

Yong Min Lee

List of Publications by Year in descending order

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197
papers

11,736
citations

34105

52
h-index

30087

103
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199
all docs

199
docs citations

199
times ranked

9870
citing authors

#	ARTICLE	IF	CITATIONS
1	Mussel-Inspired Polydopamine-Treated Polyethylene Separators for High-Power Li-Ion Batteries. <i>Advanced Materials</i> , 2011, 23, 3066-3070.	21.0	635
2	Localized High-Concentration Sulfone Electrolytes for High-Efficiency Lithium-Metal Batteries. <i>Chem</i> , 2018, 4, 1877-1892.	11.7	628
3	Monolithic solid-electrolyte interphases formed in fluorinated orthoformate-based electrolytes minimize Li depletion and pulverization. <i>Nature Energy</i> , 2019, 4, 796-805.	39.5	621
4	Enabling High-Voltage Lithium-Metal Batteries under Practical Conditions. <i>Joule</i> , 2019, 3, 1662-1676.	24.0	598
5	Electrospun Core-Shell Fibers for Robust Silicon Nanoparticle-Based Lithium Ion Battery Anodes. <i>Nano Letters</i> , 2012, 12, 802-807.	9.1	587
6	High-energy lithium metal pouch cells with limited anode swelling and long stable cycles. <i>Nature Energy</i> , 2019, 4, 551-559.	39.5	492
7	Excellent Cycle Life of Lithium-Metal Anodes in Lithium-Ion Batteries with Mussel-Inspired Polydopamine-Coated Separators. <i>Advanced Energy Materials</i> , 2012, 2, 645-650.	19.5	410
8	Critical Parameters for Evaluating Coin Cells and Pouch Cells of Rechargeable Li-Metal Batteries. <i>Joule</i> , 2019, 3, 1094-1105.	24.0	358
9	Mechanical Surface Modification of Lithium Metal: Towards Improved Li Metal Anode Performance by Directed Li Plating. <i>Advanced Functional Materials</i> , 2015, 25, 834-841.	14.9	343
10	A Localized High-Concentration Electrolyte with Optimized Solvents and Lithium Difluoro(oxalate)borate Additive for Stable Lithium Metal Batteries. <i>ACS Energy Letters</i> , 2018, 3, 2059-2067.	17.4	257
11	A simple composite protective layer coating that enhances the cycling stability of lithium metal batteries. <i>Journal of Power Sources</i> , 2015, 284, 103-108.	7.8	211
12	Electrochemical performance of lithium/sulfur batteries with protected Li anodes. <i>Journal of Power Sources</i> , 2003, 119-121, 964-972.	7.8	202
13	Novel porous separator based on PVdF and PE non-woven matrix for rechargeable lithium batteries. <i>Journal of Power Sources</i> , 2005, 139, 235-241.	7.8	174
14	SEI Layer Formation on Amorphous Si Thin Electrode during Precycling. <i>Journal of the Electrochemical Society</i> , 2007, 154, A515.	2.9	170
15	Effect of fluoroethylene carbonate on high temperature capacity retention of LiMn ₂ O ₄ /graphite Li-ion cells. <i>Electrochimica Acta</i> , 2010, 55, 2073-2077.	5.2	153
16	Micro-Patterned Lithium Metal Anodes with Suppressed Dendrite Formation for Post Lithium-Ion Batteries. <i>Advanced Materials Interfaces</i> , 2016, 3, 1600140.	3.7	149
17	Co-polyimide-coated polyethylene separators for enhanced thermal stability of lithium ion batteries. <i>Electrochimica Acta</i> , 2012, 85, 524-530.	5.2	148
18	Suppressing Lithium Dendrite Growth by Metallic Coating on a Separator. <i>Advanced Functional Materials</i> , 2017, 27, 1704391.	14.9	141

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19	Energy efficient electrochemical reduction of CO ₂ to CO using a three-dimensional porphyrin/graphene hydrogel. <i>Energy and Environmental Science</i> , 2019, 12, 747-755.	30.8	125
20	Enhancing the Cycling Stability of Sodium Metal Electrodes by Building an Inorganic–Organic Composite Protective Layer. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 6000-6006.	8.0	124
21	A water-based Al ₂ O ₃ ceramic coating for polyethylene-based microporous separators for lithium-ion batteries. <i>Journal of Power Sources</i> , 2016, 315, 161-168.	7.8	123
22	Composite protective layer for Li metal anode in high-performance lithium–oxygen batteries. <i>Electrochemistry Communications</i> , 2014, 40, 45-48.	4.7	120
23	Synergistic thermal stabilization of ceramic/co-polyimide coated polypropylene separators for lithium-ion batteries. <i>Journal of Power Sources</i> , 2015, 294, 537-544.	7.8	108
24	Effect of succinic anhydride as an electrolyte additive on electrochemical characteristics of silicon thin-film electrode. <i>Journal of Power Sources</i> , 2010, 195, 3709-3714.	7.8	103
25	Highly Adhesive and Soluble Copolyimide Binder: Improving the Long-Term Cycle Life of Silicon Anodes in Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 14851-14858.	8.0	96
26	Directly grown Co ₃ O ₄ nanowire arrays on Ni-foam: structural effects of carbon-free and binder-free cathodes for lithium–oxygen batteries. <i>Journal of Materials Chemistry A</i> , 2014, 2, 11891.	10.3	92
27	Detrimental Effects of Chemical Crossover from the Lithium Anode to Cathode in Rechargeable Lithium Metal Batteries. <i>ACS Energy Letters</i> , 2018, 3, 2921-2930.	17.4	89
28	Measurement and Analysis of Adhesion Property of Lithium-Ion Battery Electrodes with SAICAS. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 526-531.	8.0	88
29	New flame-retardant composite separators based on metal hydroxides for lithium-ion batteries. <i>Electrochimica Acta</i> , 2015, 157, 282-289.	5.2	87
30	Silicon Nanofibrils on a Flexible Current Collector for Bendable Lithium–Ion Battery Anodes. <i>Advanced Functional Materials</i> , 2013, 23, 2108-2114.	14.9	85
31	Nitrogen-doped carbon coating for a high-performance SiO anode in lithium-ion batteries. <i>Electrochemistry Communications</i> , 2013, 34, 98-101.	4.7	84
32	Fabrication of polyacrylonitrile/lignin-based carbon nanofibers for high-power lithium ion battery anodes. <i>Journal of Solid State Electrochemistry</i> , 2013, 17, 2471-2475.	2.5	84
33	Fluorinated Carbonate-Based Electrolyte for High-Voltage Li(Ni _{0.5} Mn _{0.3} Co _{0.2})O ₂ /Graphite Lithium-Ion Battery. <i>Journal of the Electrochemical Society</i> , 2017, 164, A6381-A6385.	2.9	83
34	Electrospun Three-Dimensional Mesoporous Silicon Nanofibers as an Anode Material for High-Performance Lithium Secondary Batteries. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 12005-12010.	8.0	82
35	Defect-Free, Size-Tunable Graphene for High-Performance Lithium Ion Battery. <i>Nano Letters</i> , 2014, 14, 4306-4313.	9.1	82
36	Ionomer-Liquid Electrolyte Hybrid Ionic Conductor for High Cycling Stability of Lithium Metal Electrodes. <i>Scientific Reports</i> , 2015, 5, 14458.	3.3	81

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37	Separator grafted with siloxane by electron beam irradiation for lithium secondary batteries. <i>Electrochimica Acta</i> , 2009, 54, 4312-4315.	5.2	80
38	Effect of polydopamine surface coating on polyethylene separators as a function of their porosity for high-power Li-ion batteries. <i>Electrochimica Acta</i> , 2013, 113, 433-438.	5.2	76
39	Plasma-assisted water-based Al ₂ O ₃ ceramic coating for polyethylene-based microporous separators for lithium metal secondary batteries. <i>Electrochimica Acta</i> , 2016, 212, 649-656.	5.2	76
40	Structural modulation of lithium metal-electrolyte interface with three-dimensional metallic interlayer for high-performance lithium metal batteries. <i>Scientific Reports</i> , 2016, 6, 30830.	3.3	74
41	Silicon@porous nitrogen-doped carbon spheres through a bottom-up approach are highly robust lithium-ion battery anodes. <i>RSC Advances</i> , 2012, 2, 4311.	3.6	73
42	A gel polymer electrolyte based on initiator-free photopolymerization for lithium secondary batteries. <i>Electrochimica Acta</i> , 2012, 60, 23-30.	5.2	71
43	Dopamine as a Novel Electrolyte Additive for High-Voltage Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 21366-21372.	8.0	69
44	Effects of lithium salts on thermal stabilities of lithium alkyl carbonates in SEI layer. <i>Electrochimica Acta</i> , 2012, 83, 259-263.	5.2	68
45	Effects of Triacetoxysilane as SEI Layer Additive on Electrochemical Performance of Lithium Metal Secondary Battery. <i>Electrochemical and Solid-State Letters</i> , 2007, 10, A216.	2.2	64
46	Design optimization of LiNi _{0.6} Co _{0.2} Mn _{0.2} O ₂ /graphite lithium-ion cells based on simulation and experimental data. <i>Journal of Power Sources</i> , 2016, 319, 147-158.	7.8	62
47	Chemical aspect of oxygen dissolved in a dimethyl sulfoxide-based electrolyte on lithium metal. <i>Electrochimica Acta</i> , 2014, 123, 419-425.	5.2	61
48	A Flame-Retardant Composite Polymer Electrolyte for Lithium-Ion Polymer Batteries. <i>Electrochimica Acta</i> , 2017, 241, 553-559.	5.2	60
49	Effect of Al ₂ O ₃ coatings prepared by RF sputtering on polyethylene separators for high-power lithium ion batteries. <i>Macromolecular Research</i> , 2014, 22, 1190-1195.	2.4	58
50	Enhanced Stability of Lithium Metal Anode by using a 3D Porous Nickel Substrate. <i>ChemElectroChem</i> , 2018, 5, 761-769.	3.4	58
51	A comparative investigation of carbon black (Super-P) and vapor-grown carbon fibers (VGCFs) as conductive additives for lithium-ion battery cathodes. <i>RSC Advances</i> , 2015, 5, 95073-95078.	3.6	57
52	All-Solid-State Lithium Batteries: Li ⁺ -Conducting Ionomer Binder for Dry-Processed Composite Cathodes. <i>ACS Energy Letters</i> , 2022, 7, 1092-1100.	17.4	56
53	Interfacial enhancement between lithium electrode and polymer electrolytes. <i>Journal of Power Sources</i> , 2003, 119-121, 610-616.	7.8	54
54	Graphite/Silicon Hybrid Electrodes using a 3D Current Collector for Flexible Batteries. <i>Advanced Materials</i> , 2014, 26, 2977-2982.	21.0	53

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55	Diffusion-Dependent Graphite Electrode for All-Solid-State Batteries with Extremely High Energy Density. ACS Energy Letters, 2020, 5, 2995-3004.	17.4	53
56	Revisiting the Role of Conductivity and Polarity of Host Materials for Long-Life Lithium-Sulfur Battery. Advanced Energy Materials, 2020, 10, 1903934.	19.5	52
57	Semi-empirical long-term cycle life model coupled with an electrolyte depletion function for large-format graphite/LiFePO ₄ lithium-ion batteries. Journal of Power Sources, 2017, 365, 257-265.	7.8	52
58	Protective coating of lithium metal electrode for interfacial enhancement with gel polymer electrolyte. Solid State Ionics, 2004, 172, 19-24.	2.7	51
59	Effect of an organic additive on the cycling performance and thermal stability of lithium-ion cells assembled with carbon anode and LiNi _{1/3} Co _{1/3} Mn _{1/3} O ₂ cathode. Journal of Power Sources, 2011, 196, 6997-7001.	7.8	51
60	Effect of cathode/anode area ratio on electrochemical performance of lithium-ion batteries. Journal of Power Sources, 2013, 243, 641-647.	7.8	51
61	A facile method to enhance the uniformity and adhesion properties of water-based ceramic coating layers on hydrophobic polyethylene separators. Applied Surface Science, 2018, 427, 139-146.	6.1	50
62	Comparative study on experiments and simulation of blended cathode active materials for lithium ion batteries. Electrochimica Acta, 2016, 187, 422-432.	5.2	48
63	Robust Cycling of Ultrathin Li Metal Enabled by Nitrate-Preplanted Li Powder Composite. Advanced Energy Materials, 2021, 11, 2003769.	19.5	48
64	Nanocomposite single ion conductor based on organic-inorganic hybrid. Solid State Ionics, 2004, 167, 293-299.	2.7	47
65	Preparation and characterization of new microporous stretched membrane for lithium rechargeable battery. Journal of Power Sources, 2006, 163, 247-251.	7.8	47
66	Cost-effective and strongly integrated fabric-based wearable piezoelectric energy harvester. Nano Energy, 2020, 75, 104992.	16.0	45
67	Digital Twin-Driven All-Solid-State Battery: Unraveling the Physical and Electrochemical Behaviors. Advanced Energy Materials, 2020, 10, 2001563.	19.5	42
68	Polysulfide rejection layer from alpha-lipoic acid for high performance lithium-sulfur battery. Journal of Materials Chemistry A, 2015, 3, 323-330.	10.3	41
69	Stabilizing effect of 2-(triphenylphosphoranylidene) succinic anhydride as electrolyte additive on the lithium metal of lithium metal secondary batteries. Electrochimica Acta, 2015, 170, 353-359.	5.2	39
70	Highly rough copper current collector: improving adhesion property between a silicon electrode and current collector for flexible lithium-ion batteries. RSC Advances, 2017, 7, 35681-35686.	3.6	39
71	Hybrid gel polymer electrolyte based on 1-methyl-1-Propylpyrrolidinium Bis(Trifluoromethanesulfonyl) imide for flexible and shape-variant lithium secondary batteries. Journal of Membrane Science, 2021, 621, 119018.	8.2	39
72	Improved high-temperature performance of lithium-ion batteries through use of a thermally stable co-polyimide-based cathode binder. Journal of Power Sources, 2014, 252, 138-143.	7.8	38

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73	Interfacial barrier free organic-inorganic hybrid electrolytes for solid state batteries. Energy Storage Materials, 2021, 37, 306-314.	18.0	38
74	Protective layer with oligo(ethylene glycol) borate anion receptor for lithium metal electrode stabilization. Electrochemistry Communications, 2004, 6, 1238-1242.	4.7	36
75	In-depth correlation of separator pore structure and electrochemical performance in lithium-ion batteries. Journal of Power Sources, 2016, 325, 732-738.	7.8	36
76	A crosslinked nonwoven separator based on an organosoluble polyimide for high-performance lithium-ion batteries. Journal of Industrial and Engineering Chemistry, 2019, 72, 390-399.	5.8	36
77	Electrochemical effect of coating layer on the separator based on PVdF and PE non-woven matrix. Journal of Power Sources, 2005, 146, 431-435.	7.8	35
78	Recycling oil-extracted microalgal biomass residues into nano/micro hierarchical Sn/C composite anode materials for lithium-ion batteries. Electrochimica Acta, 2017, 250, 59-67.	5.2	35
79	Improving the Cycling Performance of Lithium-Ion Battery Si/Graphite Anodes Using a Soluble Polyimide Binder. ACS Omega, 2017, 2, 8438-8444.	3.5	35
80	Polydopamine-treated three-dimensional carbon fiber-coated separator for achieving high-performance lithium metal batteries. Journal of Power Sources, 2019, 430, 130-136.	7.8	35
81	Graphiteâ€“Silicon Diffusionâ€“Dependent Electrode with Short Effective Diffusion Length for Highâ€“Performance Allâ€“Solidâ€“State Batteries. Advanced Energy Materials, 2022, 12, .	19.5	34
82	Improvement of low-temperature performance by adopting polydimethylsiloxane-g-polyacrylate and lithium-modified silica nanosalt as electrolyte additives in lithium-ion batteries. Journal of Industrial and Engineering Chemistry, 2016, 37, 325-329.	5.8	33
83	Effect of nanopatterning on mechanical properties of Lithium anode. Scientific Reports, 2018, 8, 2514.	3.3	33
84	Structureâ€“Controlled Li Metal Electrodes for Postâ€“Liâ€“Ion Batteries: Recent Progress and Perspectives. Advanced Materials Interfaces, 2020, 7, 1902113.	3.7	33
85	Influence of tris(pentafluorophenyl) borane as an anion receptor on ionic conductivity of LiClO ₄ -based electrolyte for lithium batteries. Electrochimica Acta, 2005, 50, 2843-2848.	5.2	32
86	Solid polymer electrolytes based on crosslinkable polyoctahedral silsesquioxanes (POSS) for room temperature lithium polymer batteries. Journal of Solid State Electrochemistry, 2010, 14, 1445-1449.	2.5	32
87	Nature of Tris(pentafluorophenyl)borane as a Functional Additive and Its Contribution to High Rate Performance in Lithium-Ion Secondary Battery. Electrochemical and Solid-State Letters, 2010, 13, A55.	2.2	32
88	Flexible Binder-Free Metal Fibril Mat-Supported Silicon Anode for High-Performance Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2014, 6, 11544-11549.	8.0	32
89	Effect of Calcination Temperature on a P-type Na _{0.6} Mn _{0.65} Ni _{0.25} Co _{0.10} O ₂ Cathode Material for Sodium-Ion Batteries. Journal of the Electrochemical Society, 2017, 164, A6308-A6314.	2.9	32
90	Enhanced cycling performance of lithium metal secondary batteries with succinic anhydride as an electrolyte additive. Electrochimica Acta, 2014, 115, 525-530.	5.2	31

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91	A Mathematical Model for Cyclic Aging of Spinel $\text{LiMn}_{2}\text{O}_{4}$ /Graphite Lithium-Ion Cells. Journal of the Electrochemical Society, 2016, 163, A2757-A2767.	2.9	31
92	Composite protection layers for dendrite-suppressing non-granular micro-patterned lithium metal anodes. Electrochimica Acta, 2018, 282, 343-350.	5.2	29
93	Self-Healing Wide and Thin Li Metal Anodes Prepared Using Calendared Li Metal Powder for Improving Cycle Life and Rate Capability. ACS Applied Materials & Interfaces, 2018, 10, 16521-16530.	8.0	29
94	Revisiting TiS_2 as a diffusion-dependent cathode with promising energy density for all-solid-state lithium secondary batteries. Energy Storage Materials, 2021, 41, 289-296.	18.0	28
95	Effect of Al_2O_3 ceramic fillers in $\text{LiNi}_{1/3}\text{Co}_{1/3}\text{Mn}_{1/3}\text{O}_2$ cathodes for improving high-voltage cycling and rate capability performance. Electrochimica Acta, 2018, 259, 578-586.	5.2	27
96	Effect of the dielectric constant of a liquid electrolyte on lithium metal anodes. Electrochimica Acta, 2019, 300, 299-305.	5.2	27
97	Mussel-inspired Polydopamine-treated Copper Foil as a Current Collector for High-performance Silicon Anodes. Scientific Reports, 2016, 6, 30945.	3.3	26
98	Effects of an Integrated Separator/Electrode Assembly on Enhanced Thermal Stability and Rate Capability of Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2017, 9, 17814-17821.	8.0	26
99	Electrode design methodology for all-solid-state batteries: 3D structural analysis and performance prediction. Energy Storage Materials, 2019, 19, 124-129.	18.0	26
100	Enhancement of the mechanical properties of PVdF membranes by non-solvent aided morphology control. Journal of Power Sources, 2007, 170, 191-195.	7.8	24
101	A facile approach to prepare biomimetic composite separators toward safety-enhanced lithium secondary batteries. RSC Advances, 2015, 5, 39392-39398.	3.6	23
102	Mechanical robustness of composite electrode for lithium ion battery: Insight into entanglement & crystallinity of polymeric binder. Electrochimica Acta, 2020, 332, 135471.	5.2	23
103	Low Resistance Flexible Current Collector for Lithium Secondary Battery. Electrochemical and Solid-State Letters, 2011, 14, A116-A119.	2.2	22
104	The effects of humidity on the self-discharge properties of $\text{Li}(\text{Ni}_{1/3}\text{Co}_{1/3}\text{Mn}_{1/3})\text{O}_2$ /graphite and LiCoO_2 /graphite lithium-ion batteries during storage. RSC Advances, 2017, 7, 10915-10921.	3.6	22
105	Guided Lithium Deposition by Surface Micro-Patterning of Lithium-Metal Electrodes. ChemElectroChem, 2018, 5, 3169-3175.	3.4	22
106	Effect of LiCoO_2 Cathode Density and Thickness on Electrochemical Performance of Lithium-Ion Batteries. Journal of Electrochemical Science and Technology, 2013, 4, 27-33.	2.2	21
107	Effect of LiCoO_2 Cathode Density and Thickness on Electrochemical Performance of Lithium-Ion Batteries. Journal of Electrochemical Science and Technology, 2013, 4, 27-33.	2.2	21
108	2-(triphenylphosphoranylidene) succinic anhydride as a new electrolyte additive to improve high temperature cycle performance of LiMn_2O_4 /graphite Li-ion batteries. Electrochimica Acta, 2013, 102, 97-103.	5.2	20

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109	Size effects of micro-pattern on lithium metal surface on the electrochemical performance of lithium metal secondary batteries. <i>Journal of Power Sources</i> , 2018, 408, 136-142.	7.8	20
110	High-Rate Cycling of Lithium-Metal Batteries Enabled by Dual-Salt Electrolyte-Assisted Micropatterned Interfaces. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 31777-31785.	8.0	20
111	Highly ion-conductive solid polymer electrolytes based on polyethylene non-woven matrix. <i>Electrochimica Acta</i> , 2006, 52, 1582-1587.	5.2	19
112	Three-Dimensional Adhesion Map Based on Surface and Interfacial Cutting Analysis System for Predicting Adhesion Properties of Composite Electrodes. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 23688-23695.	8.0	19
113	Effects of vinylene carbonate and 1,3-propane sultone on high-rate cycle performance and surface properties of high-nickel layered oxide cathodes. <i>Materials Research Bulletin</i> , 2020, 132, 111008.	5.2	19
114	Elucidating the Polymeric Binder Distribution within Lithium-Ion Battery Electrodes Using SAICAS. <i>ChemPhysChem</i> , 2018, 19, 1627-1634.	2.1	18
115	Highly improved thermal stability of the ceramic coating layer on the polyethylene separator via chemical crosslinking between ceramic particles and polymeric binders. <i>Chemical Engineering Journal</i> , 2022, 433, 134501.	12.7	18
116	Effect of LiFePO ₄ cathode density and thickness on electrochemical performance of lithium metal polymer batteries prepared by in situ thermal polymerization. <i>Electrochimica Acta</i> , 2015, 154, 149-156.	5.2	17
117	Comparative Study of the Adhesion Properties of Ceramic Composite Separators Using a Surface and Interfacial Cutting Analysis System for Lithium-Ion Batteries. <i>ACS Omega</i> , 2017, 2, 2159-2164.	3.5	17
118	Dimension-controlled solid oxide electrolytes for all-solid-state electrodes: Percolation pathways, specific contact area, and effective ionic conductivity. <i>Chemical Engineering Journal</i> , 2020, 391, 123528.	12.7	17
119	All-solid-state hybrid electrode configuration for high-performance all-solid-state batteries: Comparative study with composite electrode and diffusion-dependent electrode. <i>Journal of Power Sources</i> , 2022, 518, 230736.	7.8	17
120	Understanding the effects of diffusion coefficient and exchange current density on the electrochemical model of lithium-ion batteries. <i>Current Opinion in Electrochemistry</i> , 2022, 34, 100986.	4.8	17
121	Insights into Lithium Surface: Stable Cycling by Controlled 10 μ m Deep Surface Relief, Reinterpreting the Natural Surface Defect on Lithium Metal Anode. <i>ACS Applied Energy Materials</i> , 2019, 2, 5656-5664.	5.1	16
122	Effect of the Quantity of Liquid Electrolyte on Self-Healing Electrostatic Shield Mechanism of CsPF ₆ Additive for Li Metal Anodes. <i>ACS Omega</i> , 2019, 4, 11724-11727.	3.5	16
123	3D electrochemical model for a Single Secondary Particle and its application for operando analysis. <i>Nano Energy</i> , 2019, 62, 810-817.	16.0	16
124	Unraveling the limitations of solid oxide electrolytes for all-solid-state electrodes through 3D digital twin structural analysis. <i>Nano Energy</i> , 2021, 79, 105456.	16.0	16
125	Binder-free metal fibril-supported Fe ₂ O ₃ anodes for high-performance lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2014, 2, 2906.	10.3	15
126	Effect of liquid oil additive on lithium-ion battery ceramic composite separator prepared with an aqueous coating solution. <i>Journal of Alloys and Compounds</i> , 2016, 675, 341-347.	5.5	15

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127	Crosslinkable polyhedral silsesquioxane-based ceramic-coated separators for Li-ion batteries. Journal of Industrial and Engineering Chemistry, 2019, 71, 277-283.	5.8	15
128	Mussel-Inspired Polydopamine-Functionalized Super-P as a Conductive Additive for High-Performance Silicon Anodes. Advanced Materials Interfaces, 2016, 3, 1600270.	3.7	14
129	A coupled chemo-mechanical model to study the effects of adhesive strength on the electrochemical performance of silicon electrodes for advanced lithium ion batteries. Journal of Power Sources, 2018, 407, 153-161.	7.8	14
130	Thin and porous polymer membrane-based electrochromic devices. Journal of Materials Chemistry C, 2019, 7, 1042-1047.	5.5	14
131	Suppression of dendrites and granules in surface-patterned Li metal anodes using CsPF ₆ . Journal of Power Sources, 2019, 413, 344-350.	7.8	14
132	A Physics-Based Model Capacity Fade Analysis of LiMn ₂ O ₄ /Graphite Cell at Different Temperatures. Journal of the Electrochemical Society, 2019, 166, A5109-A5116.	2.9	14
133	Study on dead-Li suppression mechanism of Li-hosting vapor-grown-carbon-nanofiber-based protective layer for Li metal anodes. Journal of Power Sources, 2019, 409, 132-138.	7.8	14
134	Scaffold-structured polymer binders for long-term cycle performance of stabilized lithium-powder electrodes. Electrochimica Acta, 2020, 364, 136878.	5.2	14
135	Hybrid Effect of Micropatterned Lithium Metal and Three Dimensionally Ordered Macroporous Polyimide Separator on the Cycle Performance of Lithium Metal Batteries. ACS Applied Energy Materials, 2020, 3, 3721-3727.	5.1	14
136	Synergistic Effect of a Dual-Salt Liquid Electrolyte with a LiNO ₃ Functional Additive toward Stabilizing Thin-Film Li Metal Electrodes for Li Secondary Batteries. ACS Applied Materials & Interfaces, 2021, 13, 31605-31613.	8.0	14
137	Supercapacitive properties of electrodeposited polypyrrole on acrylonitrile-butadiene rubber as a flexible current collector. Polymer Bulletin, 2012, 69, 873-880.	3.3	13
138	Improving Lithium-Metal Battery Performance under the Conditions of Lean Electrolyte through MoS ₂ Coating. ChemElectroChem, 2020, 7, 890-892.	3.4	13
139	Effect of back-side-coated electrodes on electrochemical performances of lithium-ion batteries. Journal of Power Sources, 2015, 275, 712-719.	7.8	12
140	High-rate cycling performance and surface analysis of LiNi ₁ -Co ₂ Mn ₂ O ₂ (x=2/3, 0.4, 0.2) cathode materials. Materials Chemistry and Physics, 2019, 222, 1-10.	4.0	12
141	Submicron interlayer for stabilizing thin Li metal powder electrode. Chemical Engineering Journal, 2021, 406, 126834.	12.7	12
142	Electrode Alignment: Ignored but Important Design Parameter in Assembling Coin-Type Full Lithium-Ion Cells. Journal of the Electrochemical Society, 2022, 169, 023502.	2.9	12
143	New crosslinking agent as a Lewis acid for solid polymer electrolytes. Journal of Power Sources, 2007, 174, 603-606.	7.8	11
144	Structural Effect of Conductive Carbons on the Adhesion and Electrochemical Behavior of LiNi _{0.4} Mn _{0.4} Co _{0.2} O ₂ Cathode for Lithium Ion Batteries. Journal of Electrochemical Science and Technology, 2018, 9, 330-338.	2.2	11

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145	Anion receptor-coated separator for lithium-ion polymer battery. Journal of Solid State Electrochemistry, 2011, 15, 753-757.	2.5	10
146	Electrolyte-free graphite electrode with enhanced interfacial conduction using Li ⁺ -conductive binder for high-performance all-solid-state batteries. Energy Storage Materials, 2022, 49, 481-492.	18.0	10
147	Surface Reinforcing Balloon Trick-Inspired Separator/Li Metal Integrated Assembly To Improve the Electrochemical Performance of Li Metal Batteries. ACS Applied Materials & Interfaces, 2019, 11, 43122-43129.	8.0	9
148	Sensitivity of power of lithium-ion batteries to temperature: A case study using cylindrical- and pouch-type cells. Journal of Power Sources, 2020, 465, 228238.	7.8	9
149	Effect of electrolyte concentration on electrochromic performance of sputtered tungsten oxide film: Experiments and simulation. Electrochimica Acta, 2021, 369, 137699.	5.2	8
150	Highly stable 2,3,5,6-tetrachloro-1,4-benzoquinone electrodes for supercapacitors. Synthetic Metals, 2017, 231, 25-33.	3.9	7
151	Toward understanding the real mechanical robustness of composite electrode impregnated with a liquid electrolyte. Applied Materials Today, 2020, 21, 100809.	4.3	7
152	Effect of Varying the Ratio of Carbon Black to Vapor-Grown Carbon Fibers in the Separator on the Performance of Li ⁺ S Batteries. Nanomaterials, 2019, 9, 436.	4.1	6
153	Highly Stable Porous Polyimide Sponge as a Separator for Lithium-Metal Secondary Batteries. Nanomaterials, 2020, 10, 1976.	4.1	6
154	Large-area surface-patterned Li metal anodes fabricated using large, flexible patterning stamps for Li metal secondary batteries. Journal of Power Sources, 2021, 514, 230553.	7.8	6
155	Design of Thin-Film Interlayer between Silicon Electrode and Current Collector Using a Chemo-Mechanical Degradation Model. Journal of the Electrochemical Society, 2020, 167, 080542.	2.9	5
156	Unraveling the cohesive and interfacial adhesive strengths of electrodes for automotive fuel cells. Journal of Power Sources, 2020, 455, 227928.	7.8	5
157	Upgrading the Properties of Ceramic-Coated Separators for Lithium Secondary Batteries by Changing the Mixing Order of the Water-Based Ceramic Slurry Components. Batteries, 2022, 8, 64.	4.5	5
158	Time-Effective Accelerated Cyclic Aging Analysis of Lithium-Ion Batteries. ChemElectroChem, 2019, 6, 3714-3725.	3.4	4
159	Soluble Polyimide Binder for Silicon Electrodes in Lithium Secondary Batteries. Applied Chemistry for Engineering, 2015, 26, 674-680.	0.2	3
160	Computational Simulation on Power Prediction of Lithium Secondary Batteries by using Pulse-based Measurement Methods. KEPCO Journal on Electric Power and Energy, 2015, 1, 33-38.	0.1	3
161	Effects of Lithium Bis(Oxalate) Borate as an Electrolyte Additive on High-Temperature Performance of Li(Ni ^{1/3} Co ^{1/3} Mn ^{1/3})O ₂ /Graphite Cells. Journal of the Korean Electrochemical Society, 2015, 18, 58-67.	0.1	3
162	Statistical and computational analysis for state-of-health and heat generation behavior of long-term cycled LiNi _{0.8} Co _{0.15} Al _{0.05} O ₂ /Graphite cylindrical lithium-ion cells for energy storage applications. Journal of Power Sources, 2022, 529, 231240.	7.8	1

#	ARTICLE	IF	CITATIONS
163	Understanding the Selective Deposition of Li Metal on Nonuniform Electrode Surfaces Using Atomic Force Microscopy. Journal of the Electrochemical Society, 2021, 168, 020534.	2.9	0
164	Quantitative Analysis of Solid-State Energy Devices Via 3D Reconstruction Using a FIB/SEM Dual Beam System. ECS Meeting Abstracts, 2021, MA2021-03, 253-253.	0.0	0
165	A 1D Mathematical Model to Study the Effects of Adhesive Strength on the Electrochemical Performance of Silicon Electrodes for Advanced Lithium Ion Batteries. ECS Meeting Abstracts, 2018, , .	0.0	0
166	Effect of LiNO ₃ Electrolyte Additives for Improved the Rate Capability of Micro-Patterned Lithium Metal Anode. ECS Meeting Abstracts, 2018, , .	0.0	0
167	Polymeric Binder Distribution within LiCoO ₂ Electrodes By Using a Surface and Interfacial Cutting Analysis System (SAICAS). ECS Meeting Abstracts, 2018, , .	0.0	0
168	Semi-Empirical Cycle Life Model with Electrolyte Depletion Function for Long Cycle Prediction of Lithium-Ion Battery. ECS Meeting Abstracts, 2018, , .	0.0	0
169	Micro-Patterning Technology and Conformal Protective Coating for Lithium Metal Electrodes. ECS Meeting Abstracts, 2018, , .	0.0	0
170	Unveiling Polymeric Binder Distribution within Electrodes for High-Energy-Density Li-Ion Batteries By Measuring Adhesion Properties As a Function of Depth. ECS Meeting Abstracts, 2018, , .	0.0	0
171	A Study on Overcoming the Inert Capacity of Polymer Sulfide Electrode with Conducting Materials. ECS Meeting Abstracts, 2018, , .	0.0	0
172	Advanced Cycle Life Model Based on 18650 Lithium-Ion Battery Cells. ECS Meeting Abstracts, 2018, , .	0.0	0
173	Size-Effects of Micropattern on Lithium Metal Surface on the Electrochemical Performance of Lithium Metal Secondary Batteries. ECS Meeting Abstracts, 2019, , .	0.0	0
174	A Single Secondary Particle Model for LiFePO ₄ Electrochemical Performance Evaluation.. ECS Meeting Abstracts, 2019, , .	0.0	0
175	Study on the Distribution of Polymeric Binder in Lib Composite Electrodes By Measuring Adhesion at Different Depths. ECS Meeting Abstracts, 2019, , .	0.0	0
176	Effects of a Novel Fluorinated Linear Carbonate Additive on the High Voltage Performance of Lithium Ion Batteries. ECS Meeting Abstracts, 2019, , .	0.0	0
177	Three-Dimensional Structural Analysis of All-Solid-State Electrode with Oxide-Based Solid Electrolyte. ECS Meeting Abstracts, 2019, , .	0.0	0
178	New Analytical Method to Reveal the Adhesion Properties in the Composite Electrodes for Lithium-Ion Batteries. ECS Meeting Abstracts, 2019, , .	0.0	0
179	Ultra-Thin Nitrate-Preplanted Li Powder Composite for Lithium Metal Secondary Battery. ECS Meeting Abstracts, 2021, MA2021-02, 1688-1688.	0.0	0
180	Simulation Model Based Real Time Analysis and Design for Single Secondary Particle. ECS Meeting Abstracts, 2021, MA2021-02, 1680-1680.	0.0	0

#	ARTICLE	IF	CITATIONS
181	Effect of AgNO ₃ in Lithium Metal Powder Electrodes. ECS Meeting Abstracts, 2021, MA2021-02, 1689-1689.	0.0	0
182	Effect of Electrolyte Concentration on the Electrochromic Properties of Tungsten Oxide Thin Films. ECS Meeting Abstracts, 2020, MA2020-02, 2072-2072.	0.0	0
183	Real-Time Analysis of a Single Secondary Particle Using an Electrochemical Modeling. ECS Meeting Abstracts, 2020, MA2020-02, 57-57.	0.0	0
184	Development of Flame Retarding Separator for Lithium Ion Battery By Crosslinkable Binder Coating. ECS Meeting Abstracts, 2020, MA2020-02, 3479-3479.	0.0	0
185	Digital Twin-Driven All-Solid-State Lithium-Ion Battery. ECS Meeting Abstracts, 2020, MA2020-02, 993-993.	0.0	0
186	(Invited) Digital Twin-Driven Battery Modeling: Understanding the Physical and Electrochemical Behavior during Fast-Charging. ECS Meeting Abstracts, 2020, MA2020-02, 620-620.	0.0	0
187	Analysis of Mechanical Properties of Composite Electrode with Different Binder Molecular Weights. ECS Meeting Abstracts, 2020, MA2020-02, 3481-3481.	0.0	0
188	Hybrid Effect of Micro-Patterned Lithium Metal and Three Dimensionally Ordered Macroporous Polyimide Separator on the Cycle Performance of Lithium Metal Batteries. ECS Meeting Abstracts, 2020, MA2020-02, 3480-3480.	0.0	0
189	Stabilization of Li Metal Powder Anodes on Cu Foil Current Collectors Using Thin Carbon Interlayers. ECS Meeting Abstracts, 2020, MA2020-02, 3482-3482.	0.0	0
190	Model Approach on Crack Growth within High Nickel Cathode Materials. ECS Meeting Abstracts, 2020, MA2020-02, 3483-3483.	0.0	0
191	A New Perspective on the Advanced Microblade Cutting Method for Reliable Adhesion Measurement of Composite Electrodes. Journal of Electrochemical Science and Technology, 0, , .	2.2	0
192	New Insights on Electrochemical Parameters in Battery Modeling through 3D Digital Twin Structural Analysis. ECS Meeting Abstracts, 2022, MA2022-01, 185-185.	0.0	0
193	A Thermo-Electrochemical Model for Simulating Internal Short Circuits in a Li-Ion Battery Depending on Lithium Dendrites. ECS Meeting Abstracts, 2022, MA2022-01, 2258-2258.	0.0	0
194	Study of Improving the Thermal Stability of Ceramic Coated Separator Via Chemical Crosslinking between Ceramic Particles and Polymeric Binders. ECS Meeting Abstracts, 2022, MA2022-01, 2259-2259.	0.0	0
195	Unveiling the Effects of the Diffusivity and Exchange Current Density on the Electrochemical Modeling of Lithium-Ion Battery. ECS Meeting Abstracts, 2022, MA2022-01, 2252-2252.	0.0	0
196	3D Modeling on Diffusion-Dependent Graphite-Silicon Electrode for All-Solid-State Batteries. ECS Meeting Abstracts, 2022, MA2022-01, 2260-2260.	0.0	0
197	Robust Cycling of Ultrathin Li-Metal Enabled By Nitrate-Preplanted Li Powder Electrode. ECS Meeting Abstracts, 2022, MA2022-01, 2253-2253.	0.0	0