Yoon Seok Jung

List of Publications by Year
in descending order

95 papers	10,449 citations	34493 54 h-index	43601 95 g-index
100 all docs	100 docs citations	100 times ranked	10587 citing authors

#	Article	IF	Citations
1	Tactical hybrids of Li+-conductive dry polymer electrolytes with sulfide solid electrolytes: Toward practical all-solid-state batteries with wider temperature operability. Materials Today, 2022, 53, 7-15.	8.3	34
2	Electrochemo-mechanical effects as a critical design factor for all-solid-state batteries. Current Opinion in Solid State and Materials Science, 2022, 26, 100977.	5.6	32
3	Universal Solution Synthesis of Sulfide Solid Electrolytes Using Alkahest for Allâ€Solidâ€State Batteries. Advanced Materials, 2022, 34, e2200083.	11.1	36
4	Li+ conduction in aliovalent-substituted monoclinic Li2ZrCl6 for all-solid-state batteries: Li2+xZr1-xMxCl6 (MÂ=Âln, Sc). Chemical Engineering Journal, 2022, 437, 135413.	6.6	34
5	Scalable fabrication of sheet-type electrodes for practical all-solid-state batteries employing sulfide solid electrolytes. Current Opinion in Electrochemistry, 2022, 34, 101026.	2.5	7
6	Three-dimensional networking binders prepared in situ during wet-slurry process for all-solid-state batteries operating under low external pressure. Energy Storage Materials, 2022, 49, 219-226.	9.5	31
7	Emerging Halide Superionic Conductors for All-Solid-State Batteries: Design, Synthesis, and Practical Applications. ACS Energy Letters, 2022, 7, 1776-1805.	8.8	106
8	Operando electrochemical pressiometry probing interfacial evolution of electrodeposited thin lithium metal anodes for all-solid-state batteries. Energy Storage Materials, 2022, 50, 543-553.	9.5	16
9	Wet-slurry fabrication using PVdF-HFP binder with sulfide electrolytes via synergetic cosolvent approach for all-solid-state batteries. Chemical Engineering Journal, 2022, 450, 138047.	6.6	13
10	New Costâ€Effective Halide Solid Electrolytes for Allâ€Solidâ€State Batteries: Mechanochemically Prepared Fe³⁺â€Substituted Li₂ZrCl₆. Advanced Energy Materials, 2021, 11, 2003190.	10.2	132
11	Allâ€Solidâ€State Batteries: New Costâ€Effective Halide Solid Electrolytes for Allâ€Solidâ€State Batteries: Mechanochemically Prepared Fe³⁺â€Substituted Li₂ZrCl₆ (Adv.) Tj ETQq1 1 0.784314 rgBT /Ov[illegible]	10.2	4
12	Tailoring Slurries Using Cosolvents and Li Salt Targeting Practical Allâ€Solidâ€State Batteries Employing Sulfide Solid Electrolytes. Advanced Energy Materials, 2021, 11, 2003766.	10.2	41
13	Singleâ€or Polyâ€Crystalline Niâ€Rich Layered Cathode, Sulfide or Halide Solid Electrolyte: Which Will be the Winners for Allâ€Solidâ€State Batteries?. Advanced Energy Materials, 2021, 11, 2100126.	10.2	148
14	Na2ZrCl6 enabling highly stable 3 V all-solid-state Na-ion batteries. Energy Storage Materials, 2021, 37, 47-54.	9.5	53
15	Methyl Viologen Anolyte Introducing Nitrate as Counter-Anion for an Aqueous Redox Flow Battery. Journal of the Electrochemical Society, 2021, 168, 100532.	1.3	8
16	Heat treatment protocol for modulating ionic conductivity via structural evolution of Li3-xYb1-xMxCl6 (MÂ=ÂHf4+, Zr4+) new halide superionic conductors for all-solid-state batteries. Chemical Engineering Journal, 2021, 425, 130630.	6.6	71
17	Wetâ€Chemical Tuning of Li 3â^’ x PS 4 (0â‰ x â‰0.3) Enabled by Dual Solvents for Allâ€Solidâ€State Lithiumâ€Ion Batteries. ChemSusChem, 2020, 13, 146-151.	3.6	12
18	Li+ conduction in air-stable Sb-Substituted Li4SnS4 for all-solid-state Li-Ion batteries. Journal of Power Sources, 2020, 446, 227338.	4.0	75

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19	Niâ€Rich Layered Cathode Materials with Electrochemoâ€Mechanically Compliant Microstructures for Allâ€Solidâ€State Li Batteries. Advanced Energy Materials, 2020, 10, 1903360.	10.2	136
20	Crystallization of closo-borate electrolytes from solution enabling infiltration into slurry-casted porous electrodes for all-solid-state batteries. Energy Storage Materials, 2020, 26, 543-549.	9.5	50
21	Digital Twinâ€Driven Allâ€Solidâ€State Battery: Unraveling the Physical and Electrochemical Behaviors. Advanced Energy Materials, 2020, 10, 2001563.	10.2	42
22	Tailoring Solution-Processable Li Argyrodites Li_{6+<i>x</i>}P_{1â€“<i>x</i>}M_{<i>x</i>}S₅I (M = Ge, Sn) and Their Microstructural Evolution Revealed by Cryo-TEM for All-Solid-State Batteries. Nano Letters, 2020, 20, 4337-4345.	4.5	67
23	Operando Differential Electrochemical Pressiometry for Probing Electrochemoâ€Mechanics in Allâ€Solidâ€State Batteries. Advanced Functional Materials, 2020, 30, 2002535.	7.8	41
24	Thin and Flexible Solid Electrolyte Membranes with Ultrahigh Thermal Stability Derived from Solution-Processable Li Argyrodites for All-Solid-State Li-Ion Batteries. ACS Energy Letters, 2020, 5, 718-727.	8.8	126
25	How Certain Are the Reported Ionic Conductivities of Thiophosphate-Based Solid Electrolytes? An Interlaboratory Study. ACS Energy Letters, 2020, 5, 910-915.	8.8	98
26	Synthesis of nano-sized urchin-shaped LiFePO₄ for lithium ion batteries. RSC Advances, 2019, 9, 13714-13721.	1.7	19
27	Slurryâ€Fabricable Li⁺â€Conductive Polymeric Binders for Practical Allâ€Solidâ€State Lithiumâ€Ion Batteries Enabled by Solvate Ionic Liquids. Advanced Energy Materials, 2019, 9, 1802927.	10.2	135
28	Sheet-type Li6PS5Cl-infiltrated Si anodes fabricated by solution process for all-solid-state lithium-ion batteries. Journal of Power Sources, 2019, 426, 143-150.	4.0	84
29	Design Strategies, Practical Considerations, and New Solution Processes of Sulfide Solid Electrolytes for Allâ€Solidâ€State Batteries. Advanced Energy Materials, 2018, 8, 1800035.	10.2	410
30	New Naâ€Ion Solid Electrolytes Na_{4â^'}<i>_x</i>Sn_{1â^'}<i>_x</i>Sb<i>_x</i>S₄ (0.02 â‰ <i>x</i> â‰ 0.33) for Allâ€Solidâ€State Naâ€Ion Batteries. Advanced Energy Materials, 2018, 8, 1702716.	10.2	91
31	Toward practical all-solid-state lithium-ion batteries with high energy density and safety: Comparative study for electrodes fabricated by dry- and slurry-mixing processes. Journal of Power Sources, 2018, 375, 93-101.	4.0	267
32	Aqueous-solution synthesis of Na₃SbS₄ solid electrolytes for all-solid-state Na-ion batteries. Journal of Materials Chemistry A, 2018, 6, 840-844.	5.2	77
33	SiO2@V2O5@Al2O3 coreâ€“shell catalysts with high activity and stability for methane oxidation to formaldehyde. Journal of Catalysis, 2018, 368, 134-144.	3.1	19
34	Li₃BO₃â€“Li₂CO₃: Rationally Designed Buffering Phase for Sulfide All-Solid-State Li-Ion Batteries. Chemistry of Materials, 2018, 30, 8190-8200.	3.2	162
35	Vacancy-Driven Na⁺ Superionic Conduction in New Ca-Doped Na₃PS₄ for All-Solid-State Na-Ion Batteries. ACS Energy Letters, 2018, 3, 2504-2512.	8.8	101
36	Diagnosis of failure modes for all-solid-state Li-ion batteries enabled by three-electrode cells. Journal of Materials Chemistry A, 2018, 6, 14867-14875.	5.2	44

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37	Facile Method to Prepare for the Ni₂P Nanostructures with Controlled Crystallinity and Morphology as Anode Materials of Lithium-Ion Batteries. ACS Omega, 2018, 3, 7655-7662.	1.6	20
38	Solution-derived glass-ceramic NaIÂ·Na₃SbS₄ superionic conductors for all-solid-state Na-ion batteries. Journal of Materials Chemistry A, 2018, 6, 17192-17200.	5.2	41
39	Coordination Polymers for High-Capacity Li-Ion Batteries: Metal-Dependent Solid-State Reversibility. ACS Applied Materials & Interfaces, 2018, 10, 22110-22118.	4.0	31
40	Extremely conductive RuO2-coated LiNi0.5Mn1.5O4 for lithium-ion batteries. Electrochimica Acta, 2017, 232, 236-243.	2.6	35
41	Coatable Li₄SnS₄ Solid Electrolytes Prepared from Aqueous Solutions for Allâ€Solidâ€State Lithiumâ€Ion Batteries. ChemSusChem, 2017, 10, 2605-2611.	3.6	84
42	Infiltration of Solution-Processable Solid Electrolytes into Conventional Li-Ion-Battery Electrodes for All-Solid-State Li-Ion Batteries. Nano Letters, 2017, 17, 3013-3020.	4.5	281
43	Single-step wet-chemical fabrication of sheet-type electrodes from solid-electrolyte precursors for all-solid-state lithium-ion batteries. Journal of Materials Chemistry A, 2017, 5, 20771-20779.	5.2	123
44	Enhanced electrochemical performance of surface-treated Li[Ni0.8Co0.1Mn0.1]O2 cathode material for lithium-ion batteries. , 2016, , .		1
45	Semimicro-size agglomerate structured silicon-carbon composite as an anode material for high performance lithium-ion batteries. Journal of Power Sources, 2016, 334, 128-136.	4.0	47
46	Na₃SbS₄: A Solution Processable Sodium Superionic Conductor for Allâ€Solidâ€State Sodiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2016, 55, 9634-9638.	7.2	266
47	Na₃SbS₄: A Solution Processable Sodium Superionic Conductor for Allâ€Solidâ€State Sodiumâ€Ion Batteries. Angewandte Chemie, 2016, 128, 9786-9790.	1.6	85
48	Ammonium Fluoride Mediated Synthesis of Anhydrous Metal Fluorideâ€"Mesoporous Carbon Nanocomposites for High-Performance Lithium Ion Battery Cathodes. ACS Applied Materials & Interfaces, 2016, 8, 35180-35190.	4.0	62
49	Graphene Oxide Assisted Synthesis of Self-assembled Zinc Oxide for Lithium-Ion Battery Anode. Chemistry of Materials, 2016, 28, 8498-8503.	3.2	78
50	Solutionâ€Processable Glass LiIâ€Li₄SnS₄ Superionic Conductors for Allâ€Solidâ€State Liâ€Ion Batteries. Advanced Materials, 2016, 28, 1874-1883.	11.1	265
51	All-solid-state lithium-ion batteries with TiS₂ nanosheets and sulphide solid electrolytes. Journal of Materials Chemistry A, 2016, 4, 10329-10335.	5.2	88
52	Porous spherical polyacrylonitrile-carbon nanocomposite with high loading of sulfur for lithiumâ€"sulfur batteries. Journal of Power Sources, 2016, 302, 70-78.	4.0	77
53	Excellent Compatibility of Solvate Ionic Liquids with Sulfide Solid Electrolytes: Toward Favorable Ionic Contacts in Bulkâ€Type Allâ€Solidâ€State Lithiumâ€Ion Batteries. Advanced Energy Materials, 2015, 5, 1500865.	10.2	134
54	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 (Adv. Energy Mater.) Tj ETQq0 0 0 rgBT /Overlock 10 T	10.2	2

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55	Issues and Challenges for Bulkâ€Type Allâ€Solidâ€State Rechargeable Lithium Batteries using Sulfide Solid Electrolytes. Israel Journal of Chemistry, 2015, 55, 472-485.	1.0	216
56	Surface chemistry of LiNi0.5Mn1.5O4 particles coated by Al2O3 using atomic layer deposition for lithium-ion batteries. Journal of Power Sources, 2015, 274, 1254-1262.	4.0	188
57	Bendable and Thin Sulfide Solid Electrolyte Film: A New Electrolyte Opportunity for Free-Standing and Stackable High-Energy All-Solid-State Lithium-Ion Batteries. Nano Letters, 2015, 15, 3317-3323.	4.5	233
58	All-Solid-State Rechargeable Lithium Batteries Using LiTi₂(PS₄)₃Cathode with Li₂S-P₂S₅Solid Electrolyte. Journal of the Electrochemical Society, 2014, 161, A154-A159.	1.3	20
59	Tin Phosphide as a Promising Anode Material for Naâ€Ion Batteries. Advanced Materials, 2014, 26, 4139-4144.	11.1	356
60	Comparative Study of TiS 2 /Li-In All-Solid-State Lithium Batteries Using Glass-Ceramic Li 3 PS 4 and Li 10 GeP 2 S 12 Solid Electrolytes. Electrochimica Acta, 2014, 146, 395-402.	2.6	187
61	Interfacial Architecture for Extra Li+ Storage in All-Solid-State Lithium Batteries. Scientific Reports, 2014, 4, 5572.	1.6	59
62	Robust lithium-ion anodes based on nanocomposites of iron oxideâ€"carbonâ€"silicate. Journal of Materials Chemistry A, 2013, 1, 4539.	5.2	24
63	Unexpected Improved Performance of ALD Coated LiCoO₂/Graphite Liâ€Ion Batteries. Advanced Energy Materials, 2013, 3, 213-219.	10.2	206
64	Ion-Exchangeable Functional Binders and Separator for High Temperature Performance of Li_{1.1}Mn_{1.86}Mg_{0.04}O₄Spinel Electrodes in Lithium Ion Batteries. Journal of the Electrochemical Society, 2013, 160, A2234-A2243.	1.3	21
65	Implications of the formation of small polarons in Li<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>O<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>for Li-air batteries. Physical Review B, 2012, 85, .	1.1	74
66	Carbon-coated nanoclustered LiMn0.71Fe0.29PO4 cathode for lithium-ion batteries. Journal of Power Sources, 2012, 216, 162-168.	4.0	42
67	Improved Functionality of Lithiumâ€Ion Batteries Enabled by Atomic Layer Deposition on the Porous Microstructure of Polymer Separators and Coating Electrodes. Advanced Energy Materials, 2012, 2, 1022-1027.	10.2	213
68	Using Atomic Layer Deposition to Hinder Solvent Decomposition in Lithium Ion Batteries: First-Principles Modeling and Experimental Studies. Journal of the American Chemical Society, 2011, 133, 14741-14754.	6.6	174
69	Thermo-electrochemical activation of Cu3Sn negative electrode for lithium-ion batteries. Journal of Alloys and Compounds, 2011, 509, 7595-7599.	2.8	31
70	Ultrathin Coatings on Nano-LiCoO₂for Li-Ion Vehicular Applications. Nano Letters, 2011, 11, 414-418.	4.5	357
71	Direct Access to Mesoporous Crystalline TiO₂/Carbon Composites with Large and Uniform Pores for Use as Anode Materials in Lithium Ion Batteries. Macromolecular Chemistry and Physics, 2011, 212, 383-390.	1.1	40
72	Fe₃O₄ Nanoparticles Confined in Mesocellular Carbon Foam for High Performance Anode Materials for Lithiumâ€Ion Batteries. Advanced Functional Materials, 2011, 21, 2430-2438.	7.8	403

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73	Highly Improved Rate Capability for a Lithium-Ion Battery Nano-Li4Ti5O12 Negative Electrode via Carbon-Coated Mesoporous Uniform Pores with a Simple Self-Assembly Method. Advanced Functional Materials, 2011, 21, 4349-4357.	7.8	263
74	Extremely Durable Highâ€Rate Capability of a LiNi_{0.4}Mn_{0.4}Co_{0.2}O₂ Cathode Enabled with Singleâ€Walled Carbon Nanotubes. Advanced Energy Materials, 2011, 1, 58-62.	10.2	74
75	High lithium ion conducting Li2Sâ€“GeS2â€“P2S5 glassâ€“ceramic solid electrolyte with sulfur additive for all solid-state lithium secondary batteries. Electrochimica Acta, 2011, 56, 4243-4247.	2.6	68
76	HWCVD MoO3 nanoparticles and a-Si for next generation Li-ion anodes. Thin Solid Films, 2011, 519, 4495-4497.	0.8	22
77	Effects of Atomic Layer Deposition of Al2O3 on the Li[Li0.20Mn0.54Ni0.13Co0.13]O2 Cathode for Lithium-Ion Batteries. Journal of the Electrochemical Society, 2011, 158, A1298.	1.3	119
78	Conformal Surface Coatings to Enable High Volume Expansion Liâ€Ion Anode Materials. ChemPhysChem, 2010, 11, 2124-2130.	1.0	126
79	Ultrathin Direct Atomic Layer Deposition on Composite Electrodes for Highly Durable and Safe Liâ€Ion Batteries. Advanced Materials, 2010, 22, 2172-2176.	11.1	486
80	Preparation of Li2Sâ€“GeSe2â€“P2S5 electrolytes by a single step ball milling for all-solid-state lithium secondary batteries. Journal of Power Sources, 2010, 195, 4984-4989.	4.0	28
81	High-Capacity and High-Rate Anodes for Li-Ion Batteries. ECS Meeting Abstracts, 2010, , .	0.0	0
82	Enhanced Stability of LiCoO[sub 2] Cathodes in Lithium-Ion Batteries Using Surface Modification by Atomic Layer Deposition. Journal of the Electrochemical Society, 2010, 157, A75.	1.3	319
83	Thermoelectrochemically Activated MoO[sub 2] Powder Electrode for Lithium Secondary Batteries. Journal of the Electrochemical Society, 2009, 156, A688.	1.3	143
84	Electrochemical stability of bis(trifluoromethanesulfonyl)imide-based ionic liquids at elevated temperature as a solvent for a titanium oxide bronze electrode. Journal of Power Sources, 2009, 194, 1068-1074.	4.0	52
85	Glassâ€“ceramic Li2Sâ€“P2S5 electrolytes prepared by a single step ball billing process and their application for all-solid-state lithiumâ€“ion batteries. Electrochemistry Communications, 2009, 11, 1830-1833.	2.3	99
86	The role of in situ generated nano-sized metal particles on the coulombic efficiency of MGeO3 (M = Cu,) Tj ETQq0 0 0 rgBT /Overlock 10	2.6	88
87	Electrochemical reactivity of ball-milled MoO3â^'y as anode materials for lithium-ion batteries. Journal of Power Sources, 2009, 188, 286-291.	4.0	125
88	Thermoâ€electrochemical Activation of an Inâ€“Cu Intermetallic Electrode for the Anode in Lithium Secondary Batteries. Advanced Functional Materials, 2008, 18, 3010-3017.	7.8	31
89	Role of Electrochemically Driven Cu Nanograins in CuGa₂ Electrode. Chemistry of Materials, 2008, 20, 447-453.	3.2	26
90	Liquid Gallium Electrode Confined in Porous Carbon Matrix as Anode for Lithium Secondary Batteries. Electrochemical and Solid-State Letters, 2008, 11, A21.	2.2	52

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91	Siâ€“carbon coreâ€“shell composite anode in lithium secondary batteries. Electrochimica Acta, 2007, 52, 7061-7067.	2.6	97
92	Sn-Carbon Core-Shell Powder for Anode in Lithium Secondary Batteries. Journal of the Electrochemical Society, 2005, 152, A1452.	1.3	133
93	A simple preparation method for spherical carbons and their anodic performance in lithium secondary batteries. Journal of Power Sources, 2004, 125, 221-227.	4.0	26
94	Synthesis of Tin-Encapsulated Spherical Hollow Carbon for Anode Material in Lithium Secondary Batteries. Journal of the American Chemical Society, 2003, 125, 5652-5653.	6.6	666
95	Formation of Silicaâ€Coated Carbon Powder and Conversion to Spherical Î²â€Silicon Carbide by Carbothermal Reduction. Journal of the American Ceramic Society, 2002, 85, 2134-2136.	1.9	14