

Yong-Hyeok Lee

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1030474/publications.pdf>

Version: 2024-02-01

197
papers

11,205
citations

23567

58
h-index

33894

99
g-index

213
all docs

213
docs citations

213
times ranked

11053
citing authors

#	ARTICLE	IF	CITATIONS
1	Nanocellulose: a promising nanomaterial for advanced electrochemical energy storage. <i>Chemical Society Reviews</i> , 2018, 47, 2837-2872.	38.1	586
2	All-inkjet-printed, solid-state flexible supercapacitors on paper. <i>Energy and Environmental Science</i> , 2016, 9, 2812-2821.	30.8	377
3	Cable-Type Flexible Lithium Ion Battery Based on Hollow Multi-Helix Electrodes. <i>Advanced Materials</i> , 2012, 24, 5192-5197.	21.0	331
4	Solvent-Free, Single Lithium-Ion Conducting Covalent Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2019, 141, 5880-5885.	13.7	284
5	Eco-friendly cellulose nanofiber paper-derived separator membranes featuring tunable nanoporous network channels for lithium-ion batteries. <i>Journal of Materials Chemistry</i> , 2012, 22, 16618.	6.7	266
6	Closely packed SiO ₂ nanoparticles/poly(vinylidene fluoride-hexafluoropropylene) layers-coated polyethylene separators for lithium-ion batteries. <i>Journal of Power Sources</i> , 2011, 196, 6716-6722.	7.8	242
7	Progress in flexible energy storage and conversion systems, with a focus on cable-type lithium-ion batteries. <i>Energy and Environmental Science</i> , 2013, 6, 2414.	30.8	235
8	Bendable and Thin Sulfide Solid Electrolyte Film: A New Electrolyte Opportunity for Free-Standing and Stackable High-Energy All-Solid-State Lithium-Ion Batteries. <i>Nano Letters</i> , 2015, 15, 3317-3323.	9.1	233
9	Recent advances on separator membranes for lithium-ion battery applications: From porous membranes to solid electrolytes. <i>Energy Storage Materials</i> , 2019, 22, 346-375.	18.0	225
10	COF-Net on CNT-Net as a Molecularly Designed, Hierarchical Porous Chemical Trap for Polysulfides in Lithium-Sulfur Batteries. <i>Nano Letters</i> , 2016, 16, 3292-3300.	9.1	216
11	UV-curable semi-interpenetrating polymer network-integrated, highly bendable plastic crystal composite electrolytes for shape-conformable all-solid-state lithium ion batteries. <i>Energy and Environmental Science</i> , 2012, 5, 6491.	30.8	210
12	Effect of phase inversion on microporous structure development of Al ₂ O ₃ /poly(vinylidene fluoride) composite separators for lithium-ion batteries. <i>Journal of Power Sources</i> , 2010, 195, 6116-6121.	7.8	209
13	Thin, Deformable, and Safety-Reinforced Plastic Crystal Polymer Electrolytes for High-Performance Flexible Lithium-Ion Batteries. <i>Advanced Functional Materials</i> , 2014, 24, 44-52.	14.9	195
14	Imprintable, Bendable, and Shape-Conformable Polymer Electrolytes for Versatile-Shaped Lithium-Ion Batteries. <i>Advanced Materials</i> , 2013, 25, 1395-1400.	21.0	183
15	Printable Solid-State Lithium-Ion Batteries: A New Route toward Shape-Conformable Power Sources with Aesthetic Versatility for Flexible Electronics. <i>Nano Letters</i> , 2015, 15, 5168-5177.	9.1	182
16	Nanocellulose for Energy Storage Systems: Beyond the Limits of Synthetic Materials. <i>Advanced Materials</i> , 2019, 31, e1804826.	21.0	181
17	Close-packed SiO ₂ /poly(methyl methacrylate) binary nanoparticles-coated polyethylene separators for lithium-ion batteries. <i>Journal of Power Sources</i> , 2010, 195, 8306-8310.	7.8	179
18	Effect of microporous structure on thermal shrinkage and electrochemical performance of Al ₂ O ₃ /poly(vinylidene fluoride-hexafluoropropylene) composite separators for lithium-ion batteries. <i>Journal of Membrane Science</i> , 2010, 364, 177-182.	8.2	175

#	ARTICLE	IF	CITATIONS
19	A polymer electrolyte-skinned active material strategy toward high-voltage lithium ion batteries: a polyimide-coated LiNi _{0.5} Mn _{1.5} O ₄ spinel cathode material case. <i>Energy and Environmental Science</i> , 2012, 5, 7124.	30.8	175
20	Particle size-dependent, tunable porous structure of a SiO ₂ /poly(vinylidene fluoride) composite for a lithium-ion battery. <i>Journal of Materials Chemistry</i> , 2011, 21, 14747.	6.7	156
21	Flexible/shape-versatile, bipolar all-solid-state lithium-ion batteries prepared by multistage printing. <i>Energy and Environmental Science</i> , 2018, 11, 321-330.	30.8	141
22	Current Status and Challenges in Printed Batteries: Toward Form Factor-Free, Monolithic Integrated Power Sources. <i>ACS Energy Letters</i> , 2018, 3, 220-236.	17.4	139
23	A novel poly(vinylidene fluoride-hexafluoropropylene)/poly(ethylene terephthalate) composite nonwoven separator with phase inversion-controlled microporous structure for a lithium-ion battery. <i>Journal of Materials Chemistry</i> , 2010, 20, 9180.	6.7	138
24	Nanomaterials-based batteries based on all-fibrous cathode/separator assemblies and reinforced Li metal anodes: towards ultrahigh energy density and flexibility. <i>Energy and Environmental Science</i> , 2019, 12, 177-186.	30.8	138
25	Excellent Compatibility of Solvate Ionic Liquids with Sulfide Solid Electrolytes: Toward Favorable Ionic Contacts in Bulk-Type All-Solid-State Lithium-Ion Batteries. <i>Advanced Energy Materials</i> , 2015, 5, 1500865.	19.5	134
26	Thin and Flexible Solid Electrolyte Membranes with Ultrahigh Thermal Stability Derived from Solution-Processable Li Argryrodites for All-Solid-State Li-Ion Batteries. <i>ACS Energy Letters</i> , 2020, 5, 718-727.	17.4	126
27	Why Cellulose-Based Electrochemical Energy Storage Devices?. <i>Advanced Materials</i> , 2021, 33, e2000892.	21.0	125
28	Colloidal silica nanoparticle-assisted structural control of cellulose nanofiber paper separators for lithium-ion batteries. <i>Journal of Power Sources</i> , 2013, 242, 533-540.	7.8	123
29	Printing of wirelessly rechargeable solid-state supercapacitors for soft, smart contact lenses with continuous operations. <i>Science Advances</i> , 2019, 5, eaay0764.	10.3	117
30	Heterolayered, One-Dimensional Nanobuilding Block Mat Batteries. <i>Nano Letters</i> , 2014, 14, 5677-5686.	9.1	111
31	Hetero-Nanonet Rechargeable Paper Batteries: Toward Ultrahigh Energy Density and Origami Foldability. <i>Advanced Functional Materials</i> , 2015, 25, 6029-6040.	14.9	111
32	Monolithically integrated, photo-rechargeable portable power sources based on miniaturized Si solar cells and printed solid-state lithium-ion batteries. <i>Energy and Environmental Science</i> , 2017, 10, 931-940.	30.8	111
33	Mechanically compliant and lithium dendrite growth-suppressing composite polymer electrolytes for flexible lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2013, 1, 4949.	10.3	110
34	Revisiting polymeric single lithium-ion conductors as an organic route for all-solid-state lithium ion and metal batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 1917-1935.	10.3	103
35	A self-standing, UV-cured polymer networks-reinforced plastic crystal composite electrolyte for a lithium-ion battery. <i>Electrochimica Acta</i> , 2011, 57, 40-45.	5.2	98
36	Functionalized Nanocellulose-Integrated Heterolayered Nanomats toward Smart Battery Separators. <i>Nano Letters</i> , 2016, 16, 5533-5541.	9.1	96

#	ARTICLE	IF	CITATIONS
37	Close-packed poly(methyl methacrylate) nanoparticle arrays-coated polyethylene separators for high-power lithium-ion polymer batteries. <i>Journal of Power Sources</i> , 2011, 196, 7035-7038.	7.8	91
38	Lamellar crystalline structure of hard elastic HDPE films and its influence on microporous membrane formation. <i>Polymer</i> , 2006, 47, 3540-3547.	3.8	86
39	Polyimide gel polymer electrolyte-nanoencapsulated LiCoO ₂ cathode materials for high-voltage Li-ion batteries. <i>Electrochemistry Communications</i> , 2010, 12, 1099-1102.	4.7	82
40	Evaporation-induced, close-packed silica nanoparticle-embedded nonwoven composite separator membranes for high-voltage/high-rate lithium-ion batteries: Advantageous effect of highly percolated, electrolyte-philic microporous architecture. <i>Journal of Membrane Science</i> , 2012, 415-416, 513-519.	8.2	82
41	Artificially engineered, bicontinuous anion-conducting/-repelling polymeric phases as a selective ion transport channel for rechargeable zinc-air battery separator membranes. <i>Journal of Materials Chemistry A</i> , 2016, 4, 3711-3720.	10.3	80
42	Inverse Opal-Inspired, Nanoscaffold Battery Separators: A New Membrane Opportunity for High-Performance Energy Storage Systems. <i>Nano Letters</i> , 2014, 14, 4438-4448.	9.1	77
43	A Chemically Self-Charging Flexible Solid-State Zinc-Ion Battery Based on VO ₂ Cathode and Polyacrylamide-Chitin Nanofiber Hydrogel Electrolyte. <i>Advanced Energy Materials</i> , 2021, 11, 2003902.	19.5	77
44	A novel ion-conductive protection skin based on polyimide gel polymer electrolyte: application to nanoscale coating layer of high voltage LiNi _{1/3} Co _{1/3} Mn _{1/3} O ₂ cathode materials for lithium-ion batteries. <i>Journal of Materials Chemistry</i> , 2012, 22, 12574.	6.7	76
45	Covalent organic framework-based ultrathin crystalline porous film: manipulating uniformity of fluoride distribution for stabilizing lithium metal anode. <i>Journal of Materials Chemistry A</i> , 2020, 8, 3459-3467.	10.3	75
46	Conducting Polymer-Skinned Electroactive Materials of Lithium-Ion Batteries: Ready for Monocomponent Electrodes without Additional Binders and Conductive Agents. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 12789-12797.	8.0	74
47	Laminar morphology development and oxygen permeability of LDPE/EVOH blends. <i>Polymer Engineering and Science</i> , 1997, 37, 463-475.	3.1	72
48	Ultrahigh areal number density solid-state on-chip microsupercapacitors via electrohydrodynamic jet printing. <i>Science Advances</i> , 2020, 6, eaaz1692.	10.3	72
49	A shape-deformable and thermally stable solid-state electrolyte based on a plastic crystal composite polymer electrolyte for flexible/safer lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2014, 2, 10854-10861.	10.3	68
50	Janus-Faced, Dual-Conductive/Chemically Active Battery Separator Membranes. <i>Advanced Functional Materials</i> , 2016, 26, 7074-7083.	14.9	67
51	A stretchable solid-state zinc ion battery based on a cellulose nanofiber-polyacrylamide hydrogel electrolyte and a Mg _{0.23} V ₂ O ₅ ·1.0H ₂ O cathode. <i>Journal of Materials Chemistry A</i> , 2020, 8, 18327-18337.	10.3	66
52	Two-Cation Competition in Ionic-Liquid-Modified Electrolytes for Lithium Ion Batteries. <i>Journal of Physical Chemistry B</i> , 2005, 109, 13663-13667.	2.6	65
53	Facile fabrication of nanoporous composite separator membranes for lithium-ion batteries: poly(methyl methacrylate) colloidal particles-embedded nonwoven poly(ethylene terephthalate). <i>Journal of Materials Chemistry</i> , 2011, 21, 8192.	6.7	65
54	Electrospun polyetherimide nanofiber mat-reinforced, permselective polyvinyl alcohol composite separator membranes: A membrane-driven step closer toward rechargeable zinc-air batteries. <i>Journal of Membrane Science</i> , 2016, 499, 526-537.	8.2	65

#	ARTICLE	IF	CITATIONS
55	Water-Repellent Ionic Liquid Skinny Gels Customized for Aqueous Zn-Ion Battery Anodes. <i>Advanced Functional Materials</i> , 2021, 31, 2103850.	14.9	63
56	Wearable Supercapacitors Printed on Garments. <i>Advanced Functional Materials</i> , 2018, 28, 1705571.	14.9	62
57	Composition ratio-dependent structural evolution of SiO ₂ /poly(vinylidene fluoride) for lithium-ion batteries. <i>Electrochimica Acta</i> , 2012, 86, 317-322.	5.2	60
58	Compliant polymer network-mediated fabrication of a bendable plastic crystal polymer electrolyte for flexible lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2013, 1, 5224.	10.3	60
59	A new high-voltage calcium intercalation host for ultra-stable and high-power calcium rechargeable batteries. <i>Nature Communications</i> , 2021, 12, 3369.	12.8	59
60	30 Li ⁺ -Accommodating Covalent Organic Frameworks as Ultralong Cyclable High-Capacity Li-Ion Battery Electrodes. <i>Advanced Functional Materials</i> , 2022, 32, 2108798.	14.9	59
61	Evaporation-induced self-assembled silica colloidal particle-assisted nanoporous structural evolution of poly(ethylene terephthalate) nonwoven composite separators for high-safety/high-rate lithium-ion batteries. <i>Journal of Power Sources</i> , 2012, 216, 42-47.	7.8	58
62	Nonflammable Lithium Metal Full Cells with Ultra-high Energy Density Based on Coordinated Carbonate Electrolytes. <i>IScience</i> , 2020, 23, 100844.	4.1	58
63	Hierarchical multiscale hyperporous block copolymer membranes via tunable dual-phase separation. <i>Science Advances</i> , 2015, 1, e1500101.	10.3	57
64	SiO ₂ -coated polyimide nonwoven/Nafion composite membranes for proton exchange membrane fuel cells. <i>Journal of Membrane Science</i> , 2011, 367, 265-272.	8.2	56
65	Integration of Transparent Supercapacitors and Electrodes Using Nanostructured Metallic Glass Films for Wirelessly Rechargeable, Skin Heat Patches. <i>Nano Letters</i> , 2020, 20, 4872-4881.	9.1	56
66	Size controlled synthesis of Li ₂ MnSiO ₄ nanoparticles: Effect of calcination temperature and carbon content for high performance lithium batteries. <i>Journal of Colloid and Interface Science</i> , 2011, 355, 472-477.	9.4	55
67	Restricted growth of LiMnPO ₄ nanoparticles evolved from a precursor seed. <i>Journal of Power Sources</i> , 2012, 210, 1-6.	7.8	52
68	Flexible/Rechargeable Zn-Air Batteries Based on Multifunctional Heteronanomat Architecture. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 22210-22217.	8.0	51
69	A single-ion conducting covalent organic framework for aqueous rechargeable Zn-ion batteries. <i>Chemical Science</i> , 2020, 11, 11692-11698.	7.4	51
70	Effect of Solvent-Nonsolvent Miscibility on Morphology and Electrochemical Performance of SiO ₂ /PVDF/HFP-Based Composite Separator Membranes for Safer Lithium-Ion Batteries. <i>Macromolecular Chemistry and Physics</i> , 2010, 211, 420-425.	2.2	47
71	Cycling performance and thermal stability of lithium polymer cells assembled with ionic liquid-containing gel polymer electrolytes. <i>Journal of Power Sources</i> , 2011, 196, 6750-6755.	7.8	46
72	Ultrahigh-Energy-Density Lithium-Ion Batteries Based on a High-Capacity Anode and a High-Voltage Cathode with an Electroconductive Nanoparticle Shell. <i>Advanced Energy Materials</i> , 2014, 4, 1301542.	19.5	46

#	ARTICLE	IF	CITATIONS
73	Superlattice Crystals Mimic, Flexible/Functional Ceramic Membranes: Beyond Polymeric Battery Separators. <i>Advanced Energy Materials</i> , 2015, 5, 1500954.	19.5	45
74	All-Solid-State Printed Bipolar Li-S Batteries. <i>Advanced Energy Materials</i> , 2019, 9, 1901841.	19.5	45
75	Potential application of microporous structured poly(vinylidene fluoride)-hexafluorophosphate high-voltage and high-power lithium-ion batteries. <i>Electrochimica Acta</i> , 2011, 56, 5201-5204.	5.2	44
76	Preparation of micro-porous gel polymer for lithium ion polymer battery. <i>Electrochimica Acta</i> , 2004, 50, 363-366.	5.2	43
77	Agarose-biofunctionalized, dual-electrospun heteronano fiber mats: toward metal-ion chelating battery separator membranes. <i>Journal of Materials Chemistry A</i> , 2015, 3, 10687-10692.	10.3	43
78	Platform for wireless pressure sensing with built-in battery and instant visualization. <i>Nano Energy</i> , 2019, 62, 230-238.	16.0	43
79	Ultrathin Polyimide Coating for a Spinel LiNi _{0.5} Mn _{1.5} O ₄ Cathode and Its Superior Lithium Storage Properties under Elevated Temperature Conditions. <i>Journal of the Electrochemical Society</i> , 2013, 160, A1003-A1008.	2.9	42
80	Novel design of ultra-fast Si anodes for Li-ion batteries: crystalline Si@amorphous Si encapsulating hard carbon. <i>Nanoscale</i> , 2014, 6, 10604-10610.	5.6	40
81	Nanoscale Phase Separation of Sulfonated Poly(arylene ether sulfone)/Poly(ether sulfone) Semi-IPNs for DMFC Membrane Applications. <i>Macromolecules</i> , 2009, 42, 5244-5250.	4.8	39
82	Sulfonated SBA-15 mesoporous silica-incorporated sulfonated poly(phenylsulfone) composite membranes for low-humidity proton exchange membrane fuel cells: Anomalous behavior of humidity-dependent proton conductivity. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 9202-9211.	7.1	39
83	Multifunctional natural agarose as an alternative material for high-performance rechargeable lithium-ion batteries. <i>Green Chemistry</i> , 2016, 18, 2710-2716.	9.0	39
84	Highly Flexible, Proton-Conductive Silicate Glass Electrolytes for Medium-Temperature/Low-Humidity Proton Exchange Membrane Fuel Cells. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 5034-5043.	8.0	38
85	Coffee-Driven Green Activation of Cellulose and Its Use for All-Paper Flexible Supercapacitors. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 22568-22577.	8.0	38
86	High-voltage cell performance and thermal stability of nanoarchitected polyimide gel polymer electrolyte-coated LiCoO ₂ cathode materials. <i>Electrochimica Acta</i> , 2012, 86, 346-351.	5.2	37
87	Polysulfide-Breathing/Dual-Conductive, Heterolayered Battery Separator Membranes Based on 0D/1D Mingled Nanomaterial Composite Mats. <i>Nano Letters</i> , 2017, 17, 2220-2228.	9.1	36
88	Stand-Alone Intrinsically Stretchable Electronic Device Platform Powered by Stretchable Rechargeable Battery. <i>Advanced Functional Materials</i> , 2020, 30, 2003608.	14.9	36
89	1D Building Blocks Intermingled Heteronano mats as a Platform Architecture For High-Performance Ultrahigh-Capacity Lithium-Ion Battery Cathodes. <i>Advanced Energy Materials</i> , 2016, 6, 1501594.	19.5	35
90	Carbon Nanotube-Cored Cobalt Porphyrin as a 1D Nanohybrid Strategy for High-Performance Lithium-Ion Battery Anodes. <i>Advanced Functional Materials</i> , 2019, 29, 1806937.	14.9	35

#	ARTICLE	IF	CITATIONS
91	All [∞] Nanomat Lithium [∞] ion Batteries: A New Cell Architecture Platform for Ultrahigh Energy Density and Mechanical Flexibility. <i>Advanced Energy Materials</i> , 2017, 7, 1701099.	19.5	34
92	Control of water-channel structure and state of water in sulfonated poly(arylene ether) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 707 Td (su properties for DMFC membranes. <i>Journal of Membrane Science</i> , 2010, 346, 131-135.	8.2	33
93	SiO ₂ ceramic nanoporous substrate-reinforced sulfonated poly(arylene ether sulfone) composite membranes for proton exchange membrane fuel cells. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 6189-6198.	7.1	32
94	Anomalous behavior of proton transport and dimensional stability of sulfonated poly(arylene ether) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 morphology. <i>Journal of Membrane Science</i> , 2014, 450, 235-241.	8.2	29
95	Biomimetic Superoxide Disproportionation Catalyst for Anti-Aging Lithium [∞] Oxygen Batteries. <i>ACS Nano</i> , 2019, 13, 9190-9197.	14.6	29
96	A proton conductive silicate-nanoencapsulated polyimide nonwoven as a novel porous substrate for a reinforced sulfonated poly(arylene ether sulfone) composite membrane. <i>Journal of Materials Chemistry</i> , 2012, 22, 1634-1642.	6.7	28
97	Polyimide nonwoven fabric-reinforced, flexible phosphosilicate glass composite membranes for high-temperature/low-humidity proton exchange membrane fuel cells. <i>Journal of Materials Chemistry</i> , 2012, 22, 18550.	6.7	27
98	Monolithic heteronanomat paper air cathodes toward origami-foldable/rechargeable Zn [∞] air batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 24231-24238.	10.3	27
99	Monolithic heterojunction quasi-solid-state battery electrolytes based on thermodynamically immiscible dual phases. <i>Energy and Environmental Science</i> , 2019, 12, 559-565.	30.8	27
100	Spiderweb [∞] Mimicking Anion [∞] Exchanging Separators for Li [∞] S Batteries. <i>Advanced Functional Materials</i> , 2018, 28, 1801422.	14.9	26
101	Single [∞] ion Conducting Soft Electrolytes for Semi [∞] Solid Lithium Metal Batteries Enabling Cell Fabrication and Operation under Ambient Conditions. <i>Advanced Energy Materials</i> , 2021, 11, 2101813.	19.5	26
102	A Facile Approach to Fabricate Self [∞] Standing Gel [∞] Polymer Electrolytes for Flexible Lithium [∞] ion Batteries by Exploitation of UV [∞] Cured Trivalent/Monovalent Acrylate Polymer Matrices. <i>Macromolecular Chemistry and Physics</i> , 2011, 212, 2217-2223.	2.2	25
103	Cellulose Nanofiber/Carbon Nanotube [∞] Based Bicontinuous Ion/Electron Conduction Networks for High [∞] Performance Aqueous Zn [∞] ion Batteries. <i>Small</i> , 2020, 16, e2002837.	10.0	25
104	Anion [∞] Rectifying Polymeric Single Lithium [∞] ion Conductors. <i>Advanced Functional Materials</i> , 2022, 32, 2107753.	14.9	25
105	Effect of compatibilizer on the crystallization, rheological, and tensile properties of LDPE/EVOH blends. <i>Journal of Applied Polymer Science</i> , 1998, 68, 1245-1256.	2.6	24
106	Control of nanoparticle dispersion in SPAES/SiO ₂ composite proton conductors and its influence on DMFC membrane performance. <i>Electrochemistry Communications</i> , 2009, 11, 1492-1495.	4.7	24
107	Thiol-terminated polystyrene through the reversible addition [∞] fragmentation chain transfer technique for the preparation of gold nanoparticles and their application in organic memory devices. <i>Reactive and Functional Polymers</i> , 2011, 71, 187-194.	4.1	24
108	Synthesis and characterization of sulfonated poly(arylene ether sulfone) ionomers incorporating perfluorohexylene units for DMFC membranes. <i>Macromolecular Research</i> , 2010, 18, 352-357.	2.4	23

#	ARTICLE	IF	CITATIONS
109	Surface engineering of sponge-like silicon particles for high-performance lithium-ion battery anodes. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 7045.	2.8	23
110	An effective coupling of nanostructured Si and gel polymer electrolytes for high-performance lithium-ion battery anodes. <i>RSC Advances</i> , 2016, 6, 6960-6966.	3.6	23
111	Direct ultraviolet-assisted conformal coating of nanometer-thick poly(tris(2-(acryloyloxy)ethyl) Tj ETQq1 1 0.784314 rgBT /Overlock Sources, 2013, 244, 389-394.	7.8	22
112	Redox-homogeneous, gel electrolyte-embedded high-mass-loading cathodes for high-energy lithium metal batteries. <i>Nature Communications</i> , 2022, 13, 2541.	12.8	22
113	Multilayer-structured, SiO ₂ /sulfonated poly(phenylsulfone) composite membranes for proton exchange membrane fuel cells. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 6182-6188.	7.1	21
114	Multifunctional semi-interpenetrating polymer network-nanoencapsulated cathode materials for high-performance lithium-ion batteries. <i>Scientific Reports</i> , 2014, 4, 4602.	3.3	21
115	Heteromat-framed metal-organic coordination polymer anodes for high-performance lithium-ion batteries. <i>Energy Storage Materials</i> , 2019, 19, 130-136.	18.0	21
116	Fibrous skeleton-framed, flexible high-energy-density quasi-solid-state lithium metal batteries. , 2022, 1, .		21
117	A Novel Water-Free Proton-Conducting Solid Electrolyte based on an Organic/Inorganic Hybrid. <i>Advanced Materials</i> , 2005, 17, 626-630.	21.0	20
118	Thickness-tunable polyimide nanoencapsulating layers and their influence on cell performance/thermal stability of high-voltage LiCoO ₂ cathode materials for lithium-ion batteries. <i>Journal of Power Sources</i> , 2013, 244, 442-449.	7.8	20
119	Polyimide/carbon black composite nanocoating layers as a facile surface modification strategy for high-voltage lithium ion cathode materials. <i>Journal of Materials Chemistry A</i> , 2013, 1, 12441.	10.3	20
120	Revisiting Surface Modification of Graphite: Dual-Layer Coating for High-Performance Lithium Battery Anode Materials. <i>Chemistry - an Asian Journal</i> , 2016, 11, 1711-1717.	3.3	20
121	Ultrahigh-Energy-Density Flexible Lithium-Metal Full Cells based on Conductive Fibrous Skeletons. <i>Advanced Energy Materials</i> , 2021, 11, 2100531.	19.5	20
122	Effects of melt-extension and annealing on row-nucleated lamellar crystalline structure of HDPE films. <i>Journal of Applied Polymer Science</i> , 2007, 103, 3326-3333.	2.6	19
123	A facile route for growth of CNTs on Si@hard carbon for conductive agent incorporating anodes for lithium-ion batteries. <i>Nanoscale</i> , 2015, 7, 11286-11290.	5.6	19
124	Form factor-free, printed power sources. <i>Energy Storage Materials</i> , 2020, 29, 92-112.	18.0	19
125	Aqueous eutectic lithium-ion electrolytes for wide-temperature operation. <i>Energy Storage Materials</i> , 2021, 36, 222-228.	18.0	19
126	Effect of conducting additives on the properties of composite cathodes for lithium-ion batteries. <i>Journal of Solid State Electrochemistry</i> , 2010, 14, 593-597.	2.5	18

#	ARTICLE	IF	CITATIONS
127	Direct surface modification of high-voltage LiCoO ₂ cathodes by UV-cured nanothickness poly(ethylene glycol diacrylate) gel polymer electrolytes. <i>Electrochimica Acta</i> , 2013, 104, 249-254.	5.2	17
128	In situ hybrid Nafion/SiO ₂ -P ₂ O ₅ proton conductors for high-temperature and low-humidity proton exchange membrane fuel cells. <i>Journal of Membrane Science</i> , 2010, 360, 210-216.	8.2	16
129	Toward Ultrahigh Capacity V ₂ O ₅ Lithium-Ion Battery Cathodes via One-Pot Synthetic Route from Precursors to Electrode Sheets. <i>Advanced Materials Interfaces</i> , 2016, 3, 1600173.	3.7	16
130	Printable Solid Electrolyte Interphase Mimic for Antioxidative Lithium Metal Electrodes. <i>Advanced Functional Materials</i> , 2020, 30, 2000792.	14.9	16
131	Printed Built-In Power Sources. <i>Matter</i> , 2020, 2, 345-359.	10.0	16
132	Performance and thermal stability of LiCoO ₂ cathode modified with ionic liquid. <i>Journal of Power Sources</i> , 2005, 146, 732-735.	7.8	15
133	SiO ₂ nanoparticles-coated poly(paraphenylene terephthalamide) nonwovens as reinforcing porous substrates for proton-conducting, sulfonated poly(arylene ether sulfone)-impregnated composite membranes. <i>Solid State Ionics</i> , 2011, 190, 30-37.	2.7	15
134	Nanoporous polymer scaffold-embedded nonwoven composite separator membranes for high-rate lithium-ion batteries. <i>RSC Advances</i> , 2014, 4, 54312-54321.	3.6	15
135	Reversible thixotropic gel electrolytes for safer and shape-versatile lithium-ion batteries. <i>Journal of Power Sources</i> , 2018, 401, 126-134.	7.8	15
136	Phase Behavior of Gel-Type Polymer Electrolytes and Its Influence on Electrochemical Properties. <i>ChemPhysChem</i> , 2005, 6, 49-53.	2.1	14
137	Nano-encapsulation of LiCoO ₂ cathodes by a novel polymer electrolyte and its influence on thermal safeties of Li-ion batteries. <i>Electrochemistry Communications</i> , 2008, 10, 113-117.	4.7	14
138	The feasibility of a pyrrolidinium-based ionic liquid solvent for non-graphitic carbon electrodes. <i>Electrochemistry Communications</i> , 2011, 13, 1256-1259.	4.7	14
139	Hydrophilicity/porous structure-tuned, SiO ₂ /polyetherimide-coated polyimide nonwoven porous substrates for reinforced composite proton exchange membranes. <i>Journal of Colloid and Interface Science</i> , 2011, 362, 607-614.	9.4	13
140	Wearable Electronics: Wearable Supercapacitors Printed on Garments (<i>Adv. Funct. Mater.</i> 11/2018). <i>Advanced Functional Materials</i> , 2018, 28, 1870074.	14.9	13
141	A new water-free proton conducting membrane for high-temperature application. <i>Journal of Power Sources</i> , 2006, 163, 27-33.	7.8	12
142	Nano-encapsulation of graphite-based anodes by a novel polymer electrolyte and its influence on C-rate performances of Li-ion batteries. <i>Electrochemistry Communications</i> , 2008, 10, 1625-1628.	4.7	12
143	Triple-Layer Structured Composite Separator Membranes with Dual Pore Structures and Improved Interfacial Contact for Sustainable Dye-Sensitized Solar Cells. <i>Advanced Energy Materials</i> , 2014, 4, 1400477.	19.5	12
144	Dual electro-spray-assisted forced blending of thermodynamically immiscible polyelectrolyte mixtures. <i>Journal of Membrane Science</i> , 2015, 481, 28-35.	8.2	12

#	ARTICLE	IF	CITATIONS
145	Transparent Supercapacitors: From Optical Theories to Optoelectronics Applications. Energy and Environmental Materials, 2020, 3, 265-285.	12.8	12
146	A microgrid-patterned silicon electrode as an electroactive lithium host. Energy and Environmental Science, 2022, 15, 2581-2590.	30.8	12
147	Lithium metal polymer cells assembled with gel polymer electrolytes containing ionic liquid. Current Applied Physics, 2010, 10, e97-e100.	2.4	11
148	Galvanically Replaced, Single-Bodied Lithium-Ion Battery Fabric Electrodes. Advanced Functional Materials, 2020, 30, 1908633.	14.9	11
149	Performances and thermal stability of LiCoO ₂ cathodes encapsulated by a new gel polymer electrolyte. Journal of Power Sources, 2007, 174, 480-483.	7.8	10
150	Wood-Derived Nanofibrillated Cellulose Hydrogel Filters for Fast and Efficient Separation of Nanoparticles. Advanced Sustainable Systems, 2019, 3, 1900063.	5.3	10
151	Scalable and safer printed Zn//MnO ₂ planar micro-batteries for smart electronics. National Science Review, 2020, 7, 5-6.	9.5	10
152	Battery technology and sustainable energy storage and conversion as a new energy resource replacing fossil fuels. , 2022, 1, .		10
153	Nitrile Electrolyte Strategy for 4.9 V-Class Lithium-Metal Batteries Operating in Flame. Energy and Environmental Materials, 2023, 6, .	12.8	10
154	Mixed ion/electron-conductive protective soft nanomatter-based conformal surface modification of lithium-ion battery cathode materials. Journal of Power Sources, 2014, 263, 209-216.	7.8	9
155	Enhancing the elevated temperature performance of high voltage LiNi _{0.5} Mn _{1.5} O ₄ by V doping with in-situ carbon and polyimide encapsulation. Journal of Power Sources, 2015, 298, 379-384.	7.8	9
156	All-Hand-Drawn Zn-Air Batteries: Toward User-Customized On-the-Fly Power Sources. Advanced Sustainable Systems, 2018, 2, 1700132.	5.3	9
157	Liquid-Based Janus Electrolyte for Sustainable Redox Mediation in Lithium-Oxygen Batteries. Advanced Energy Materials, 2021, 11, 2102096.	19.5	9
158	Effect of MWCNT on the performances of the rounded shape natural graphite as anode material for lithium-ion batteries. Journal of Solid State Electrochemistry, 2010, 14, 951-956.	2.5	8
159	Effect of silane hydrophilicity on membrane transport properties of in-situ hybrid Nafion/organically modified silicate proton conductors for DMFC applications. Solid State Ionics, 2010, 181, 714-718.	2.7	8
160	Antioxidative Lithium Reservoir Based on Interstitial Channels of Carbon Nanotube Bundles. Nano Letters, 2019, 19, 5879-5884.	9.1	8
161	One-pot surface engineering of battery electrode materials with metallic SWCNT-enriched, ivy-like conductive nanonets. Journal of Materials Chemistry A, 2017, 5, 12103-12112.	10.3	7
162	Water-Repellent Ionic Liquid Skinny Gels Customized for Aqueous Zn-Ion Battery Anodes (Adv. Funct.) Tj ETQq 0.0 rgBT /Overlock 1	14.9	7

#	ARTICLE	IF	CITATIONS
163	Expanding cellulose. <i>Nature Energy</i> , 2021, 6, 949-950.	39.5	6
164	Crystalline Porphyrazine-Linked Fused Aromatic Networks with High Proton Conductivity. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	6
165	Light-triggered autonomous shape-reconfigurable and locomotive rechargeable power sources. <i>Materials Today</i> , 2022, 55, 56-65.	14.2	6
166	Electrode-customized separator membranes based on self-assembled chiral nematic liquid crystalline cellulose nanocrystals as a natural material strategy for sustainable Li-metal batteries. <i>Energy Storage Materials</i> , 2022, 50, 783-791.	18.0	6
167	Flexible Batteries: Thin, Deformable, and Safety-Reinforced Plastic Crystal Polymer Electrolytes for High-Performance Flexible Lithium-Ion Batteries (<i>Adv. Funct. Mater.</i> 1/2014). <i>Advanced Functional Materials</i> , 2014, 24, 172-172.	14.9	5
168	Cyclic ultracapacitor for fast-charging and scalable energy storage system. <i>Energy</i> , 2015, 93, 210-219.	8.8	5
169	Beyond Slurry-Cast Supercapacitor Electrodes: PAN/MWNT Heteromat-Mediated Ultrahigh Capacitance Electrode Sheets. <i>Scientific Reports</i> , 2017, 7, 41708.	3.3	5
170	Ecofriendly Chemical Activation of Overlithiated Layered Oxides by DNA-Wrapped Carbon Nanotubes. <i>Advanced Energy Materials</i> , 2020, 10, 1903658.	19.5	5
171	Flexible, Electrically Conductive, Nanostructured, Asymmetric Aerogel Films for Lithium-Sulfur Batteries. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 59174-59184.	8.0	5
172	Reduction of heat generation for lithiated graphite by forming a local galvanic cell with Cu ₃ Sn at elevated temperature. <i>Electrochemistry Communications</i> , 2013, 37, 88-90.	4.7	4
173	Facile surface modification of high-voltage lithium-ion battery cathode materials with electroconductive zinc antimonate colloidal nanoparticles. <i>RSC Advances</i> , 2014, 4, 15630.	3.6	3
174	DNA-directed amphiphilic self-assembly as a chemifunctional/multiscale-structuring strategy for high-performance Li-S batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 4084-4092.	10.3	3
175	Nanofibrous Conductive Binders Based on DNA-Wrapped Carbon Nanotubes for Lithium Battery Electrodes. <i>IScience</i> , 2020, 23, 101739.	4.1	3
176	SiO ₂ /styrene butadiene rubber-coated poly(ethylene terephthalate) nonwoven composite separators for safer lithium-ion batteries. <i>Journal of Electrochemical Science and Technology</i> , 2011, 2, 51-56.	2.2	3
177	On-demand solid-state artistic ultrahigh areal energy density microsupercapacitors. <i>Energy Storage Materials</i> , 2022, 47, 569-578.	18.0	3
178	Lithium-Ion Batteries: Excellent Compatibility of Solvate Ionic Liquids with Sulfide Solid Electrolytes: Toward Favorable Ionic Contacts in Bulk-Type All-Solid-State Lithium-Ion Batteries (<i>Adv. Energy Mater.</i>)	19.5	2
179	Voltage-tunable portable power supplies based on tailored integration of modularized silicon photovoltaics and printed bipolar lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2020, 8, 16291-16301.	10.3	2
180	Conductive Fibrous Skeletons: Ultrahigh-Energy-Density Flexible Lithium-Metal Full Cells based on Conductive Fibrous Skeletons (<i>Adv. Energy Mater.</i> 24/2021). <i>Advanced Energy Materials</i> , 2021, 11, 2170092.	19.5	2

#	ARTICLE	IF	CITATIONS
181	Single-Ion Conducting Soft Electrolytes for Semi-Solid Lithium Metal Batteries Enabling Cell Fabrication and Operation under Ambient Conditions (Adv. Energy Mater. 38/2021). Advanced Energy Materials, 2021, 11, .	19.5	2
182	Polymer Electrolytes: Imprintable, Bendable, and Shape-Conformable Polymer Electrolytes for Versatile-Shaped Lithium-Ion Batteries (Adv. Mater. 10/2013). Advanced Materials, 2013, 25, 1512-1512.	21.0	1
183	Solar Cells: Triple-Layer Structured Composite Separator Membranes with Dual Pore Structures and Improved Interfacial Contact for Sustainable Dye-Sensitized Solar Cells (Adv. Energy Mater. 13/2014). Advanced Energy Materials, 2014, 4, n/a-n/a.	19.5	1
184	Molecularly designed, dual-doped mesoporous carbon/SWCNT nanoshields for lithium battery electrode materials. Journal of Materials Chemistry A, 2016, 4, 14996-15005.	10.3	1
185	Zinc-Ion Batteries: A Chemically Self-Charging Flexible Solid-State Zinc-Ion Battery Based on VO ₂ Cathode and Polyacrylamide-Chitin Nanofiber Hydrogel Electrolyte (Adv. Energy Mater. 10/2021). Advanced Energy Materials, 2021, 11, 1984-1994.	17.8	1
186	Polarity-tuned Gel Polymer Electrolyte Coating of High-voltage LiCoO ₂ Cathode Materials. Journal of the Korean Electrochemical Society, 2011, 14, 117-124.	0.1	1
187	Effect of Microporous Structure of Al ₂ O ₃ /PVdF_HFP Ceramic Coating Layers on Thermal Stability and Electrochemical Performance of Composite Separators for Lithium-Ion Batteries. Journal of the Korean Electrochemical Society, 2009, 12, 324-328.	0.1	1
188	Guanine-Based Quadruplexes Templated by Various Cations toward Potential Use as Single-Ion Conductors. ChemSusChem, 2022, 15, .	6.8	1
189	Crystalline Porphyrazine-Linked Fused Aromatic Networks with High Proton Conductivity. Angewandte Chemie, 2022, 134, .	2.0	1
190	Separator Membranes: Janus-Faced, Dual-Conductive/Chemically Active Battery Separator Membranes (Adv. Funct. Mater. 39/2016). Advanced Functional Materials, 2016, 26, 7195-7195.	14.9	0
191	Beyond flexible batteries: aesthetically versatile, printed rechargeable power sources for smart electronics. , 2017, , .		0
192	Nanocarbons in Li-Ion Batteries. Nanostructure Science and Technology, 2019, , 419-453.	0.1	0
193	Aqueous Zn-Ion Batteries: Cellulose Nanofiber/Carbon Nanotube-Based Bicontinuous Ion/Electron Conduction Networks for High-Performance Aqueous Zn-Ion Batteries (Small 44/2020). Small, 2020, 16, 2070239.	10.0	0
194	Improved High Rate Capabilities of Composite Cathodes for Lithium Ion Batteries. Journal of the Korean Electrochemical Society, 2008, 11, 309-312.	0.1	0
195	Lignocellulosics as a Green Material Opportunity for Energy Storage Systems. , 2020, , 297-343.		0
196	Printed solid-state electrolytes for form factor-free Li-metal batteries. Current Opinion in Electrochemistry, 2021, , 100889.	4.8	0
197	Laminar morphology development using hybrid EVOH-nylon blends. Journal of Applied Polymer Science, 1998, 67, 2001-2014.	2.6	0