed via electrode sharing. Organic Electronics, 2021, 89, 106050.	2.6	11
5	Robust and Highly Ion-Conducting Gel Polymer Electrolytes with Semi-Interpenetrating Polymer Network Structure. Macromolecular Research, 2021, 29, 211-216.	2.4	6
6	Solar-Powered Supercapacitors Integrated with a Shared Electrode. ACS Applied Energy Materials, 2021, 4, 14014-14021.	5.1	15
7	Fiber Electrodes Mesostructured on Carbon Fibers for Energy Storage. ACS Applied Energy Materials, 2021, 4, 13716-13724.	5.1	5
8	Three-Dimensional Hierarchical Porous Carbons Derived from Betelnut Shells for Supercapacitor Electrodes. Materials, 2021, 14, 7793.	2.9	6
9	Enhanced Electrical and Mechanical Properties of Chemically Cross-Linked Carbon-Nanotube-Based Fibers and Their Application in High-Performance Supercapacitors. ACS Nano, 2020, 14, 632-639.	14.6	44
10	Joule Heating-Induced Carbon Fibers for Flexible Fiber Supercapacitor Electrodes. Materials, 2020, 13, 5255.	2.9	8
11	Hierarchically structured carbon electrodes derived from intrinsically microporous TrÃ¶gerâ€™s base polymers for high-performance supercapacitors. Applied Surface Science, 2020, 530, 147146.	6.1	12
12	Infilling of highly ion-conducting gel polymer electrolytes into electrodes with high mass loading for high-performance energy storage. Journal of Industrial and Engineering Chemistry, 2020, 87, 173-179.	5.8	7
13	Preparation of Porous Carbon Nanofibers with Tailored Porosity for Electrochemical Capacitor Electrodes. Materials, 2020, 13, 729.	2.9	13
14	Facile fabrication of polyaniline films with hierarchical porous networks for enhanced electrochemical activity. Journal of Industrial and Engineering Chemistry, 2020, 86, 81-89.	5.8	4
15	Monodisperse starburst carbon spheres-intercalated graphene nanohybrid papers for supercapacitor electrodes. Journal of Electroanalytical Chemistry, 2019, 853, 113533.	3.8	7
16	Zwitterion Nondetergent Sulfobetaine-Modified SnO₂ as an Efficient Electron Transport Layer for Inverted Organic Solar Cells. ACS Omega, 2019, 4, 19225-19237.	3.5	14
17	A humidityâ€sensing composite microfiber based on moistureâ€induced swelling of an agarose polymer matrix. Polymer Composites, 2019, 40, 3582-3587.	4.6	13
18	Enhancing device performance of inverted organic solar cells with SnO2/Cs2CO3 as dual electron transport layers. Organic Electronics, 2019, 68, 85-95.	2.6	34

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19	Flexible sodium-ion battery anodes using indium sulfide-based nanohybrid paper electrodes. Applied Surface Science, 2019, 467-468, 1040-1045.	6.1	22
20	Nanohybrid electrodes of porous hollow SnO2 and graphene aerogel for lithium ion battery anodes. Journal of Industrial and Engineering Chemistry, 2019, 71, 345-350.	5.8	15
21	Intrinsically microporous polymer-based hierarchical nanostructuring of electrodes<i>via</i>nonsolvent-induced phase separation for high-performance supercapacitors. Journal of Materials Chemistry A, 2018, 6, 8909-8915.	10.3	23
22	Thin and Small N-Doped Carbon Boxes Obtained from Microporous Organic Networks and Their Excellent Energy Storage Performance at High Current Densities in Coin Cell Supercapacitors. ACS Sustainable Chemistry and Engineering, 2018, 6, 3525-3532.	6.7	24
23	High energy flexible supercapacitors formed via bottom-up infilling of gel electrolytes into thick porous electrodes. Nature Communications, 2018, 9, 2578.	12.8	121
24	Flexible Binderâ€Free CuS/Polydopamineâ€Coated Carbon Cloth for High Voltage Supercapacitors. Energy Technology, 2018, 6, 1852-1858.	3.8	12
25	Adhesive organic network films with a holey microstructure: useful platforms for the engineering of flexible energy devices. Journal of Materials Chemistry A, 2017, 5, 5696-5700.	10.3	10
26	Proton conductive cross-linked benzoxazine-benzimidazole copolymers as novel porous substrates for reinforced pore-filling membranes in fuel cells operating at high temperatures. Journal of Membrane Science, 2017, 536, 76-85.	8.2	37
27	Highly reinforced pore-filling membranes based on sulfonated poly(arylene ether sulfone)s for high-temperature/low-humidity polymer electrolyte membrane fuel cells. Journal of Membrane Science, 2017, 537, 11-21.	8.2	47
28	Flexible and Wearable Fiber Microsupercapacitors Based on Carbon Nanotubeâ€“Agarose Gel Composite Electrodes. ACS Applied Materials & Interfaces, 2017, 9, 19925-19933.	8.0	34
29	Pseudocapacitive organic catechol derivative-functionalized three-dimensional graphene aerogel hybrid electrodes for high-performance supercapacitors. Applied Surface Science, 2017, 422, 316-320.	6.1	15
30	Reduced Graphene Oxide/LiI Composite Lithium Ion Battery Cathodes. Nano Letters, 2017, 17, 6893-6899.	9.1	67
31	Polybenzimidazole and Phosphonic Acid Groups-Functionalized Polyhedral Oligomeric Silsesquioxane Composite Electrolyte for High Temperature Proton Exchange Membrane. Journal of Nanomaterials, 2016, 2016, 1-7.	2.7	4
32	Highâ€Performance Mesostructured Organic Hybrid Pseudocapacitor Electrodes. Advanced Functional Materials, 2016, 26, 903-910.	14.9	63
33	Cross-Linked Sulfonated Poly(arylene ether sulfone) Membranes Formed by <i>in Situ</i> Casting and Click Reaction for Applications in Fuel Cells. Macromolecules, 2015, 48, 1104-1114.	4.8	92
34	Poly(arlyene ether sulfone) based semi-interpenetrating polymer network membranes containing cross-linked poly(vinyl phosphonic acid) chains for fuel cell applications at high temperature and low humidity conditions. Journal of Power Sources, 2015, 293, 539-547.	7.8	35
35	Organic/inorganic composite membranes comprising of sulfonated Poly(arylene ether sulfone) and coreâ€“shell silica particles having acidic and basic polymer shells. Polymer, 2015, 71, 70-81.	3.8	38
36	Extremely Durable, Flexible Supercapacitors with Greatly Improved Performance at High Temperatures. ACS Nano, 2015, 9, 8569-8577.	14.6	113

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37	Manipulating the glass transition behavior of sulfonated polystyrene by functionalized nanoparticle inclusion. Nanoscale, 2015, 7, 8864-8872.	5.6	13
38	Self-Assembly of Monodisperse Starburst Carbon Spheres into Hierarchically Organized Nanostructured Supercapacitor Electrodes. ACS Applied Materials & Interfaces, 2015, 7, 9128-9133.	8.0	36
39	Sulfonated poly(arylene ether sulfone) composite membranes having poly(2,5-benzimidazole)-grafted graphene oxide for fuel cell applications. Journal of Materials Chemistry A, 2015, 3, 20595-20606.	10.3	100
40	Superior Pseudocapacitive Behavior of Confined Lignin Nanocrystals for Renewable Energyâ€Storage Materials. ChemSusChem, 2014, 7, 1094-1101.	6.8	132
41	Binder-free, self-standing films of iron oxide nanoparticles deposited on ionic liquid functionalized carbon nanotubes for lithium-ion battery anodes. Materials Chemistry and Physics, 2014, 144, 396-401.	4.0	19
42	Anomalous nanoinclusion effects of 2D MoS2 and WS2 nanosheets on the mechanical stiffness of polymer nanocomposites. Nanoscale, 2014, 6, 7430.	5.6	104
43	Multiwalled carbon nanotubes coated with a thin carbon layer for use as composite electrodes in supercapacitors. RSC Advances, 2014, 4, 47827-47832.	3.6	8
44	Facile fabrication of graphene composite microwires via drying-induced size reduction of hydrogel filaments. RSC Advances, 2014, 4, 20927-20931.	3.6	14
45	Selective Wettingâ€Induced Microâ€Electrode Patterning for Flexible Microâ€Supercapacitors. Advanced Materials, 2014, 26, 5108-5112.	21.0	146
46	Healable properties of polymethacrylate derivatives having photo crosslinkable cinnamoyl side groups with surface hardness control. Journal of Coatings Technology Research, 2014, 11, 455-459.	2.5	12
47	Highly durable polymer electrolyte membranes at elevated temperature: Cross-linked copolymer structure consisting of poly(benzoxazine) and poly(benzimidazole). Journal of Power Sources, 2013, 226, 346-353.	7.8	43
48	Durable cross-linked copolymer membranes based on poly(benzoxazine) and poly(2,5-benzimidazole) for use in fuel cells at elevated temperatures. Journal of Materials Chemistry, 2012, 22, 7194.	6.7	54
49	Poly[2,2â€²-(m-phenylene)-5,5â€²-bibenzimidazole] and poly[6-fluoro-3-(pyridin-2-yl)-3,4-dihydro-2H-benzoxazine] based polymer electrolyte membranes for fuel cells at elevated temperature. Macromolecular Research, 2012, 20, 1181-1190.	2.4	18
50	Organic/Inorganic Hybrid Block Copolymer Electrolytes with Nanoscale Ion-Conducting Channels for Lithium Ion Batteries. Macromolecules, 2012, 45, 9347-9356.	4.8	108
51	Starâ€shaped polymers having side chain poss groups for solid polymer electrolytes; synthesis, thermal behavior, dimensional stability, and ionic conductivity. Journal of Polymer Science Part A, 2012, 50, 3618-3627.	2.3	63
52	Cross-Linked Benzoxazineâ€"Benzimidazole Copolymer Electrolyte Membranes for Fuel Cells at Elevated Temperature. Macromolecules, 2012, 45, 1438-1446.	4.8	122
53	Preparation of MEA with the Polybenzimidazole Membrane for High Temperature PEM Fuel Cell. Electrochemical and Solid-State Letters, 2011, 14, B38.	2.2	16
54	Cross-linked poly(2,5-benzimidazole) consisting of wholly aromatic groups for high-temperature PEM fuel cell applications. Journal of Membrane Science, 2011, 373, 80-88.	8.2	53

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55	Preparation of Polybenzimidazole/Lithium Hydrazinium Sulfate Composite Membranes for Highâ€Temperature Fuel Cell Applications. Macromolecular Chemistry and Physics, 2010, 211, 1322-1329.	2.2	11
56	Macromol. Chem. Phys. 12/2010. Macromolecular Chemistry and Physics, 2010, 211, n/a-n/a.	2.2	0
57	Polybenzimidazole containing benzimidazole side groups for high-temperature fuel cell applications. Polymer, 2009, 50, 3495-3502.	3.8	81
58	Copolymers of Poly(2,5â€benzimidazole) and Poly[2,2â€²â€(<i>p</i>â€phenylene)â€5,5â€²â€bibenzimidazole] for Highâ€Temperature Fuel Cell Applications. Macromolecular Materials and Engineering, 2008, 293, 914-921.	3.6	22
59	Synthesis and properties of poly(aryl ether benzimidazole) copolymers for high-temperature fuel cell membranes. Journal of Membrane Science, 2008, 323, 362-370.	8.2	67
60	Threeâ€dimensional mesostructured single crystalline Fe 3 O 4 for ultrafast electrochemical capacitor electrode with AC line filtering performance. International Journal of Energy Research, 0, , .	4.5	3