Xia-Yin Yao

List of Publications by Year in Descending Order

98 papers	4,324 citations	37 h-index	64 g-index
105 ext. papers	6,071 ext. citations	10.6 avg, IF	6.1 L-index

#	Paper	IF	Citations
98	Gravity-driven Poly(ethylene glycol)@Li1.5Al0.5Ge1.5(PO4)3 asymmetric solid polymer electrolytes for all-solid-state lithium batteries. *Journal of Power Sources*, **2022**, 518, 230756	8.9	5
97	Flexible Composite Solid Electrolyte with 80 wt% Na3.4Zr1.9Zn0.1Si2.2P0.8O12 for Solid-State Sodium Batteries. *Energy Storage Materials*, **2022**,	19.4	4
96	Tungsten and oxygen co-doped stable tetragonal phase Na3SbS4 with ultrahigh ionic conductivity for all-solid-state sodium batteries. *Applied Materials Today*, **2022**, 27, 101448	6.6	3
95	Catalytic Mo2C decorated N-doped honeycomb-like carbon network for high stable lithium-sulfur batteries. *Chemical Engineering Journal*, **2021**, 133683	14.7	5
94	Wet-Milling Synthesis of Superionic Lithium Argyrodite Electrolytes with Different Concentrations of Lithium Vacancy. *ACS Applied Materials & Interfaces*, **2021**, 13, 46644-46649	9.5	1
93	Understanding LiI-LiBr Catalyst Activity for Solid State LiS/S Reactions in an All-Solid-State Lithium Battery. *Nano Letters*, **2021**, 21, 8488-8494	11.5	6
92	Formed Li-Ag Alloy Interface Enables LiGePS-Based All-Solid-State Lithium Batteries. *ACS Applied Materials & Interfaces*, **2021**, 13, 50076-50082	9.5	5
91	Synergistic Effects of Plasticizer and 3D Framework toward High-Performance Solid Polymer Electrolyte for Room-Temperature Solid-State Lithium Batteries. *ACS Applied Energy Materials*, **2021**, 4, 4129-4137	6.1	12
90	Superior lithium-stable Li7P2S8I solid electrolyte for all-solid-state lithium batteries. *Journal of Power Sources*, **2021**, 491, 229565	8.9	14
89	Ultrasmall LiS-Carbon Nanotube Nanocomposites for High-Rate All-Solid-State Lithium-Sulfur Batteries. *ACS Applied Materials & Interfaces*, **2021**, 13, 18666-18672	9.5	8
88	Quasi-Ionic Liquid Enabling Single-Phase Poly(vinylidene fluoride)-Based Polymer Electrolytes for Solid-State LiNi Co Mn O ||Li Batteries with Rigid-Flexible Coupling Interphase.. *Small Methods*, **2021**, 5, e2100262	12.8	36
87	10 Ɛm-Thick High-Strength Solid Polymer Electrolytes with Excellent Interface Compatibility for Flexible All-Solid-State Lithium-Metal Batteries. *Advanced Materials*, **2021**, 33, e2100353	24	61
86	Ultra-thin free-standing sulfide solid electrolyte film for cell-level high energy density all-solid-state lithium batteries. *Energy Storage Materials*, **2021**, 38, 249-254	19.4	28
85	Flexible Sulfide Electrolyte Thin Membrane with Ultrahigh Ionic Conductivity for All-Solid-State Lithium Batteries. *Nano Letters*, **2021**, 21, 5233-5239	11.5	32
84	Poly(ethylene glycol) brush on Li6.4La3Zr1.4Ta0.6O12 towards intimate interfacial compatibility in composite polymer electrolyte for flexible all-solid-state lithium metal batteries. *Journal of Power Sources*, **2021**, 498, 229934	8.9	16
83	Engineering the interface between LiCoO2 and Li10GeP2S12 solid electrolytes with an ultrathin Li2CoTi3O8 interlayer to boost the performance of all-solid-state batteries. *Energy and Environmental Science*, **2021**, 14, 437-450	35.4	26
82	Na10SnSb2S12: A nanosized air-stable solid electrolyte for all-solid-state sodium batteries. *Chemical Engineering Journal*, **2021**, 420, 127692	14.7	7

81	All-Solid-State Lithium Batteries with Sulfide Electrolytes and Oxide Cathodes. *Electrochemical Energy Reviews*, **2021**, 4, 101-135	29.3	65
80	Lithium/Sulfide All-Solid-State Batteries using Sulfide Electrolytes. *Advanced Materials*, **2021**, 33, e2000751	24	105
79	Dipolar and catalytic effects of an Fe3O4 based nitrogen-doped hollow carbon sphere framework for high performance lithium sulfur batteries. *Inorganic Chemistry Frontiers*, **2021**, 8, 1771-1778	6.8	7
78	Liquid-Phase Synthesis of Nanosized Na11Sn2PS12 Solid Electrolytes for Room Temperature All-Solid-State Sodium Batteries. *ACS Applied Energy Materials*, **2021**, 4, 1467-1473	6.1	2
77	Surface Engineered Li Metal Anode for All-Solid-State Lithium Metal Batteries with High Capacity. *ChemElectroChem*, **2021**, 8, 386-389	4.3	5
76	Bifunctional Interphase-Enabled Li10GeP2S12 Electrolytes for Lithium–Sulfur Battery. *ACS Energy Letters*, **2021**, 6, 862-868	20.1	29
75	Poly(methyl methacrylate)-Based Gel Polymer Electrolyte for High-Performance Solid State LiO2 Battery with Enhanced Cycling Stability. *ACS Applied Energy Materials*, **2021**, 4, 3975-3982	6.1	9
74	One-dimensional NiS-CNT@Li7P3S11 nanocomposites as ionic/electronic additives for LiCoO2 based all-solid-state lithium batteries. *Electrochimica Acta*, **2021**, 398, 139280	6.7	0
73	Harnessing the Volume Expansion of MoS Anode by Structure Engineering to Achieve High Performance Beyond Lithium-Based Rechargeable Batteries. *Advanced Materials*, **2021**, 33, e2106232	24	16
72	High ionic conductivity and stable phase Na11.5Sn2Sb0.5Ti0.5S12 for all-solid-state sodium batteries. *Journal of Power Sources*, **2021**, 512, 230485	8.9	2
71	Bimetallic Hexagonal Layered NiCo Sulfides with High Electrochemical Performance for All-Solid-State Lithium Batteries. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 17061-17067	8.3	1
70	Improving the Interfacial Stability between Lithium and Solid-State Electrolyte via Dipole-Structured Lithium Layer Deposited on Graphene Oxide. *Advanced Science*, **2020**, 7, 2000237	13.6	16
69	Passivation of the Cathode-Electrolyte Interface for 5 V-Class All-Solid-State Batteries. *ACS Applied Materials & Interfaces*, **2020**, 12, 28083-28090	9.5	14
68	Na3Zr2Si2PO12: A Stable Na+-Ion Solid Electrolyte for Solid-State Batteries. *ACS Applied Energy Materials*, **2020**, 3, 7427-7437	6.1	31
67	Selenium-Infused Ordered Mesoporous Carbon for Room-Temperature All-Solid-State Lithium-Selenium Batteries with Ultrastable Cyclability. *ACS Applied Materials & Interfaces*, **2020**, 12, 16541-16547	9.5	13
66	Synergistic effect of cobalt, nitrogen-codoped hollow carbon sphere hosts for high performance lithium sulfur batteries. *New Journal of Chemistry*, **2020**, 44, 5965-5971	3.6	1
65	Sulfur-Embedded FeS as a High-Performance Cathode for Room Temperature All-Solid-State Lithium-Sulfur Batteries. *ACS Applied Materials & Interfaces*, **2020**, 12, 18519-18525	9.5	30
64	Sodium Ion Batteries: Toward High Energy Density All Solid-State Sodium Batteries with Excellent Flexibility (Adv. Energy Mater. 12/2020). *Advanced Energy Materials*, **2020**, 10, 2070055	21.8	0

63	CoS@LiPS Hexagonal Platelets as Cathodes with Superior Interfacial Contact for All-Solid-State Lithium Batteries. *ACS Applied Materials & Interfaces*, **2020**, 12, 14079-14086	9.5	22
62	Toward High Energy Density All Solid-State Sodium Batteries with Excellent Flexibility. *Advanced Energy Materials*, **2020**, 10, 1903698	21.8	67
61	Bio-inspired Nanoscaled Electronic/Ionic Conduction Networks for Room-Temperature All-Solid-State Sodium-Sulfur Battery. *Nano Today*, **2020**, 33, 100860	17.9	31
60	Cobalt-doped pyrite for Na11Sn2SbS11.5Se0.5 electrolyte based all-solid-state sodium battery with enhanced capacity. *Journal of Power Sources*, **2020**, 449, 227515	8.9	10
59	Prussian blue analog Co3[Co(CN)6]2 as a cathode material for lithium-sulfur batteries. *Applied Physics Letters*, **2020**, 117, 163905	3.4	2
58	Self-Formed Electronic/Ionic Conductive Fe S @ S @ 0.9Na SbS ?0.1NaI Composite for High-Performance Room-Temperature All-Solid-State Sodium-Sulfur Battery. *Small*, **2020**, 16, e2001574	11	23
57	Coating of LiPS Electrolyte on CuCoS/Graphene Nanocomposite as a High-Performance Cathode for All-Solid-State Lithium Batteries. *ACS Applied Materials & Interfaces*, **2020**, 12, 33810-33816	9.5	6
56	Ultrastable All-Solid-State Sodium Rechargeable Batteries. *ACS Energy Letters*, **2020**, 5, 2835-2841	20.1	53
55	Densified LiPSCl Nanorods with High Ionic Conductivity and Improved Critical Current Density for All-Solid-State Lithium Batteries. *Nano Letters*, **2020**, 20, 6660-6665	11.5	41
54	CNTs@S composite as cathode for all-solid-state lithium-sulfur batteries with ultralong cycle life. *Journal of Energy Chemistry*, **2020**, 40, 151-155	12	49
53	Grain-boundary-resistance-less Na3SbS4-xSex solid electrolytes for all-solid-state sodium batteries. *Nano Energy*, **2019**, 66, 104109	17.1	32
52	Titanium Dioxide Doping toward High-Lithium-Ion-Conducting Li1.5Al0.5Ge1.5(PO4)3 Glass-Ceramics for All-Solid-State Lithium Batteries. *ACS Applied Energy Materials*, **2019**, 2, 7299-7305	6.1	8
51	PEDOT-PSS coated VS2 nanosheet anodes for high rate and ultrastable lithium-ion batteries. *New Journal of Chemistry*, **2019**, 43, 1681-1687	3.6	14
50	Preparation of new composite polymer electrolyte for long cycling all-solid-state lithium battery. *Ionics*, **2019**, 25, 907-916	2.7	13
49	Molybdenum trisulfide based anionic redox driven chemistry enabling high-performance all-solid-state lithium metal batteries. *Energy Storage Materials*, **2019**, 23, 168-180	19.4	25
48	High conductivity polymer electrolyte with comb-like structure via a solvent-free UV-cured method for large-area ambient all-solid-sate lithium batteries. *Journal of Materiomics*, **2019**, 5, 195-203	6.7	11
47	High air-stability and superior lithium ion conduction of Li3+3P1-Zn S4-O by aliovalent substitution of ZnO for all-solid-state lithium batteries. *Energy Storage Materials*, **2019**, 17, 266-274	19.4	61
46	Transitional Metal Catalytic Pyrite Cathode Enables Ultrastable Four-Electron-Based All-Solid-State Lithium Batteries. *ACS Nano*, **2019**, 13, 9551-9560	16.7	28

45	Effective Strategy for Enhancing the Performance of LiTiO Anodes in Lithium-Ion Batteries: Magnetron Sputtering Molybdenum Disulfide-Optimized Interface Architecture. *ACS Applied Materials & Interfaces*, **2019**, 11, 26880-26890	9.5	8
44	Construction of 3D Electronic/Ionic Conduction Networks for All-Solid-State Lithium Batteries. *Small*, **2019**, 15, e1905849	11	26
43	Rational design of multi-channel continuous electronic/ionic conductive networks for room temperature vanadium tetrasulfide-based all-solid-state lithium-sulfur batteries. *Nano Energy*, **2019**, 57, 771-782	17.1	65
42	Core-Shell FeS@NaPSSe Nanorods for Room Temperature All-Solid-State Sodium Batteries with High Energy Density. *ACS Nano*, **2018**, 12, 2809-2817	16.7	46
41	Highly Crystalline Layered VS Nanosheets for All-Solid-State Lithium Batteries with Enhanced Electrochemical Performances. *ACS Applied Materials & Interfaces*, **2018**, 10, 10053-10063	9.5	61
40	Sulfide solid electrolytes for all-solid-state lithium batteries: Structure, conductivity, stability and application. *Energy Storage Materials*, **2018**, 14, 58-74	19.4	228
39	High ion conductive Sb2O5-doped Li3PS4 with excellent stability against Li for all-solid-state lithium batteries. *Journal of Power Sources*, **2018**, 389, 140-147	8.9	62
38	NASICON-structured Na3.1Zr1.95Mg0.05Si2PO12 solid electrolyte for solid-state sodium batteries. *Rare Metals*, **2018**, 37, 480-487	5.5	32
37	Interface Re-Engineering of LiGePS Electrolyte and Lithium anode for All-Solid-State Lithium Batteries with Ultralong Cycle Life. *ACS Applied Materials & Interfaces*, **2018**, 10, 2556-2565	9.5	148
36	Nanoscaled NaPS Solid Electrolyte for All-Solid-State FeS/Na Batteries with Ultrahigh Initial Coulombic Efficiency of 95% and Excellent Cyclic Performances. *ACS Applied Materials & Interfaces*, **2018**, 10, 12300-12304	9.5	49
35	In-situ preparation of poly(ethylene oxide)/Li3PS4 hybrid polymer electrolyte with good nanofiller distribution for rechargeable solid-state lithium batteries. *Journal of Power Sources*, **2018**, 387, 72-80	8.9	67
34	FeS nanosheets as positive electrodes for all-solid-state lithium batteries. *Solid State Ionics*, **2018**, 318, 60-64	3.3	25
33	Superior lithium ion conduction of polymer electrolyte with comb-like structure via solvent-free copolymerization for bipolar all-solid-state lithium battery. *Journal of Materials Chemistry A*, **2018**, 6, 13438-13447	13	48
32	Nickel sulfide anchored carbon nanotubes for all-solid-state lithium batteries with enhanced rate capability and cycling stability. *Journal of Materials Chemistry A*, **2018**, 6, 12098-12105	13	55
31	High-Performance All-Solid-State Lithium–Sulfur Batteries Enabled by Amorphous Sulfur-Coated Reduced Graphene Oxide Cathodes. *Advanced Energy Materials*, **2017**, 7, 1602923	21.8	241
30	Fe3S4@Li7P3S11 nanocomposites as cathode materials for all-solid-state lithium batteries with improved energy density and low cost. *Journal of Materials Chemistry A*, **2017**, 5, 23919-23925	13	53
29	An advanced construction strategy of all-solid-state lithium batteries with excellent interfacial compatibility and ultralong cycle life. *Journal of Materials Chemistry A*, **2017**, 5, 16984-16993	13	128
28	Facile synthesis of Co9S8 nanosheets for lithium ion batteries with enhanced rate capability and cycling stability. *New Journal of Chemistry*, **2017**, 41, 9184-9191	3.6	16

27	A new solid polymer electrolyte incorporating Li10GeP2S12 into a polyethylene oxide matrix for all-solid-state lithium batteries. *Journal of Power Sources*, **2016**, 301, 47-53	8.9	273
26	High-Energy All-Solid-State Lithium Batteries with Ultralong Cycle Life. *Nano Letters*, **2016**, 16, 7148-7154	11.5	243
25	All-solid-state lithium batteries with inorganic solid electrolytes: Review of fundamental science. *Chinese Physics B*, **2016**, 25, 018802	1.2	117
24	Insights on the fundamental lithium storage behavior of all-solid-state lithium batteries containing the LiNi0.8Co0.15Al0.05O2 cathode and sulfide electrolyte. *Journal of Power Sources*, **2016**, 307, 724-730	8.9	44
23	Lithium Superionic Conducting Oxysulfide Solid Electrolyte with Excellent Stability against Lithium Metal for All-Solid-State Cells. *Journal of the Electrochemical Society*, **2016**, 163, A96-A101	3.9	82
22	NiS Nanorods as Cathode Materials for All-Solid-State Lithium Batteries with Excellent Rate Capability and Cycling Stability. *ChemElectroChem*, **2016**, 3, 764-769	4.3	31
21	Structure Integrity Endowed by a Ti-Containing Surface Layer towards Ultrastable LiNi0.8Co0.15Al0.05O2for All-Solid-State Lithium Batteries. *Journal of the Electrochemical Society*, **2016**, 163, A1530-A1534	3.9	35
20	Cu2ZnSnS4/graphene nanocomposites for ultrafast, long life all-solid-state lithium batteries using lithium metal anode. *Energy Storage Materials*, **2016**, 4, 59-65	19.4	67
19	Polydopamine-derived porous nanofibers as host of ZnFe2O4 nanoneedles: towards high-performance anodes for lithium-ion batteries. *RSC Advances*, **2015**, 5, 13315-13323	3.7	36
18	MoS2 nanoflowers consisting of nanosheets with a controllable interlayer distance as high-performance lithium ion battery anodes. *RSC Advances*, **2015**, 5, 7938-7943	3.7	90
17	Influence of the Li$_{10}$GeP$_2$S$_{12}$ based solid electrolytes on NCA electrochemical performances in all-solid-state lithium batteries. *Solid State Ionics*, **2015**, 274, 8-11	3.3	50
16	Poly(vinylidene fluoride) nanofibrous mats with covalently attached SiO2 nanoparticles as an ionic liquid host: enhanced ion transport for electrochromic devices and lithium-ion batteries. *Journal of Materials Chemistry A*, **2015**, 3, 16040-16049	13	34
15	Synthesis and electrochemical properties of LiNi1/3Co1/3Mn1/3O2 cathodes in lithium-ion and all-solid-state lithium batteries. *Ionics*, **2015**, 21, 43-49	2.7	11
14	Dopamine-assisted one-pot synthesis of zinc ferrite-embedded porous carbon nanospheres for ultrafast and stable lithium ion batteries. *Chemical Communications*, **2014**, 50, 14597-600	5.8	40
13	Facile synthesis of porous CoFe2O4 nanosheets for lithium-ion battery anodes with enhanced rate capability and cycling stability. *RSC Advances*, **2014**, 4, 27488-27492	3.7	48
12	Zinc ferrite nanorods coated with polydopamine-derived carbon for high-rate lithium ion batteries. *Electrochimica Acta*, **2014**, 146, 464-471	6.7	29
11	Polydopamine-assisted synthesis of hollow NiCo2O4 nanospheres as high-performance lithium ion battery anodes. *RSC Advances*, **2014**, 4, 37928	3.7	39
10	Non-isothermal crystallization kinetics of poly (lactic acid)/graphene nanocomposites. *Journal of Polymer Engineering*, **2013**, 33, 163-171	1.4	20

9	A 3D porous architecture of Si/graphene nanocomposite as high-performance anode materials for Li-ion batteries. *Journal of Materials Chemistry*, **2012**, 22, 7724		182
8	Co3O4 nanowires as high capacity anode materials for lithium ion batteries. *Journal of Alloys and Compounds*, **2012**, 521, 95-100	5.7	92
7	Mechanical and Thermal Properties of Epoxy Resin Nanocomposites Reinforced with Graphene Oxide. *Polymer-Plastics Technology and Engineering*, **2012**, 51, 251-256		116
6	Si/C nanocomposite anode materials by freeze-drying with enhanced electrochemical performance in lithium-ion batteries. *Journal of Solid State Electrochemistry*, **2012**, 16, 2733-2738	2.6	13
5	Porous hematite (⊞Fe2O3) nanorods as an anode material with enhanced rate capability in lithium-ion batteries. *Electrochemistry Communications*, **2011**, 13, 1439-1442	5.1	67
4	Synthesis and electrochemical properties of layered lithium transition metal oxides. *Journal of Materials Chemistry*, **2011**, 21, 2544-2549		69
3	A Robust Li-Intercalated Interlayer with Strong Electron Withdrawing Ability Enables Durable and High-Rate Li Metal Anode. *ACS Energy Letters*,1594-1603	20.1	8
2	Air exposure towards stable Li/Li10GeP2S12 interface for all-solid-state lithium batteries		4
1	Electrochemical Polishing: An Effective Strategy for Eliminating Li Dendrites. *Advanced Functional Materials*,2203652	15.6	2