

SeungCheol Yang

List of Publications by Year in descending order

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65
papers

2,644
citations

236925

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189892

50
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67
all docs

67
docs citations

67
times ranked

2115
citing authors

#	ARTICLE	IF	CITATIONS
1	Desalination via a new membrane capacitive deionization process utilizing flow-electrodes. <i>Energy and Environmental Science</i> , 2013, 6, 1471.	30.8	518
2	Thermally Stable Transparent Sol-gel Based Siloxane Hybrid Material with High Refractive Index for Light Emitting Diode (LED) Encapsulation. <i>Chemistry of Materials</i> , 2010, 22, 3549-3555.	6.7	175
3	Flow-Electrode Capacitive Deionization Using an Aqueous Electrolyte with a High Salt Concentration. <i>Environmental Science & Technology</i> , 2016, 50, 5892-5899.	10.0	156
4	Ion storage and energy recovery of a flow-electrode capacitive deionization process. <i>Journal of Materials Chemistry A</i> , 2014, 2, 6378.	10.3	143
5	Flow-electrode capacitive deionization with highly enhanced salt removal performance utilizing high-aspect ratio functionalized carbon nanotubes. <i>Water Research</i> , 2019, 151, 252-259.	11.3	116
6	A novel three-dimensional desalination system utilizing honeycomb-shaped lattice structures for flow-electrode capacitive deionization. <i>Energy and Environmental Science</i> , 2017, 10, 1746-1750.	30.8	114
7	Surface-modified spherical activated carbon for high carbon loading and its desalting performance in flow-electrode capacitive deionization. <i>RSC Advances</i> , 2016, 6, 69720-69727.	3.6	91
8	Assessing the behavior of the feed-water constituents of a pilot-scale 1000-cell-pair reverse electro-dialysis with seawater and municipal wastewater effluent. <i>Water Research</i> , 2019, 148, 261-271.	11.3	87
9	High-performance hybrid plastic films: a robust electrode platform for thin-film optoelectronics. <i>Energy and Environmental Science</i> , 2013, 6, 1811.	30.8	85
10	Rollable Transparent Glass-Fabric Reinforced Composite Substrate for Flexible Devices. <i>Advanced Materials</i> , 2010, 22, 4510-4515.	21.0	77
11	Thermally resistant UV-curable epoxy-siloxane hybrid materials for light emitting diode (LED) encapsulation. <i>Journal of Materials Chemistry</i> , 2012, 22, 8874.	6.7	71
12	Stack Design and Operation for Scaling Up the Capacity of Flow-Electrode Capacitive Deionization Technology. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 4174-4180.	6.7	68
13	Analysis of the desalting performance of flow-electrode capacitive deionization under short-circuited closed cycle operation. <i>Desalination</i> , 2017, 424, 110-121.	8.2	63
14	Thermally Stable, Dye-Bridged Nanohybrid-Based White Light-Emitting Diodes. <i>Advanced Materials</i> , 2011, 23, 5767-5772.	21.0	53
15	Plate-Shaped Graphite for Improved Performance of Flow-Electrode Capacitive Deionization. <i>Journal of the Electrochemical Society</i> , 2017, 164, E480-E488.	2.9	46
16	Cycloaliphatic epoxy oligosiloxane-derived hybrid materials for a high refractive index LED encapsulant. <i>Journal of Applied Polymer Science</i> , 2011, 122, 2478-2485.	2.6	39
17	Hot-corrosion resistance and phase stability of Yb ₂ O ₃ -Gd ₂ O ₃ -Y ₂ O ₃ costabilized zirconia-based thermal barrier coatings against Na ₂ SO ₄ +V ₂ O ₅ molten salts. <i>Surface and Coatings Technology</i> , 2020, 400, 126197.	4.8	34
18	Thermal stability of sol-gel derived methacrylate oligosiloxane-based hybrids for LED encapsulants. <i>Journal of Sol-Gel Science and Technology</i> , 2010, 53, 434-440.	2.4	33

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19	Photo-curable siloxane hybrid material fabricated by a thiol-ene reaction of sol-gel synthesized oligosiloxanes. <i>Chemical Communications</i> , 2011, 47, 6051.	4.1	31
20	Fabrication of an Anion-Exchange Membrane by Pore-Filling Using Catechol-1,4-Diazabicyclo-[2,2,2]octane Coating and Its Application to Reverse Electrodialysis. <i>Langmuir</i> , 2018, 34, 10837-10846.	3.5	31
21	Thermal resistance of cycloaliphatic epoxy hybriimer based on sol-gel derived oligosiloxane for LED encapsulation. <i>Journal of Applied Polymer Science</i> , 2010, 117, 2140-2145.	2.6	30
22	Fabrication of transparent methacrylate zirconium siloxane hybrid materials using sol-gel synthesized oligosiloxane resin. <i>Journal of Sol-Gel Science and Technology</i> , 2011, 58, 114-120.	2.4	30
23	Energy-efficient seawater softening and power generation using a microbial electrolysis cell-reverse electro dialysis hybrid system. <i>Chemical Engineering Journal</i> , 2020, 391, 123480.	12.7	30
24	Membrane-spacer assembly for flow-electrode capacitive deionization. <i>Applied Surface Science</i> , 2018, 433, 437-442.	6.1	27
25	Highly Condensed Epoxy-Oligosiloxane-Based Hybrid Material for Transparent Low-k Dielectric Coatings. <i>ACS Applied Materials & Interfaces</i> , 2009, 1, 1585-1590.	8.0	26
26	Domestic wastewater treatment in a tubular microbial electrolysis cell with a membrane electrode assembly. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 652-660.	7.1	26
27	Electrode system for large-scale reverse electro dialysis: water electrolysis, bubble resistance, and inorganic scaling. <i>Journal of Applied Electrochemistry</i> , 2019, 49, 517-528.	2.9	25
28	Green fabrication of pore-filling anion exchange membranes using R2R processing. <i>Journal of Membrane Science</i> , 2019, 584, 181-190.	8.2	24
29	Optimization of the number of cell pairs to design efficient reverse electro dialysis stack. <i>Desalination</i> , 2021, 497, 114676.	8.2	24
30	Fabrication of photocured anion-exchange membranes using water-soluble siloxane resins as cross-linking agents and their application in reverse electro dialysis. <i>Journal of Membrane Science</i> , 2019, 573, 544-553.	8.2	23
31	Single crystal casting of gas turbine blades using superior ceramic core. <i>Journal of Materials Research and Technology</i> , 2020, 9, 3348-3356.	5.8	22
32	Network structure-property relationship in UV-cured organic/inorganic hybrid nanocomposites. <i>Polymer Chemistry</i> , 2011, 2, 168-174.	3.9	21
33	Effects of Sol-Gel Organic-Inorganic Hybrid Passivation on Stability of Solution-Processed Zinc Tin Oxide Thin Film Transistors. <i>Electrochemical and Solid-State Letters</i> , 2011, 14, H375.	2.2	21
34	Reverse electro dialysis (RED) using a bipolar membrane to suppress inorganic fouling around the cathode. <i>Water Research</i> , 2019, 166, 115078.	11.3	21
35	Photocurable transparent cycloaliphatic epoxy hybrid materials crosslinked by oxetane. <i>Journal of Applied Polymer Science</i> , 2012, 126, E380.	2.6	20
36	Relationship between mechanical properties of ceramic green body and structures of photo-cured acrylate polymer for ceramic 3D printing based on photo polymerization. <i>Ceramics International</i> , 2021, 47, 3867-3875.	4.8	20

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37	Selective removal of multivalent ions from seawater by bioelectrochemical system. <i>Desalination</i> , 2015, 359, 37-40.	8.2	18
38	Ultra-thin pore-filling membranes with mirror-image wave patterns for improved power density and reduced pressure drops in stacks of reverse electrodialysis. <i>Journal of Membrane Science</i> , 2021, 620, 118885.	8.2	17
39	Electrochemical Analysis of High-Performance Flow-Electrode Capacitive Mixing (F-CapMix) under Different Operating Conditions. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 9199-9208.	6.7	14
40	Fabrication of a high thermal-stable methacrylate-silicate hybrid nanocomposite: hydrolytic versus non-hydrolytic sol-gel synthesis of methacryl-oligosiloxanes. <i>Journal of Sol-Gel Science and Technology</i> , 2012, 61, 321-327.	2.4	13
41	Synthesis and characterization of nano-sized epoxy oligosiloxanes for fabrication of transparent nano hybrid materials. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2009, 47, 756-763.	2.1	12
42	Correlations between Properties of Pore-Filling Ion Exchange Membranes and Performance of a Reverse Electrodialysis Stack for High Power Density. <i>Membranes</i> , 2021, 11, 609.	3.0	12
43	Cross Effect of Surface Area and Electrical Conductivity for Carbonaceous Materials in Flow-electrode Capacitive Mixing (F-CapMix) and Flow-electrode Capacitive Deionization (FCDI): Solid-like Behavior of Flow-electrode. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 13514-13525.	6.7	12
44	Bioelectrochemical precipitation system for removal of scale-forming ions from seawater using two different buffers. <i>Desalination</i> , 2017, 418, 35-42.	8.2	11
45	Nernst-Planck analysis of reverse-electrodialysis with the thin-composite pore-filling membranes and its upscaling potential. <i>Water Research</i> , 2019, 165, 114970.	11.3	11
46	Uniform coating of molybdenum disulfide over porous carbon substrates and its electrochemical application. <i>Chemical Engineering Journal</i> , 2019, 356, 292-302.	12.7	10
47	R2R Fabrication of Pore-Filling Cation-Exchange Membranes via One-Time Impregnation and Their Application in Reverse Electrodialysis. <i>ACS Sustainable Chemistry and Engineering</i> , 0, .	6.7	9
48	Sustainable energy harvesting and on-site disinfection of natural seawater using reverse electrodialysis. <i>Water Research</i> , 2022, 220, 118681.	11.3	9
49	Facile fabrication of carbon nanotube embedded pore filling ion exchange membrane with high ion exchange capacity and permselectivity for high-performance reverse electrodialysis. <i>Journal of Membrane Science</i> , 2022, 654, 120568.	8.2	8
50	High-Performance Asymmetric Flow-Electrode Capacitive Mixing with MnO ₂ -Coated Activated Carbon Flow-Electrode for Energy Harvesting from Salinity Gradient Power. , 2022, 4, 618-625.		7
51	Importance of channel dimension for flow-electrode flowing in flow-electrode capacitive mixing (F-CapMix): Evaluation of net power density under high-pressure-drop conditions. <i>Separation and Purification Technology</i> , 2022, 290, 120859.	7.9	7
52	Multilayered Graphene-Coated Metal Current Collectors with High Electrical Conductivity and Corrosion Resistivity for Flow-Electrode Capacitive Mixing. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 7625-7634.	6.7	7
53	Thickness-modulated and interface-engineered MoS ₂ /TiO ₂ heterostructures as a highly active and inexpensive cathode for reverse electrodialysis. <i>Applied Surface Science</i> , 2020, 504, 144323.	6.1	6
54	Enhanced energy recovery using a cascaded reverse electrodialysis stack for salinity gradient power generation. <i>Water Research</i> , 2021, 200, 117255.	11.3	6

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55	Effect of Ta ⁵⁺ doping on the thermal physical properties of defective fluorite Y ₃ NbO ₇ ceramics. <i>Journal of the American Ceramic Society</i> , 2022, 105, 1358-1366.	3.8	6
56	Effect of the polymerization degree of photopolymers on the thermal and mechanical properties of ceramic cores. <i>Ceramics International</i> , 2022, 48, 14754-14760.	4.8	6
57	Sol-gel derived dye-bridged hybrid materials for white luminescence. <i>Journal of Sol-Gel Science and Technology</i> , 2013, 65, 46-51.	2.4	5
58	Electrochemical characterization of electrolyte-filled porous carbon materials for electrosorption process. <i>Journal of Electroanalytical Chemistry</i> , 2017, 801, 179-184.	3.8	4
59	Asymmetrical electrode system for stable operation of a large-scale reverse electrodialysis (RED) system. <i>Environmental Science: Water Research and Technology</i> , 2020, 6, 1597-1605.	2.4	4
60	Hot corrosion behavior of Yb ₂ O ₃ -Gd ₂ O ₃ -Y ₂ O ₃ co-stabilized zirconia-based thermal barrier coatings covered with a Lewis neutral layer. <i>Surface and Coatings Technology</i> , 2021, 428, 127911.	4.8	3
61	Synthesis of magnesium-based binary powders with high reactivity using a coprecipitation method. <i>Journal of Nanoparticle Research</i> , 2021, 23, 1.	1.9	2
62	Enhancing fracture strength of ceramic core using sodium silicate as the binder. <i>International Journal of Applied Ceramic Technology</i> , 0, , .	2.1	2
63	Characteristics of Mg _{1-x} Co _x O powder prepared using coprecipitation method for glass film formation on and magnetic performance improvement of electrical steel. <i>Journal of Magnetism and Magnetic Materials</i> , 2022, 550, 169085.	2.3	1
64	P-69: PDP Fabricated with Low-Temperature Processes Below 300°C Using Sol-Gel Hybrid Polymers (Hybrimer PDP). <i>Digest of Technical Papers SID International Symposium</i> , 2008, 39, 1446.	0.3	0
65	Flexible amorphous silicon solar cells on surface-textured glass-fabric reinforced composite films. , 2011, , .		0