Taeeun Yim

List of Publications by Year
in descending order

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79 papers	3,181 citations	196777 29 h-index	175968 55 g-index
80 all docs	80 docs citations	80 times ranked	4447 citing authors

#	Article	IF	Citations
1	Monolayer assembly of gold nanodots on polyelectrolyte support: A multifunctional electrocatalyst for reduction of oxygen and oxidation of sulfite and nitrite. Bulletin of the Korean Chemical Society, 2022, 43, 396-401.	1.0	3
2	Anti-corrosive and surface-stabilizing functional electrolyte containing LiFSI and LiPO2F2 for SiO /NCM811-based batteries. Corrosion Science, 2022, 198, 110117.	3.0	9
3	Crucial role of Ni-doping to interfacial Li2MnO3 layer of High-performance Ni-rich layered cathode in Lithium-Ion batteries. Chemical Engineering Journal, 2022, 434, 134577.	6.6	21
4	Theoretical Protocol Based on Long-Range Corrected Density Functional Theory and Tuning of Range-Split Parameter for Two-Electron Two-Proton Reduction of Phenylazocarboxylates. Journal of Physical Chemistry A, 2022, 126, 2430-2436.	1.1	0
5	Dually modified cathode-electrolyte interphases layers by calcium phosphate on the surface of nickel-rich layered oxide cathode for lithium-ion batteries. Journal of Power Sources, 2021, 483, 229218.	4.0	18
6	Triethanolamine borate as a surface stabilizing bifunctional additive for Niâ€rich layered oxide cathode. International Journal of Energy Research, 2021, 45, 2138-2147.	2.2	11
7	Unraveling the critical role of Zn-phyllomanganates in zinc ion batteries. Journal of Materials Chemistry A, 2021, 9, 13950-13957.	5.2	14
8	Triphenyl phosphate as an Efficient Electrolyte Additive for Ni-rich NCM Cathode Materials. Journal of Electrochemical Science and Technology, 2021, 12, 67-73.	0.9	9
9	Calcium- and sulfate-functionalized artificial cathodeâ€“electrolyte interphases of Ni-rich cathode materials. Rare Metals, 2021, 40, 2793-2801.	3.6	22
10	Trimethoxymethylsilane as a solid-electrolyte interphases improver for graphite anode. Current Applied Physics, 2021, 26, 72-77.	1.1	5
11	Ni-rich LiNi0.8Co0.1Mn0.1O2 oxide functionalized by allyl phenyl sulfone as high-performance cathode material for lithium-ion batteries. Journal of Alloys and Compounds, 2021, 867, 159153.	2.8	22
12	Effects of methanesulfonic acid on electrolyte for vanadium redox flow batteries. Journal of Industrial and Engineering Chemistry, 2021, 99, 326-333.	2.9	9
13	Tris(2,4,6â€trimethylphenyl) phosphine with Aluminum Oxide Incorporated Polyethylene Separator for Lithiumâ€Ion Batteries. Bulletin of the Korean Chemical Society, 2021, 42, 1245-1250.	1.0	2
14	Singleâ€Ion Conducting Soft Electrolytes for Semiâ€Solid Lithium Metal Batteries Enabling Cell Fabrication and Operation under Ambient Conditions. Advanced Energy Materials, 2021, 11, 2101813.	10.2	26
15	Dually-functionalized Ni-rich layered oxides for high-capacity lithium-ion batteries. Journal of Materials Science and Technology, 2021, 86, 70-76.	5.6	13
16	Interface-Stabilized Layered Lithium Ni-Rich Oxide Cathode via Surface Functionalization with Titanium Silicate. ACS Applied Materials & Interfaces, 2021, 13, 47696-47705.	4.0	8
17	Trimesitylborane-embedded radical scavenging separator for lithium-ion batteries. Current Applied Physics, 2021, 31, 1-6.	1.1	2
18	Facile interface functionalization of Ni-rich layered LiNi0.8Co0.1Mn0.1O2 cathode material by dually-modified phosphate and aluminum precursor for Li-ion batteries. Solid State Ionics, 2021, 370, 115734.	1.3	11

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19	Singleâ€Ion Conducting Soft Electrolytes for Semiâ€Solid Lithium Metal Batteries Enabling Cell Fabrication and Operation under Ambient Conditions (Adv. Energy Mater. 38/2021). Advanced Energy Materials, 2021, 11, .	10.2	2
20	Crucial role of thioacetamide for ZrO2 coating on the fragile surface of Ni-rich layered cathode in lithium ion batteries. Journal of Power Sources, 2020, 450, 227625.	4.0	64
21	In Situ Polymerized Methacrylate Based Electrolyte for Lithiumâ€Ion Batteries. ChemistrySelect, 2020, 5, 11862-11865.	0.7	1
22	Surfaceâ€Modified Niâ€Rich Layered Oxide Cathode Via Thermal Treatment of Poly(Vinylidene Fluoride) for Lithiumâ€Ion Batteries. Bulletin of the Korean Chemical Society, 2020, 41, 1107-1113.	1.0	6
23	Critical role of corrosion inhibitors modified by silyl ether functional groups on electrochemical performances of lithium manganese oxides. Journal of Energy Chemistry, 2020, 51, 425-433.	7.1	10
24	Printable Solid Electrolyte Interphase Mimic for Antioxidative Lithium Metal Electrodes. Advanced Functional Materials, 2020, 30, 2000792.	7.8	16
25	Spectroelectrochemical Studies on Silicate Solâ€Gel Matrixâ€supported Subâ€10 nm Prussian Blue Nanostructuresâ€based Electrochromic Device. Electroanalysis, 2020, 32, 1571-1581.	1.5	3
26	Sulfonate-Based Artificial Cathodeâ€“Electrolyte Interface to Enhance Electrochemical Performance of Ni-Rich Layered Oxide Cathode Materials. ACS Sustainable Chemistry and Engineering, 2020, 8, 7316-7323.	3.2	14
27	A dataset of the thioacetmide supported formation of ZrO2 coating on Ni-rich layered structure cathode materials in lithium-ion batteries. Data in Brief, 2020, 30, 105458.	0.5	9
28	High-performance lithium-ion batteries combined with bi-functionalized electrolyte additive and nickel-rich layered oxides. Journal of Alloys and Compounds, 2020, 834, 155155.	2.8	22
29	Lead ruthenate nanocrystals on reduced graphene oxides as an efficient bifunctional catalyst for metalâ€“air batteries. Journal of Industrial and Engineering Chemistry, 2019, 79, 409-417.	2.9	2
30	Click Chemistry-Induced Terminally Crosslinked Poly(ether sulfone) as a Highly Conductive Anion Exchange Membrane Under Humidity Condition. Macromolecular Research, 2019, 27, 1050-1059.	1.0	11
31	Artificial cathode-electrolyte interphases on nickel-rich cathode materials modified by silyl functional group. Journal of Power Sources, 2019, 416, 1-8.	4.0	40
32	Catalytic Investigation of Ag Nanostructures Loaded on Porous Hematite Cubes: Infiltrated versus Exteriors. ChemistrySelect, 2019, 4, 5185-5194.	0.7	4
33	Critical role of elemental copper for enhancing conversion kinetics of sulphur cathodes in rechargeable magnesium batteries. Applied Surface Science, 2019, 484, 933-940.	3.1	22
34	Chemically-induced cathodeâ€“electrolyte interphase created by lithium salt coating on Nickel-rich layered oxides cathode. Journal of Power Sources, 2019, 410-411, 15-24.	4.0	48
35	Amideâ€Functionalized Porous Carbonaceous Anode Materials for Lithiumâ€Ion Batteries. ChemPhysChem, 2019, 20, 752-756.	1.0	3
36	Functional separator with lower resistance toward lithium ion transport for enhancing the electrochemical performance of lithium ion batteries. Journal of Industrial and Engineering Chemistry, 2019, 71, 228-233.	2.9	15

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37	Strategic combination of Grignard reagents and allyl-functionalized ionic liquids as an advanced electrolyte for rechargeable magnesium batteries. Journal of Materials Chemistry A, 2018, 6, 3126-3133.	5.2	18
38	Effect of surface modification using a sulfate-based surfactant on the electrochemical performance of Ni-rich cathode materials. Materials Chemistry and Physics, 2018, 214, 66-72.	2.0	31
39	Two-Dimensional Phosphorene-Derived Protective Layers on a Lithium Metal Anode for Lithium-Oxygen Batteries. ACS Nano, 2018, 12, 4419-4430.	7.3	115
40	Enhancement of surface stability of lithium manganese oxide spinel by silyl-group functionalized fluoride-responsive ionic liquid additives. Journal of Industrial and Engineering Chemistry, 2018, 64, 311-317.	2.9	4
41	Oxidation Potential Tunable Organic Molecules and Their Catalytic Application to Aerobic Dehydrogenation of Tetrahydroquinolines. Organic Letters, 2018, 20, 6436-6439.	2.4	20
42	Thiophene-initiated polymeric artificial cathode-electrolyte interface for Ni-rich cathode material. Electrochimica Acta, 2018, 290, 465-473.	2.6	30
43	Silyl-group functionalized organic additive for high voltage Ni-rich cathode material. Current Applied Physics, 2018, 18, 1345-1351.	1.1	33
44	Compositional core-shell design by nickel leaching on the surface of Ni-rich cathode materials for advanced high-energy and safe rechargeable batteries. Journal of Power Sources, 2018, 400, 87-95.	4.0	43
45	Metalâ€“Organic Framework as a Multifunctional Additive for Selectively Trapping Transition-Metal Components in Lithium-Ion Batteries. ACS Sustainable Chemistry and Engineering, 2018, 6, 8547-8553.	3.2	19
46	Computational screening of phosphite derivatives as high-performance additives in high-voltage Li-ion batteries. RSC Advances, 2017, 7, 20049-20056.	1.7	14
47	Investigation into the stability of Li metal anodes in Liâ€“O₂batteries with a redox mediator. Journal of Materials Chemistry A, 2017, 5, 10609-10621.	5.2	63
48	Magnesium Anode Pretreatment Using a Titanium Complex for Magnesium Battery. ACS Sustainable Chemistry and Engineering, 2017, 5, 5733-5739.	3.2	22
49	Surface-initiated fluoride-scavenging polymeric layer on cathode materials for lithium-ion batteries. Journal of Industrial and Engineering Chemistry, 2017, 53, 425-428.	2.9	6
50	Effect of Nucleophilic Lithium Trimethylsiloxide on Chemical and Electrochemical Aspects of Electrophilic Carbonateâ€based Solvents for Lithiumâ€ion Batteries. Bulletin of the Korean Chemical Society, 2017, 38, 1214-1220.	1.0	1
51	Tris(trimethylsilyl) Phosphite as an Efficient Electrolyte Additive To Improve the Surface Stability of Graphite Anodes. ACS Applied Materials & Interfaces, 2017, 9, 32851-32858.	4.0	52
52	Effect of Silyl Etherâ€functinoalized Dimethoxydimethylsilane on Electrochemical Performance of a Niâ€rich NCM Cathode. ChemPhysChem, 2017, 18, 3402-3406.	1.0	39
53	Triphenyl borate as a bi-functional additive to improve surface stability of Ni-rich cathode material. Journal of Power Sources, 2017, 372, 24-30.	4.0	54
54	Egg-shell structured LiCoO₂ by Cu²⁺ substitution to Li⁺ sites via facile stirring in an aqueous copper(<scp>ii</scp>) nitrate solution. Journal of Materials Chemistry A, 2017, 5, 24892-24900.	5.2	35

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55	Sulfonate-immobilized artificial cathode electrolyte interphases layer on Ni-rich cathode. Journal of Power Sources, 2017, 360, 480-487.	4.0	45
56	Effect of Tris(trimethylsilyl) Phosphate Additive on the Electrochemical Performance of Nickel-rich Cathode Materials at High Temperature. Journal of Electrochemical Science and Technology, 2017, 8, 162-168.	0.9	6
57	Distinct Reaction Characteristics of Electrolyte Additives for High-Voltage Lithium-Ion Batteries: Tris(trimethylsilyl) Phosphite, Borate, and Phosphate. Electrochimica Acta, 2016, 215, 455-465.	2.6	45
58	A joint experimental and theoretical determination of the structure of discharge products in Naâ€“SO₂ batteries. Physical Chemistry Chemical Physics, 2016, 18, 24841-24844.	1.3	5
59	Effective Polysulfide Rejection by Dipoleâ€Aligned BaTiO₃ Coated Separator in Lithiumâ€“Sulfur Batteries. Advanced Functional Materials, 2016, 26, 7817-7823.	7.8	170
60	Insight into the electrochemical behaviors of 5Vâ€“class highâ€“voltage batteries composed of lithiumâ€“rich layered oxide with multifunctional additive. Journal of Power Sources, 2016, 336, 465-474.	4.0	24
61	Size effect of SO₂ receptors on the energy efficiency of Naâ€“SO₂ batteries: gallium-based inorganic electrolytes. RSC Advances, 2016, 6, 105105-105109.	1.7	4
62	Polymeric binder based on PAA and conductive PANI for high performance silicon-based anodes. RSC Advances, 2016, 6, 101622-101625.	1.7	28
63	Pyrrolinium-based Ionic Liquid as a Flame Retardant for Binary Electrolytes of Lithium Ion Batteries. ACS Sustainable Chemistry and Engineering, 2016, 4, 497-505.	3.2	46
64	Investigation of new manganese orthophosphate Mn3(PO4)2 coating for nickel-rich LiNi0.6Co0.2Mn0.2O2 cathode and improvement of its thermal properties. Electrochimica Acta, 2016, 198, 77-83.	2.6	117
65	Understanding the effects of a multi-functionalized additive on the cathodeâ€“electrolyte interfacial stability of Ni-rich materials. Journal of Power Sources, 2016, 302, 431-438.	4.0	82
66	Room Temperature Ionic Liquidâ€based Electrolytes as an Alternative to Carbonateâ€based Electrolytes. Israel Journal of Chemistry, 2015, 55, 586-598.	1.0	45
67	5V-class high-voltage batteries with over-lithiated oxide and a multi-functional additive. Journal of Materials Chemistry A, 2015, 3, 6157-6167.	5.2	51
68	Improved electrochemical and thermal properties of nickel rich LiNi0.6Co0.2Mn0.2O2 cathode materials by SiO2 coating. Journal of Power Sources, 2015, 282, 45-50.	4.0	270
69	Why is tris(trimethylsilyl) phosphite effective as an additive for high-voltage lithium-ion batteries?. Journal of Materials Chemistry A, 2015, 3, 10900-10909.	5.2	112
70	1,3-Propanesultone as an effective functional additive to enhance the electrochemical performance of over-lithiated layered oxides. RSC Advances, 2014, 4, 19172.	1.7	15
71	Effect of acid scavengers on electrochemical performance of lithiumâ€“sulfur batteries: Functional additives for utilization of LiPF₆. Japanese Journal of Applied Physics, 2014, 53, 08NK01.	0.8	13
72	Electron-beam-irradiated polyethylene membrane with improved electrochemical and thermal properties for lithium-ion batteries. Journal of Applied Electrochemistry, 2014, 44, 345-352.	1.5	19

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73	Effect of additives on electrochemical performance of lithium nickel cobalt manganese oxide at high temperature. Journal of Power Sources, 2014, 253, 48-54.	4.0	82
74	Ceramic composite separators coated with moisturized ZrO₂ nanoparticles for improving the electrochemical performance and thermal stability of lithium ion batteries. Physical Chemistry Chemical Physics, 2014, 16, 9337-9343.	1.3	65
75	Allylic ionic liquid electrolyte-assisted electrochemical surface passivation of LiCoO2 for advanced, safe lithium-ion batteries. Scientific Reports, 2014, 4, 5802.	1.6	44
76	Screening for Superoxide Reactivity in Li-O₂ Batteries: Effect on Li₂O₂/LiOH Crystallization. Journal of the American Chemical Society, 2012, 134, 2902-2905.	6.6	669
77	Comparative Study on Surface Films from Ionic Liquids Containing Saturated and Unsaturated Substituent for LiCoO[sub 2]. Journal of the Electrochemical Society, 2010, 157, A136.	1.3	42
78	Linear-Sweep Thermammetry Study on Corrosion Behavior of Al Current Collector in Ionic Liquid Solvent. Electrochemical and Solid-State Letters, 2010, 13, A109.	2.2	52
79	Synthesis and Properties of Acyclic Ammonium-based Ionic Liquids with Allyl Substituents as Electrolytes. Molecules, 2009, 14, 1840-1851.	1.7	32