Yang Xia

List of Publications by Year in descending order

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113 papers	8,583 citations	50170 46 h-index	43802 91 g-index
113 all docs	113 docs citations	113 times ranked	9292 citing authors

#	Article	IF	Citations
1	Composite polymer electrolytes reinforced by a three-dimensional polyacrylonitrile/Li0.33La0.557TiO3 nanofiber framework for room-temperature dendrite-free all-solid-state lithium metal battery. Rare Metals, 2022, 41, 1870-1879.	3.6	48
2	Hydrogen bonding enhanced SiO₂/PEO composite electrolytes for solid-state lithium batteries. Journal of Materials Chemistry A, 2022, 10, 3400-3408.	5.2	54
3	Regulation of the Interfaces Between Argyrodite Solid Electrolytes and Lithium Metal Anode. Frontiers in Chemistry, 2022, 10, 837978.	1.8	14
4	A Facile Pre-Lithiated Strategy towards High-Performance Li2Se-LiTiO2 Composite Cathode for Li-Se Batteries. Nanomaterials, 2022, 12, 815.	1.9	0
5	Glass fiber reinforced graphite/carbon black@PES composite films for high-temperature electric heaters. Journal of Industrial and Engineering Chemistry, 2022, 107, 401-409.	2.9	5
6	Polybenzimidazole/Conductive Carbon Black Composite Driven at Low Voltage for High-Temperature Heaters. Journal of Electronic Materials, 2022, 51, 2652-2662.	1.0	5
7	Spinel LiNi0.5Mn1.5O4 shell enables Ni-rich layered oxide cathode with improved cycling stability and rate capability for high-energy lithium-ion batteries. Electrochimica Acta, 2022, 418, 140352.	2.6	17
8	The Effect of Compaction Density of Sulfur/Carbon Cathodes on the Practical Application of Li-S Pouch Cells. Journal of Electronic Materials, 2022, 51, 4115-4124.	1.0	2
9	Argyrodite Solid Electrolyte-Integrated Ni-Rich Oxide Cathode with Enhanced Interfacial Compatibility for All-Solid-State Lithium Batteries. ACS Applied Materials & Interfaces, 2022, 14, 33361-33369.	4.0	13
10	Yttrium stabilized argyrodite solid electrolyte with enhanced ionic conductivity and interfacial stability for all-solid-state batteries. Journal of Power Sources, 2022, 543, 231846.	4.0	10
11	Interfacial Reactions in Inorganic Allâ€Solidâ€State Lithium Batteries. Batteries and Supercaps, 2021, 4, 8-38.	2.4	39
12	A low temperature MgH2-AlCl3-SiO2 system to synthesize nano-silicon for high-performance Li-ion batteries. Chemical Engineering Journal, 2021, 406, 126805.	6.6	15
13	Graphene/TiO2 decorated N-doped carbon foam as 3D porous current collector for high loading sulfur cathode. Materials Research Bulletin, 2021, 135, 111129.	2.7	15
14	Milling Time-Dependent Lithium/Sodium Storage Performance of Carbons Synthesized by a Mechanochemical Reaction. Energy & Fuels, 2021, 35, 4596-4603.	2.5	4
15	A Low-Cost and High-Efficiency Electrothermal Composite Film Composed of Hybrid Conductivity Fillers and Polymer Blends Matrix for High-Performance Plate Heater. Journal of Electronic Materials, 2021, 50, 3084-3094.	1.0	19
16	Li₂S₆â€Integrated PEOâ€Based Polymer Electrolytes for Allâ€Solidâ€State Lithiumâ€Metal Batteries. Angewandte Chemie - International Edition, 2021, 60, 17701-17706.	7.2	127
17	Li₂S₆â€Integrated PEOâ€Based Polymer Electrolytes for Allâ€Solidâ€State Lithiumâ€Metal Batteries. Angewandte Chemie, 2021, 133, 17842-17847.	1.6	33
18	Supercritical CO2 Synthesis of Freestanding Se1-xSx Foamy Cathodes for High-Performance Li-Se1-xSx Battery. Frontiers in Chemistry, 2021, 9, 738977.	1.8	7

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19	Unprecedented Selfâ€Healing Effect of Li₆PS₅Clâ€Based Allâ€Solidâ€State Lithium Battery. Small, 2021, 17, e2101326.	5.2	54
20	Facile and efficient synthesis of Li2Se particles towards high-areal capacity Li2Se cathode for advanced Liâ€“Se battery. Sustainable Materials and Technologies, 2021, 29, e00288.	1.7	2
21	Interface issues of lithium metal anode for <scp>highâ€energy</scp> batteries: Challenges, strategies, and perspectives. InformaÄnÃ-MateriÃ¡ly, 2021, 3, 155-174.	8.5	195
22	Green synthesis of graphite from CO2 without graphitization process of amorphous carbon. Nature Communications, 2021, 12, 119.	5.8	93
23	In Situ Synthesis of a Si/CNTs/C Composite by Directly Reacting Magnesium Silicide with Lithium Carbonate for Enhanced Lithium Storage Capability. Energy & Fuels, 2021, 35, 20386-20393.	2.5	7
24	Rose pollens as sustainable biotemplates for porous SiOC microellipsoids with enhanced lithium storage performance. Journal of Alloys and Compounds, 2020, 816, 152595.	2.8	14
25	2â€‰D MXeneâ€based Energy Storage Materials: Interfacial Structure Design and Functionalization. ChemSusChem, 2020, 13, 1409-1419.	3.6	63
26	Î²-Cyclodextrin-modified porous ceramic membrane with enhanced ionic conductivity and thermal stability for lithium-ion batteries. Ionics, 2020, 26, 173-182.	1.2	12
27	Achieving efficient and stable interface between metallic lithium and garnet-type solid electrolyte through a thin indium tin oxide interlayer. Journal of Power Sources, 2020, 448, 227440.	4.0	75
28	A new magnesium hydride route to synthesize morphology-controlled Si/rGO nanocomposite towards high-performance lithium storage. Electrochimica Acta, 2020, 330, 135248.	2.6	17
29	Unraveling the Intra and Intercycle Interfacial Evolution of Li₆PS₅Clâ€Based Allâ€Solidâ€State Lithium Batteries. Advanced Energy Materials, 2020, 10, 1903311.	10.2	141
30	Puffed Rice Carbon with Coupled Sulfur and Metal Iron for High-Efficiency Mercury Removal in Aqueous Solution. Environmental Science & Technology, 2020, 54, 2539-2547.	4.6	46
31	Silicon-Doped Argyrodite Solid Electrolyte Li₆PS₅I with Improved Ionic Conductivity and Interfacial Compatibility for High-Performance All-Solid-State Lithium Batteries. ACS Applied Materials & Interfaces, 2020, 12, 41538-41545.	4.0	90
32	Response to Comment on â€œPuffed Rice Carbon with Coupled Sulfur and Metal Iron for High-Efficiency Mercury Removal in Aqueous Solutionâ€• Environmental Science & Technology, 2020, 54, 7727-7729.	4.6	0
33	A Solar-Driven Flexible Electrochromic Supercapacitor. Materials, 2020, 13, 1206.	1.3	34
34	Electrode Design for Lithiumâ€“Sulfur Batteries: Problems and Solutions. Advanced Functional Materials, 2020, 30, 1910375.	7.8	206
35	Hydrogen Pressure-Dependent Dehydrogenation Performance of the Mg(NH₂)₂â€“2LiHâ€“0.07KOH System. ACS Applied Materials & Interfaces, 2020, 12, 15255-15261.	4.0	10
36	Rational design of highly efficient metal-polyaniline/carbon cloth catalyst towards enhanced oxygen reduction reaction. Ionics, 2020, 26, 5065-5073.	1.2	4

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37	Lithium Sulfide as Cathode Materials for Lithium-Ion Batteries: Advances and Challenges. Journal of Chemistry, 2020, 2020, 1-17.	0.9	9
38	Tremella-like porous carbon derived from one-step electroreduction of molten carbonates with superior rate capability for sodium-ion batteries. Ionics, 2020, 26, 2899-2907.	1.2	4
39	Lithium Batteries: Unraveling the Intra and Intercycle Interfacial Evolution of Li₆PS₅Clâ€Based Allâ€Solidâ€State Lithium Batteries (Adv. Energy Mater. 4/2020). Advanced Energy Materials, 2020, 10, 2070017.	10.2	9
40	Mechanochemical synthesis of carbon from CO2: Mechanism for milling process-dependent morphology of carbon. Journal of Alloys and Compounds, 2020, 830, 154681.	2.8	9
41	Multiscale Porous Carbon Nanomaterials for Applications in Advanced Rechargeable Batteries. Batteries and Supercaps, 2019, 2, 9-36.	2.4	56
42	Biological Metabolism Synthesis of Metal Oxides Nanorods from Bacteria as a Biofactory toward Highâ€Performance Lithiumâ€Ion Battery Anodes. Small, 2019, 15, e1902032.	5.2	17
43	Hydrothermal Synthesis and Upâ€conversion Luminescence of Ho³⁺/Yb³⁺ Coâ€doped PbTiO₃. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2019, 645, 1111-1117.	0.6	4
44	Synthesis and electrochemical performance of poly(vinylidene fluoride)/SiO2 hybrid membrane for lithium-ion batteries. Journal of Solid State Electrochemistry, 2019, 23, 519-527.	1.2	28
45	Atomic Sulfur Covalently Engineered Interlayers of Ti₃C₂ MXene for Ultraâ€Fast Sodiumâ€Ion Storage by Enhanced Pseudocapacitance. Advanced Functional Materials, 2019, 29, 1808107.	7.8	213
46	Sand/carbon composites as low-cost lithium storage materials with superior electrochemical performance. New Journal of Chemistry, 2019, 43, 4123-4129.	1.4	7
47	Hierarchically assembled mesoporous carbon nanosheets with an ultra large pore volume for high-performance lithiumâ€“sulfur batteries. New Journal of Chemistry, 2019, 43, 1380-1387.	1.4	16
48	Ultraefficient Conversion of CO₂ into Morphologyâ€Controlled Nanocarbons: A Sustainable Strategy toward Greenhouse Gas Utilization. Small, 2019, 15, e1902249.	5.2	21
49	Surfactant and binder free hierarchical NCNPs@CuO nanostructures on ITO for the cost effective enzyme-free glucose sensor applications. Applied Physics A: Materials Science and Processing, 2019, 125, 1.	1.1	23
50	Importing Tin Nanoparticles into Biomassâ€Derived Silicon Oxycarbides with Highâ€Rate Cycling Capability Based on Supercritical Fluid Technology. Chemistry - A European Journal, 2019, 25, 7719-7725.	1.7	14
51	Empowering Metal Phosphides Anode with Catalytic Attribute toward Superior Cyclability for Lithiumâ€Ion Storage. Advanced Functional Materials, 2019, 29, 1809051.	7.8	52
52	Hierarchical CuO/NiO-Carbon Nanocomposite Derived from Metal Organic Framework on Cello Tape for the Flexible and High Performance Nonenzymatic Electrochemical Glucose Sensors. ACS Sustainable Chemistry and Engineering, 2019, 7, 6707-6719.	3.2	148
53	Bio-templated fabrication of MnO nanoparticles in SiOC matrix with lithium storage properties. Chemical Engineering Journal, 2019, 359, 584-593.	6.6	43
54	Electrical heating behavior of flexible thermoplastic polyurethane/Super-P nanoparticle composite films for advanced wearable heaters. Journal of Industrial and Engineering Chemistry, 2019, 71, 293-300.	2.9	33

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55	Improved high rate capability of Li[Li0.2Mn0.534Co0.133Ni0.133]O2 cathode material by surface modification with Co3O4. Journal of Alloys and Compounds, 2019, 783, 349-356.	2.8	22
56	A flexible non-precious metal Fe-N/C catalyst for highly efficient oxygen reduction reaction. Nanotechnology, 2019, 30, 144001.	1.3	9
57	Poly(ethylene oxide) reinforced Li6PS5Cl composite solid electrolyte for all-solid-state lithium battery: Enhanced electrochemical performance, mechanical property and interfacial stability. Journal of Power Sources, 2019, 412, 78-85.	4.0	141
58	Mg₂B₂O₅ Nanowire Enabled Multifunctional Solid-State Electrolytes with High Ionic Conductivity, Excellent Mechanical Properties, and Flame-Retardant Performance. Nano Letters, 2018, 18, 3104-3112.	4.5	245
59	Metal-Embedded Porous Graphitic Carbon Fibers Fabricated from Bamboo Sticks as a Novel Cathode for Lithiumâ€“Sulfur Batteries. ACS Applied Materials & Interfaces, 2018, 10, 13598-13605.	4.0	57
60	Synthesis of hierarchical porous carbon from metal carbonates towards high-performance lithium storage. Green Chemistry, 2018, 20, 1484-1490.	4.6	32
61	Toast-like porous carbon derived from one-step reduction of CaCO3 for electrochemical lithium storage. Carbon, 2018, 130, 559-565.	5.4	23
62	Supercritical CO2 assisted synthesis of sulfur-modified zeolites as high-efficiency adsorbents for Hg2+ removal from water. New Journal of Chemistry, 2018, 42, 3541-3550.	1.4	13
63	Electrochemical lithium storage properties of desert sands. Ionics, 2018, 24, 2233-2239.	1.2	4
64	Enhancing Catalyzed Decomposition of Na₂CO₃ with Co₂MnO_x Nanowire-Decorated Carbon Fibers for Advanced Naâ€“CO₂ Batteries. ACS Applied Materials & Interfaces, 2018, 10, 17240-17248.	4.0	49
65	A green and facile strategy for the low-temperature and rapid synthesis of Li₂S@PCâ€“CNT cathodes with high Li₂S content for advanced Liâ€“S batteries. Journal of Materials Chemistry A, 2018, 6, 9906-9914.	5.2	45
66	Tunable pseudocapacitance storage of MXene by cation pillaring for high performance sodium-ion capacitors. Journal of Materials Chemistry A, 2018, 6, 7794-7806.	5.2	186
67	Enhanced sulfide chemisorption by conductive Al-doped ZnO decorated carbon nanoflakes for advanced Liâ€“S batteries. Nano Research, 2018, 11, 477-489.	5.8	36
68	Popcorn Inspired Porous Macrocellular Carbon: Rapid Puffing Fabrication from Rice and Its Applications in Lithiumâ€“Sulfur Batteries. Advanced Energy Materials, 2018, 8, 1701110.	10.2	361
69	Supercritical CO₂ mediated incorporation of sulfur into carbon matrix as cathode materials towards high-performance lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2018, 6, 212-222.	5.2	49
70	Biomass derived Ni(OH)2@porous carbon/sulfur composites synthesized by a novel sulfur impregnation strategy based on supercritical CO2 technology for advanced Li-S batteries. Journal of Power Sources, 2018, 378, 73-80.	4.0	87
71	A new strategy for the construction of 3D TiO₂ nanowires/reduced graphene oxide for high-performance lithium/sodium batteries. Journal of Materials Chemistry A, 2018, 6, 24256-24266.	5.2	43
72	Supercritical CO₂-assisted synthesis of 3D porous SiOC/Se cathode for ultrahigh areal capacity and long cycle life Liâ€“Se batteries. Journal of Materials Chemistry A, 2018, 6, 24773-24782.	5.2	26

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73	Green and Low-Temperature Synthesis of Foam-like Hierarchical Porous Carbon from CO₂ as Superior Lithium Storage Material. ACS Applied Energy Materials, 2018, 1, 7123-7129.	2.5	17
74	Revisiting Scientific Issues for Industrial Applications of Lithiumâ€“Sulfur Batteries. Energy and Environmental Materials, 2018, 1, 196-208.	7.3	158
75	Supercritical CO₂-Fluid-Assisted Synthesis of TiO₂ Quantum Dots/Reduced Graphene Oxide Composites for Outstanding Sodium Storage Capability. ACS Applied Energy Materials, 2018, 1, 7213-7219.	2.5	17
76	All-solid-state batteries with slurry coated LiNi0.8Co0.1Mn0.1O2 composite cathode and Li6PS5Cl electrolyte: Effect of binder content. Journal of Power Sources, 2018, 391, 73-79.	4.0	168
77	Effects of Nd-modification on the activity and SO₂ resistance of MnO_x/TiO₂ catalysts for low-temperature NH₃-SCR. New Journal of Chemistry, 2018, 42, 12845-12852.	1.4	19
78	High-content of sulfur uniformly embedded in mesoporous carbon: a new electrodeposition synthesis and an outstanding lithiumâ€“sulfur battery cathode. Journal of Materials Chemistry A, 2017, 5, 5905-5911.	5.2	37
79	3D lithium metal embedded within lithiophilic porous matrix for stable lithium metal batteries. Nano Energy, 2017, 37, 177-186.	8.2	431
80	Ionic conductivity promotion of polymer electrolyte with ionic liquid grafted oxides for all-solid-state lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2017, 5, 12934-12942.	5.2	126
81	Synthesis and electrochemical properties of LiMnPO4-modified Li[Li0.2Mn0.534Co0.133Ni0.133]O2 cathode material for Li-ion batteries. Electrochimica Acta, 2017, 235, 1-9.	2.6	19
82	N991/MWCNTs/PEO composite films with nano SiO 2 particles as filler for advanced flexible electric heating elements. Materials Research Bulletin, 2017, 90, 273-279.	2.7	21
83	Pillared Structure Design of MXene with Ultralarge Interlayer Spacing for High-Performance Lithium-Ion Capacitors. ACS Nano, 2017, 11, 2459-2469.	7.3	700
84	Synthesis and electrochemical performance of nano TiO₂(B)-coated Li[Li_{0.2}Mn_{0.54}Co_{0.13}Ni_{0.13}]O₂ cathode materials for lithium-ion batteries. New Journal of Chemistry, 2017, 41, 12962-12968.	1.4	21
85	H₂O-induced self-propagating synthesis of hierarchical porous carbon: a promising lithium storage material with superior rate capability and ultra-long cycling life. Journal of Materials Chemistry A, 2017, 5, 18221-18229.	5.2	30
86	Confining Sulfur in N-Doped Porous Carbon Microspheres Derived from Microalgaes for Advanced Lithiumâ€“Sulfur Batteries. ACS Applied Materials & Interfaces, 2017, 9, 23782-23791.	4.0	148
87	Efficient Activation of Li₂S by Transition Metal Phosphides Nanoparticles for Highly Stable Lithiumâ€“Sulfur Batteries. ACS Energy Letters, 2017, 2, 1711-1719.	8.8	252
88	Enhanced sulfide chemisorption using boron and oxygen dually doped multi-walled carbon nanotubes for advanced lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2017, 5, 632-640.	5.2	151
89	One-pot Biotemplate Synthesis of FeS 2 Decorated Sulfur-doped Carbon Fiber as High Capacity Anode for Lithium-ion Batteries. Electrochimica Acta, 2016, 209, 201-209.	2.6	63
90	Supercritical fluid assisted biotemplating synthesis of Siâ€“Oâ€“C microspheres from microalgae for advanced Li-ion batteries. RSC Advances, 2016, 6, 69764-69772.	1.7	35

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91	Sn⁴⁺ Ion Decorated Highly Conductive Ti₃C₂ MXene: Promising Lithium-Ion Anodes with Enhanced Volumetric Capacity and Cyclic Performance. ACS Nano, 2016, 10, 2491-2499.	7.3	632
92	TiC/NiO Core/Shell Nanoarchitecture with Battery-Capacitive Synchronous Lithium Storage for High-Performance Lithium-Ion Battery. ACS Applied Materials & Interfaces, 2015, 7, 11842-11848.	4.0	51
93	Sulfur synchronously electrodeposited onto exfoliated graphene sheets as a cathode material for advanced lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2015, 3, 16513-16519.	5.2	37
94	Controllable synthesis and in situ TEM study of lithiation mechanism of high performance NaV₃O₈ cathodes. Journal of Materials Chemistry A, 2015, 3, 3044-3050.	5.2	13
95	Synthesis and electrochemical performance of Li₄Ti₅O₁₂/TiO₂/C nanocrystallines for high-rate lithium ion batteries. RSC Advances, 2015, 5, 74774-74782.	1.7	31
96	Synthesis of MnO/C composites derived from pollen template for advanced lithium-ion batteries. Electrochimica Acta, 2015, 152, 286-293.	2.6	91
97	Bio-inspired fabrication of carbon nanotiles for high performance cathode of Liâ€“S batteries. Journal of Materials Chemistry A, 2014, 2, 2290-2296.	5.2	102
98	Facile fabrication of red phosphorus/TiO₂ composites for lithium ion batteries. RSC Advances, 2014, 4, 60914-60919.	1.7	15
99	Biotemplated synthesis of bark-structured TiC nanowires as Pt catalyst supports with enhanced electrocatalytic activity and durability for methanol oxidation. Journal of Materials Chemistry A, 2014, 2, 8003-8008.	5.2	54
100	Mesoporous Fe₃O₄@C submicrospheres evolved by a novel self-corrosion mechanism for high-performance lithium-ion batteries. New Journal of Chemistry, 2014, 38, 2428-2434.	1.4	31
101	Well-dispersed ultrafine Mn₃O₄ nanocrystals on reduced graphene oxide with high electrochemical Li-storage performance. New Journal of Chemistry, 2014, 38, 4743-4747.	1.4	26
102	Biotemplated Fabrication of Sn@C Anode Materials Based on the Unique Metal Biosorption Behavior of Microalgae. ACS Applied Materials & Interfaces, 2014, 6, 3696-3702.	4.0	67
103	Green and Facile Fabrication of Hollow Porous MnO/C Microspheres from Microalgaes for Lithium-Ion Batteries. ACS Nano, 2013, 7, 7083-7092.	7.3	493
104	Construction of sheetâ€“belt hybrid nanostructures from one-dimensional mesoporous TiO2(B) nanobelts and graphene sheets for advanced lithium-ion batteries. Journal of Materials Chemistry A, 2013, 1, 2495.	5.2	78
105	Template-free synthesis of hollow Î±-Fe₂O₃microcubes for advanced lithium-ion batteries. Journal of Materials Chemistry A, 2013, 1, 2307-2312.	5.2	66
106	Exploring the Energy Storage Mechanism of High Performance MnO₂ Electrochemical Capacitor Electrodes: An In Situ Atomic Force Microscopy Study in Aqueous Electrolyte. Advanced Functional Materials, 2013, 23, 4745-4751.	7.8	39
107	Doping and phase transformation of single-crystal pre-perovskite PbTiO3 fibers with TiO6 edge-shared octahedra. CrystEngComm, 2012, 14, 4520.	1.3	10
108	Facile synthesis of single-crystalline mesoporous Î±-Fe2O3 and Fe3O4 nanorods as anode materials for lithium-ion batteries. Journal of Materials Chemistry, 2012, 22, 20566.	6.7	148

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109	Highly efficient electrolytic exfoliation of graphite into graphene sheets based on Li ions intercalationâ€“expansionâ€“microexplosion mechanism. Journal of Materials Chemistry, 2012, 22, 10452.	6.7	109
110	Biotemplated fabrication of hierarchically porous NiO/C composite from lotus pollen grains for lithium-ion batteries. Journal of Materials Chemistry, 2012, 22, 9209.	6.7	232
111	Biotemplating of phosphate hierarchical rechargeable LiFePO4/C spirulina microstructures. Journal of Materials Chemistry, 2011, 21, 6498.	6.7	71
112	TiC Nanorods Derived from Cotton Fibers: Chloride-Assisted VLS Growth, Structure, and Mechanical Properties. Crystal Growth and Design, 2011, 11, 4422-4426.	1.4	74
113	A generic bamboo-based carbothermal method for preparing carbide (SiC, B4C, TiC, TaC, NbC, TixNb1â^'xC,) Tj ETQq1 1 0.784314 rgBT	6.7	76