Gao Liu

List of Publications by Year in descending order

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205 papers	19,554 citations	15880 67 h-index	12940 136 g-index
209 all docs	209 docs citations	209 times ranked	20888 citing authors

#	Article	IF	Citations
1	Active/inactive phases, binders, and impact of electrolyte. , 2022, , 265-295.		0
2	Lithium substituted poly(amic acid) as a water-soluble anode binder for high-temperature pre-lithiation. Journal of Power Sources, 2022, 521, 230889.	4.0	8
3	Liquid electrolyte development for low-temperature lithium-ion batteries. Energy and Environmental Science, 2022, 15, 550-578.	15.6	159
4	Investigation of SiOx anode fading mechanism with limited capacity cycling. APL Materials, 2022, 10, .	2.2	12
5	Precisely quantifying bulk transition metal valence evolution in conventional battery electrode by inverse partial fluorescence yield. Journal of Energy Chemistry, 2022, 69, 363-368.	7.1	4
6	Recent Applications of Langmuirâ€“Blodgett Technique in Battery Research. ACS Applied Materials & Interfaces, 2022, 14, 2431-2439.	4.0	13
7	Critical Evaluation of Potentiostatic Holds as Accelerated Predictors of Capacity Fade during Calendar Aging. Journal of the Electrochemical Society, 2022, 169, 050531.	1.3	16
8	(Invited) A Micelle Electrolyte Enabled By Fluorinated Ether Additives for Polysulfide Suppression, High Voltage Cathode, and Li Metal Anode Stabilization. ECS Meeting Abstracts, 2022, MA2022-01, 33-33.	0.0	0
9	Lithiated-Polyamic Acid-Coated Glass Fiber As a Functional Separator for High-Performance Li-S Batteries. ECS Meeting Abstracts, 2022, MA2022-01, 47-47.	0.0	0
10	(Invited) The Application of Conducting Polymers for Nanomaterials Based Alloy Anodes in Battery Manufacturing. ECS Meeting Abstracts, 2022, MA2022-01, 620-620.	0.0	0
11	Unraveling Shuttle Effect and Suppression Strategy in Lithium/Sulfur Cells by In Situ/Operando Xâ€ray Absorption Spectroscopic Characterization. Energy and Environmental Materials, 2021, 4, 222-228.	7.3	31
12	Controlled Lithium Deposition on Alq₃ Coated Substrate**. Batteries and Supercaps, 2021, 4, 98-105.	2.4	4
13	Probing Lithium Metals in Batteries by Advanced Characterization and Analysis Tools. Advanced Energy Materials, 2021, 11, 2003039.	10.2	30
14	Sulfonated aromatic polymer as a future proton exchange membrane: A review of sulfonation and crosslinking methods. Renewable and Sustainable Energy Reviews, 2021, 137, 110471.	8.2	73
15	Controlled Lithium Deposition on Alq 3 Coated Substrate. Batteries and Supercaps, 2021, 4, 5-5.	2.4	0
16	Large-Molecule Decomposition Products of Electrolytes and Additives Revealed by On-Electrode Chromatography and MALDI. Joule, 2021, 5, 415-428.	11.7	23
17	Revealing the working mechanism of a multi-functional block copolymer binder for lithium-sulfur batteries. Journal of Energy Chemistry, 2021, 59, 1-8.	7.1	8
18	Highly Ordered Carbon Coating Prepared with Polyvinylidene Chloride Precursor for Highâ€Performance Silicon Anodes in Lithiumâ€Ion Batteries. Batteries and Supercaps, 2021, 4, 240-247.	2.4	15

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19	Examining CO₂ as an Additive for Solid Electrolyte Interphase Formation on Silicon Anodes. Journal of the Electrochemical Society, 2021, 168, 030534.	1.3	16
20	Cycling mechanism of Li2MnO3: Liâ€“CO2Âbatteries and commonality on oxygen redox in cathode materials. Joule, 2021, 5, 975-997.	11.7	88
21	A Self-Assemble Micelle Electrolyte for Polysulfide Suppression and Li Stabilization in Li-S Battery. ECS Meeting Abstracts, 2021, MA2021-01, 343-343.	0.0	0
22	Carbon Coating on Silicon for High-Performance Anode in Lithium-Ion Batteries. ECS Meeting Abstracts, 2021, MA2021-01, 124-124.	0.0	0
23	Communicationâ€"Functional Conductive Polymer Binder for Practical Si-Based Electrodes. Journal of the Electrochemical Society, 2021, 168, 050533.	1.3	16
24	(Invited) Electrode Binder As an Enabling Material for Si Based Electrode. ECS Meeting Abstracts, 2021, MA2021-01, 122-122.	0.0	0
25	Polymeric Species in Solid Electrolyte Interphase Identified with MALDI-TOF-MS Assisted By on-Electrode Chromatography. ECS Meeting Abstracts, 2021, MA2021-01, 151-151.	0.0	0
26	Understanding the Graphite Anode Electrode Failure Mode in Cycled Commercial Lithium-Ion Batteries. ECS Meeting Abstracts, 2021, MA2021-01, 298-298.	0.0	0
27	Random copolymer of poly(polyethylene glycol methyl ether)methacrylate as tunable transition temperature solid-solid phase change material for thermal energy storage. Solar Energy Materials and Solar Cells, 2021, 225, 111030.	3.0	19
28	Organic Solvent Free Process to Fabricate High Performance Silicon/Graphite Composite Anode. Journal of Composites Science, 2021, 5, 188.	1.4	7
29	Distinct Oxygen Redox Activities in Li₂MO₃ (M = Mn, Ru, Ir). ACS Energy Letters, 2021, 6, 3417-3424.	8.8	33
30	In Situ-Formed Novel Elastic Network Binder for a Silicon Anode in Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 46518-46525.	4.0	29
31	Calendar aging of silicon-containing batteries. Nature Energy, 2021, 6, 866-872.	19.8	137
32	Biomass-derived polymeric binders in silicon anodes for battery energy storage applications. Green Chemistry, 2021, 23, 7890-7901.	4.6	26
33	Dynamic tunability of phase-change material transition temperatures using ions for thermal energy storage. Cell Reports Physical Science, 2021, 2, 100613.	2.8	7
34	Electrolyte decomposition and solid electrolyte interphase revealed by mass spectrometry. Electrochimica Acta, 2021, 399, 139362.	2.6	24
35	Viscosity Analysis of Battery Electrode Slurry. Polymers, 2021, 13, 4033.	2.0	15
36	Recent Applications of Molecular Structures at Silicon Anode Interfaces. Electrochem, 2021, 2, 664-676.	1.7	0

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37	FeIII chelated organic anode with ultrahigh rate performance and ultra-long cycling stability for lithium-ion batteries. Energy Storage Materials, 2020, 24, 432-438.	9.5	25
38	Insights into the Dynamic Catalytic Effect of Metal Sulfides with Prominent Lithiation Process in the Application of Liâ€“S Batteries. ACS Applied Energy Materials, 2020, 3, 11131-11141.	2.5	3
39	Novel Hoberman Sphere Design for Interlaced Mn₃O₄@CNT Architecture with Atomic Layer Deposition-Coated TiO₂ Overlayer as Advanced Anodes in Li-Ion Battery. ACS Applied Materials & Interfaces, 2020, 12, 39282-39292.	4.0	24
40	A Micelle Electrolyte Enabled by Fluorinated Ether Additives for Polysulfide Suppression and Li Metal Stabilization in Li-S Battery. Frontiers in Chemistry, 2020, 8, 484.	1.8	24
41	Gradient Polarity Solvent Wash for Separation and Analysis of Electrolyte Decomposition Products on Electrode Surfaces. Journal of the Electrochemical Society, 2020, 167, 020506.	1.3	14
42	Development of a Synergistic Activation Strategy for the Pilot-Scale Construction of Hierarchical Porous Graphitic Carbon for Energy Storage Applications. ACS Nano, 2020, 14, 4741-4754.	7.3	47
43	Reversible Crosslinked Polymer Binder for Recyclable Lithium Sulfur Batteries with High Performance. Advanced Functional Materials, 2020, 30, 2003605.	7.8	63
44	Dissociate lattice oxygen redox reactions from capacity and voltage drops of battery electrodes. Science Advances, 2020, 6, eaaw3871.	4.7	82
45	The influence of compact and ordered carbon coating on solidâ€state behaviors of silicon during electrochemical processes. , 2020, 2, 143-150.		40
46	Negligible voltage hysteresis with strong anionic redox in conventional battery electrode. Nano Energy, 2020, 74, 104831.	8.2	72
47	Recent advances in polysulfide mediation of lithium-sulfur batteries via facile cathode and electrolyte modification. APL Materials, 2019, 7, .	2.2	35
48	Fluoro-Ether as a Bifunctional Interphase Electrolyte Additive with Graphite/LiNi_{0.5}Co_{0.2}Mn_{0.3}O₂ Full Cell. ACS Applied Energy Materials, 2019, 2, 6404-6416.	2.5	19
49	Suppressing the dry bed-lake fracture of silicon anode via dispersant modification in electrode processing. Electrochimica Acta, 2019, 319, 682-689.	2.6	12
50	Systematic structural characterization of highâ€density porous silicon anodes in lithiumâ€ion batteries. Energy Storage, 2019, 1, e78.	2.3	0
51	Role of conductive binder to direct solidâ€“electrolyte interphase formation over silicon anodes. Physical Chemistry Chemical Physics, 2019, 21, 17356-17365.	1.3	15
52	Investigation of the Nanocrystal CoS₂ Embedded in 3D Honeycomb-like Graphitic Carbon with a Synergistic Effect for High-Performance Lithium Sulfur Batteries. ACS Applied Materials & Interfaces, 2019, 11, 33987-33999.	4.0	77
53	Trap-Assisted Charge Injection into Large Bandgap Polymer Semiconductors. Materials, 2019, 12, 2427.	1.3	3
54	Polyisoprene Captured Sulfur Nanocomposite Materials for High-Areal-Capacity Lithium Sulfur Battery. ACS Applied Polymer Materials, 2019, 1, 1965-1970.	2.0	37

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55	Nitrogen-doped carbon coated SnO2 nanoparticles embedded in a hierarchical porous carbon framework for high-performance lithium-ion battery anodes. Journal of Power Sources, 2019, 428, 44-52.	4.0	73
56	Aqueous emulsion of conductive polymer binders for Si anode materials in lithium ion batteries. European Polymer Journal, 2019, 114, 265-270.	2.6	24
57	A trimethylol melamine functionalized polyvinyl alcohol network for high performance nano-silicon anodes. Journal of Materials Chemistry A, 2019, 7, 26029-26038.	5.2	33
58	P2-type Na_{2/3}Ni_{1/3}Mn_{2/3}O₂ Cathode Material with Excellent Rate and Cycling Performance for Sodium-Ion Batteries. Journal of the Electrochemical Society, 2019, 166, A3980-A3986.	1.3	34
59	High Reversibility of Lattice Oxygen Redox Quantified by Direct Bulk Probes of Both Anionic and Cationic Redox Reactions. Joule, 2019, 3, 518-541.	11.7	225
60	Mussel-Inspired Conductive Polymer Binder for Si-Alloy Anode in Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2018, 10, 5440-5446.	4.0	90
61	Engineered Si@alginate microcapsule-graphite composite electrode for next generation high-performance lithium-ion batteries. Electrochimica Acta, 2018, 270, 480-489.	2.6	24
62	Cationic polymer binder inhibit shuttle effects through electrostatic confinement in lithium sulfur batteries. Journal of Materials Chemistry A, 2018, 6, 6959-6966.	5.2	68
63	A novel maleic acid/graphite composite anode for lithium ion batteries with high energy and power density. Carbon, 2018, 132, 420-429.	5.4	34
64	The synergetic interaction between LiNO3 and lithium polysulfides for suppressing shuttle effect of lithium-sulfur batteries. Energy Storage Materials, 2018, 11, 24-29.	9.5	160
65	Optimizing solid electrolyte interphase on graphite anode by adjusting the electrolyte solution structure with ionic liquid. Electrochimica Acta, 2018, 260, 640-647.	2.6	6
66	Evaluation of using pre-lithiated graphite from recycled Li-ion batteries for new LiB anodes. Resources, Conservation and Recycling, 2018, 129, 129-134.	5.3	53
67	Effects of Room Ionic Liquid as Solute on the Electrolyte Solution Structure and Electrochemical Performances in Ethylene Carbonate-Based Electrolyte. Journal of the Electrochemical Society, 2018, 165, A3844-A3853.	1.3	4
68	In-situ covalent bonding of polysulfides with electrode binders in operando for lithiumâ€“sulfur batteries. Journal of Power Sources, 2018, 402, 1-6.	4.0	28
69	A Quadrupleâ€Hydrogenâ€Bonded Supramolecular Binder for Highâ€Performance Silicon Anodes in Lithiumâ€Ion Batteries. Small, 2018, 14, e1801189.	5.2	171
70	Highly Graphitized Carbon Coating on SiO with a Ï€â€“Ï€ Stacking Precursor Polymer for High Performance Lithium-Ion Batteries. Polymers, 2018, 10, 610.	2.0	14
71	Chemical Reduction Synthesis and Electrochemistry of Siâ€“Sn Nanocomposites as High-Capacity Anodes for Li-Ion Batteries. Journal of Physical Chemistry Letters, 2018, 9, 5130-5134.	2.1	14
72	Exploring Chemical, Mechanical, and Electrical Functionalities of Binders for Advanced Energy-Storage Devices. Chemical Reviews, 2018, 118, 8936-8982.	23.0	575

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73	Stress monitoring of lithiuim ion cells during cycling to correlate with the electrochemical processes. , 2018, , .		0
74	Investigating the Doping Mechanism of Pyrene Based Methacrylate Functional Conductive Binder in Silicon Anodes for Lithium-Ion Batteries. Journal of the Electrochemical Society, 2017, 164, A545-A548.	1.3	15
75	Electrode Slurry Particle Density Mapping Using X-ray Radiography. Journal of the Electrochemical Society, 2017, 164, A380-A388.	1.3	14
76	High Areal Capacity Si/LiCoO 2 Batteries from Electrospun Composite Fiber Mats. ChemSusChem, 2017, 10, 1823-1831.	3.6	22
77	Raspberry-like Nanostructured Silicon Composite Anode for High-Performance Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2017, 9, 18766-18773.	4.0	65
78	Nucleophilic substitution between polysulfides and binders unexpectedly stabilizing lithium sulfur battery. Nano Energy, 2017, 38, 82-90.	8.2	119
79	Aluminum fumarate-based metal organic frameworks with tremella-like structure as ultrafast and stable anode for lithium-ion batteries. Nano Energy, 2017, 39, 200-210.	8.2	96
80	Facile Synthesis and Electrochemistry of Si-Sn-C Nanocomposites for High-Energy Li-Ion Batteries. Journal of the Electrochemical Society, 2017, 164, A1378-A1383.	1.3	7
81	Quantitative Characterization of the Surface Evolution for LiNi_{0.5}Co_{0.2}Mn_{0.3}O₂/Graphite Cell during Long-Term Cycling. ACS Applied Materials & Interfaces, 2017, 9, 12445-12452.	4.0	55
82	Ultrahigh-Capacity Organic Anode with High-Rate Capability and Long Cycle Life for Lithium-Ion Batteries. ACS Energy Letters, 2017, 2, 2140-2148.	8.8	124
83	Understanding the crack formation of graphite particles in cycled commercial lithium-ion batteries by focused ion beam - scanning electron microscopy. Journal of Power Sources, 2017, 365, 235-239.	4.0	63
84	Effective electrostatic confinement of polysulfides in lithium/sulfur batteries by a functional binder. Nano Energy, 2017, 40, 559-565.	8.2	83
85	Electrostatic Polysulfides Confinement to Inhibit Redox Shuttle Process in the Lithium Sulfur Batteries. ACS Applied Materials & Interfaces, 2017, 9, 31741-31745.	4.0	45
86	An organic-skinned secondary coating for carbon-coated LiFePO4 cathode of high electrochemical performances. Electrochimica Acta, 2017, 258, 1244-1253.	2.6	22
87	Modification of Transition-Metal Redox by Interstitial Water in Hexacyanometalate Electrodes for Sodium-Ion Batteries. Journal of the American Chemical Society, 2017, 139, 18358-18364.	6.6	102
88	Robust solid/electrolyte interphase on graphite anode to suppress lithium inventory loss in lithium-ion batteries. Carbon, 2017, 111, 291-298.	5.4	57
89	Molecular Spring Enabled High-Performance Anode for Lithium Ion Batteries. Polymers, 2017, 9, 657.	2.0	16
90	Effect of Chromium and Niobium Doping on the Morphology and Electrochemical Performance of High-Voltage Spinel LiNi_{0.5}Mn_{1.5}O₄ Cathode Material. ACS Applied Materials & Interfaces, 2016, 8, 9116-9124.	4.0	78

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91	Conductive polymer binder for nano-silicon/graphite composite electrode in lithium-ion batteries towards a practical application. Electrochimica Acta, 2016, 209, 159-162.	2.6	55
92	Conductive Polymer Binder-Enabled SiOâ€“Sn_xCo_yC_z Anode for High-Energy Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2016, 8, 13373-13377.	4.0	28
93	Improving the over-all performance of Li-S batteries via electrolyte optimization with consideration of loading condition. Electrochimica Acta, 2016, 218, 1-7.	2.6	14
94	Biomimetic Ant-Nest Electrode Structures for High Sulfur Ratio Lithiumâ€“Sulfur Batteries. Nano Letters, 2016, 16, 5365-5372.	4.5	73
95	Polymer-Derived and Sodium Hydroxide-Treated Silicon Carbonitride Material as Anodes for High Electrochemical Performance Li-ion Batteries. ChemistrySelect, 2016, 1, 309-317.	0.7	6
96	All-climate sodium ion batteries based on the NASICON electrode materials. Nano Energy, 2016, 30, 756-761.	8.2	81
97	Controllable synthesis of hierarchical CuS/ZnS hetero-nanowires as high-performance visible-light photocatalysts. RSC Advances, 2016, 6, 110266-110273.	1.7	33
98	A Convenient and Versatile Method To Control the Electrode Microstructure toward High-Energy Lithium-Ion Batteries. Nano Letters, 2016, 16, 4686-4690.	4.5	32
99	The effect of cobalt doping on the morphology and electrochemical performance of high-voltage spinel LiNi0.5Mn1.5O4 cathode material. Solid State Ionics, 2016, 292, 70-74.	1.3	31
100	Scalable process for application of stabilized lithium metal powder inÂLi-ion batteries. Journal of Power Sources, 2016, 309, 33-41.	4.0	74
101	High performance LiNi_{0.5}Mn_{1.5}O₄ cathode material with a bi-functional coating for lithium ion batteries. RSC Advances, 2016, 6, 19245-19251.	1.7	22
102	Hydrogenation effects on the lithium ion battery performance of TiOF2. Journal of Power Sources, 2016, 306, 309-316.	4.0	24
103	Solvent processed conductive polymer with single-walled carbon nanotube composites. Journal of Materials Research, 2015, 30, 3403-3411.	1.2	3
104	TiO₂ Nanomaterials as Anode Materials for Lithiumâ€ion Rechargeable Batteries. Energy Technology, 2015, 3, 801-814.	1.8	79
105	Rational Design and Facial Synthesis of Li₃V₂(PO₄)₃@C Nanocomposites Using Carbon with Different Dimensions for Ultrahigh-Rate Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2015, 7, 12057-12066.	4.0	46
106	Na0.44MnO2 with very fast sodium diffusion and stable cycling synthesized via polyvinylpyrrolidone-combustion method. Journal of Power Sources, 2015, 285, 161-168.	4.0	75
107	Inward lithium-ion breathing of hierarchically porous silicon anodes. Nature Communications, 2015, 6, 8844.	5.8	217
108	Dual-functional gum arabic binder for silicon anodes in lithium ion batteries. Nano Energy, 2015, 12, 178-185.	8.2	236

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109	Low cost and environmentally benign crack-blocking structures for long life and high power Si electrodes in lithium ion batteries. Journal of Materials Chemistry A, 2015, 3, 2036-2042.	5.2	53
110	Baseline Si electrode fabrication and performance for the battery for Advanced Transportation Technologies Program. Journal of Power Sources, 2015, 282, 223-227.	4.0	15
111	Side-Chain Conducting and Phase-Separated Polymeric Binders for High-Performance Silicon Anodes in Lithium-Ion Batteries. Journal of the American Chemical Society, 2015, 137, 2565-2571.	6.6	203
112	A Catalytic Path for Electrolyte Reduction in Lithium-Ion Cells Revealed by in Situ Attenuated Total Reflection-Fourier Transform Infrared Spectroscopy. Journal of the American Chemical Society, 2015, 137, 3181-3184.	6.6	76
113	Regulated Breathing Effect of Silicon Negative Electrode for Dramatically Enhanced Performance of Liâ€ion Battery. Advanced Functional Materials, 2015, 25, 1426-1433.	7.8	149
114	Electrochemical performance of Si/CeO2/Polyaniline composites as anode materials for lithium ion batteries. Solid State Ionics, 2015, 272, 24-29.	1.3	21
115	High Capacity and High Density Functional Conductive Polymer and SiO Anode for High-Energy Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2015, 7, 862-866.	4.0	72
116	One-Pot Synthesis of Copper Sulfide Nanowires/Reduced Graphene Oxide Nanocomposites with Excellent Lithium-Storage Properties as Anode Materials for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2015, 7, 15726-15734.	4.0	122
117	Revealing and suppressing surface Mn(II) formation of Na0.44MnO2 electrodes for Na-ion batteries. Nano Energy, 2015, 16, 186-195.	8.2	107
118	Investigation of surface effects through the application of the functional binders in lithium sulfur batteries. Nano Energy, 2015, 16, 28-37.	8.2	112
119	Multifunctional SA-PProDOT Binder for Lithium Ion Batteries. Nano Letters, 2015, 15, 4440-4447.	4.5	97
120	Hierarchical electrode design of high-capacity alloy nanomaterials for lithium-ion batteries. Nano Today, 2015, 10, 193-212.	6.2	88
121	Fumed Silica-Based Single-Ion Nanocomposite Electrolyte for Lithium Batteries. ACS Applied Materials & Interfaces, 2015, 7, 19335-19341.	4.0	43
122	Plasticized Polymer Composite Single-Ion Conductors for Lithium Batteries. ACS Applied Materials & Interfaces, 2015, 7, 19494-19499.	4.0	31
123	The transformation of graphite electrode materials in lithium-ion batteries after cycling. Journal of Power Sources, 2015, 298, 349-354.	4.0	36
124	Understanding the combined effects of microcrystal growth and band gap reduction for Fe(1â^')Ti F3 nanocomposites as cathode materials for lithium-ion batteries. Nano Energy, 2015, 17, 140-151.	8.2	63
125	Conductive Polymer Binder for High-Tap-Density Nanosilicon Material for Lithium-Ion Battery Negative Electrode Application. Nano Letters, 2015, 15, 7927-7932.	4.5	121
126	Manipulating the polarity of conductive polymer binders for Si-based anodes in lithium-ion batteries. Journal of Materials Chemistry A, 2015, 3, 3651-3658.	5.2	43

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127	Lithiumâ€Ion Battery Performance of (001)â€Faceted TiO₂ Nanosheets vs. Spherical TiO₂ Nanoparticles. Energy Technology, 2014, 2, 376-382.	1.8	27
128	Symmetrical Impedance Study on Inactivation Induced Degradation of Lithium Electrodes for Batteries Beyond Lithium-Ion. Journal of the Electrochemical Society, 2014, 161, A827-A830.	1.3	63
129	H- and J-Aggregation of Fluorene-Based Chromophores. Journal of Physical Chemistry B, 2014, 118, 14536-14545.	1.2	147
130	Propylene Carbonate (PC)-Based Electrolytes with High Coulombic Efficiency for Lithium-Ion Batteries. Journal of the Electrochemical Society, 2014, 161, A194-A200.	1.3	83
131	Amorphous carbon-coated TiO2 nanocrystals for improved lithium-ion battery and photocatalytic performance. Nano Energy, 2014, 6, 109-118.	8.2	174
132	Toward high specific capacity and high cycling stability of pure tin nanoparticles with conductive polymer binder for sodium ion batteries. Journal of Power Sources, 2014, 263, 276-279.	4.0	96
133	Improving the performance of lithiumâ€“sulfur batteries using conductive polymer and micrometric sulfur powder. Journal of Materials Research, 2014, 29, 1027-1033.	1.2	40
134	Microsized single-crystal spinel LAMO for high-power lithium ion batteries synthesized via polyvinylpyrrolidone combustion method. Journal of Power Sources, 2014, 248, 22-27.	4.0	37
135	Stabilizing the surface of lithium metal. MRS Bulletin, 2014, 39, 429-435.	1.7	62
136	Synthesis of copper sulfide nanowire bundles in a mixed solvent as a cathode material for lithium-ion batteries. Journal of Power Sources, 2014, 269, 550-555.	4.0	80
137	Toward Practical Application of Functional Conductive Polymer Binder for a High-Energy Lithium-Ion Battery Design. Nano Letters, 2014, 14, 6704-6710.	4.5	172
138	Identification of Diethyl 2,5-Dioxahexane Dicarboxylate and Polyethylene Carbonate as Decomposition Products of Ethylene Carbonate Based Electrolytes by Fourier Transform Infrared Spectroscopy. Journal of Physical Chemistry C, 2014, 118, 14732-14738.	1.5	36
139	A Systematic Investigation of Polymer Binder Flexibility on the Electrode Performance of Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2014, 6, 17111-17118.	4.0	65
140	Application of Stabilized Lithium Metal Powder (SLMPÂ®) in graphite anode â€“ A high efficient prelithiation method for lithium-ion batteries. Journal of Power Sources, 2014, 260, 57-61.	4.0	153
141	A polymerized vinylene carbonate anode binder enhances performance of lithium-ion batteries. Journal of Power Sources, 2014, 263, 288-295.	4.0	23
142	Mesoscale Origin of the Enhanced Cycling-Stability of the Si-Conductive Polymer Anode for Li-ion Batteries. Scientific Reports, 2014, 4, 3684.	1.6	43
143	A Facile Method to Improve the Photocatalytic and Lithiumâ€Ion Rechargeable Battery Performance of TiO₂ Nanocrystals. Advanced Energy Materials, 2013, 3, 1516-1523.	10.2	166
144	Toward an Ideal Polymer Binder Design for High-Capacity Battery Anodes. Journal of the American Chemical Society, 2013, 135, 12048-12056.	6.6	332

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145	Hydrogenated surface disorder enhances lithium ion battery performance. Nano Energy, 2013, 2, 826-835.	8.2	95
146	SBRâ€“PVDF based binder for the application of SLMP in graphite anodes. RSC Advances, 2013, 3, 15022.	1.7	90
147	In Situ Formed Si Nanoparticle Network with Micron-Sized Si Particles for Lithium-Ion Battery Anodes. Nano Letters, 2013, 13, 5397-5402.	4.5	83
148	Built-in Electric Field-Assisted Surface-Amorphized Nanocrystals for High-Rate Lithium-Ion Battery. Nano Letters, 2013, 13, 5289-5296.	4.5	143
149	An environmentally benign LIB fabrication process using a low cost, water soluble and efficient binder. Journal of Materials Chemistry A, 2013, 1, 11543.	5.2	42
150	Enhanced performance of a novel gel polymer electrolyte by dual plasticizers. Journal of Power Sources, 2013, 239, 111-121.	4.0	28
151	Surface stabilized LiNi0.5Mn1.5O4 cathode materials with high-rate capability and long cycle life for lithium ion batteries. Nano Energy, 2013, 2, 283-293.	8.2	115
152	Free-standing and bendable carbon nanotubes/TiO2 nanofibres composite electrodes for flexible lithium ion batteries. Electrochimica Acta, 2013, 104, 41-47.	2.6	64
153	Conductive Polymer Binder-Enabled Cycling of Pure Tin Nanoparticle Composite Anode Electrodes for a Lithium-Ion Battery. Journal of the Electrochemical Society, 2013, 160, A849-A855.	1.3	48
154	Electromechanical Probing of Li/Li₂CO₃Core/Shell Particles in a TEM. Journal of the Electrochemical Society, 2013, 160, A415-A419.	1.3	61
155	Conductive Polymer and Silicon Composite Secondary Particles for a High Area-Loading Negative Electrode. Journal of the Electrochemical Society, 2013, 160, A1380-A1383.	1.3	29
156	Distinct charge dynamics in battery electrodes revealed by in situ and operando soft X-ray spectroscopy. Nature Communications, 2013, 4, 2568.	5.8	211
157	Li4P2O7 modified high performance Li3V2(PO4)3 cathode material. Journal of Materials Chemistry, 2012, 22, 15775.	6.7	26
158	Phase Transformation and Lithiation Effect on Electronic Structure of Li_xFePO₄: An In-Depth Study by Soft X-ray and Simulations. Journal of the American Chemical Society, 2012, 134, 13708-13715.	6.6	136
159	Correlationship between electrode mechanics and long-term cycling performance for graphite anode in lithium ion cells. Journal of Power Sources, 2012, 217, 530-537.	4.0	71
160	High Rate Capability of Li(Ni_{1/3}Mn_{1/3}Co_{1/3})O₂Electrode for Li-Ion Batteries. Journal of the Electrochemical Society, 2012, 159, A438-A444.	1.3	141
161	Hard carbon: a promising lithium-ion battery anode for high temperature applications with ionic electrolyte. RSC Advances, 2012, 2, 4904.	1.7	79
162	A novel all-solid electrolyte based on a co-polymer of poly-(methoxy/hexadecal-poly(ethylene glycol)) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	6.7	74

#	Article	IF	Citations
163	Cooperation between Active Material, Polymeric Binder and Conductive Carbon Additive in Lithium Ion Battery Cathode. Journal of Physical Chemistry C, 2012, 116, 4875-4882.	1.5	264
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