

Xiaoen Wang

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1299425/publications.pdf>

Version: 2024-02-01

45
papers

2,210
citations

249298

26
h-index

263392

45
g-index

47
all docs

47
docs citations

47
times ranked

2550
citing authors

#	ARTICLE	IF	CITATIONS
1	Ion Transport in Li-Doped Triethyl(methyl)phosphonium Tetrafluoroborate (Li-[P ₁₂₂₂][BF ₄]) Impregnated with PVDF Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2022, 126, 3839-3852.	1.5	9
2	Ultra-stable all-solid-state sodium metal batteries enabled by perfluoropolyether-based electrolytes. <i>Nature Materials</i> , 2022, 21, 1057-1065.	13.3	92
3	Functional Binders Based on Polymeric Ionic Liquids for Sodium Oxygen Batteries Using Ionic Liquid Electrolytes. <i>ACS Applied Energy Materials</i> , 2021, 4, 434-444.	2.5	11
4	Phase behavior and electrochemical properties of solid lithium electrolytes based on N-ethyl-N-methylpyrrolidinium bis(fluorosulfonyl)imide and PVDF composites. <i>Solid State Ionics</i> , 2021, 363, 115588.	1.3	7
5	Solid-state rigid-rod polymer composite electrolytes with nanocrystalline lithium ion pathways. <i>Nature Materials</i> , 2021, 20, 1255-1263.	13.3	110
6	Highly conductive ionogel electrolytes based on N-ethyl-N-methylpyrrolidinium bis(fluorosulfonyl)imide FSI and NaFSI mixtures and their applications in sodium batteries. <i>JPhys Materials</i> , 2021, 4, 044005.	1.8	12
7	Anion effects on the properties of OIPC/PVDF composites. <i>Materials Advances</i> , 2021, 2, 1683-1694.	2.6	17
8	Development and Progression of Polymer Electrolytes for Batteries: Influence of Structure and Chemistry. <i>Polymers</i> , 2021, 13, 4127.	2.0	23
9	Nanofiber-reinforced polymer electrolytes toward room temperature solid-state lithium batteries. <i>Journal of Power Sources</i> , 2020, 448, 227424.	4.0	34
10	Solid (cyanomethyl)trimethylammonium salts for electrochemically stable electrolytes for lithium metal batteries. <i>Journal of Materials Chemistry A</i> , 2020, 8, 14721-14735.	5.2	9
11	Stable performance of an all-solid-state Li metal cell coupled with a high-voltage NCA cathode and ultra-high lithium content poly(ionic liquid)s-based polymer electrolyte. <i>Journal of Solid State Electrochemistry</i> , 2020, 24, 2479-2485.	1.2	13
12	Strongly Correlated Ion Dynamics in Plastic Ionic Crystals and Polymerized Ionic Liquids. <i>Journal of Physical Chemistry C</i> , 2020, 124, 17889-17896.	1.5	22
13	Mixed Ionic-Electronic Conductors Based on PEDOT:PolyDADMA and Organic Ionic Plastic Crystals. <i>Polymers</i> , 2020, 12, 1981.	2.0	15
14	The influence of interfacial interactions on the conductivity and phase behaviour of organic ionic plastic crystal/polymer nanoparticle composite electrolytes. <i>Journal of Materials Chemistry A</i> , 2020, 8, 5350-5362.	5.2	26
15	Toward High-Energy-Density Lithium Metal Batteries: Opportunities and Challenges for Solid Organic Electrolytes. <i>Advanced Materials</i> , 2020, 32, e1905219.	11.1	154
16	A novel proton conducting ionogel electrolyte based on poly(ionic liquids) and protic ionic liquid. <i>Electrochimica Acta</i> , 2020, 346, 136224.	2.6	24
17	Poly(ionic liquid)s/Electrospun Nanofiber Composite Polymer Electrolytes for High Energy Density and Safe Li Metal Batteries. <i>ACS Applied Energy Materials</i> , 2019, 2, 6237-6245.	2.5	63
18	Poly(Ionic Liquid)s-in-Salt Electrolytes with Co-coordination-Assisted Lithium-Ion Transport for Safe Batteries. <i>Joule</i> , 2019, 3, 2687-2702.	11.7	108

#	ARTICLE	IF	CITATIONS
19	Sustainable, Dendrite Free Lithium-Metal Electrode Cycling Achieved with Polymer Composite Electrolytes Based on a Poly(Ionic Liquid) Host. <i>Batteries and Supercaps</i> , 2019, 2, 229-239.	2.4	35
20	Innovative Electrolytes Based on Ionic Liquids and Polymers for Next-Generation Solid-State Batteries. <i>Accounts of Chemical Research</i> , 2019, 52, 686-694.	7.6	276
21	Lubricin Antiadhesive Coatings Exhibit Size-Selective Transport Properties that Inhibit Biofouling of Electrode Surfaces with Minimal Loss in Electrochemical Activity. <i>Advanced Materials Interfaces</i> , 2018, 5, 1701296.	1.9	31
22	Poly(ionic liquid) iongels for all-solid rechargeable zinc/PEDOT batteries. <i>Electrochimica Acta</i> , 2018, 278, 271-278.	2.6	47
23	The anion effect in ternary electrolyte systems using poly(diallyldimethylammonium) and phosphonium-based ionic liquid with high lithium salt concentration. <i>Solid State Ionics</i> , 2018, 327, 83-92.	1.3	27
24	Structure and Ion Dynamics in Imidazolium-Based Protic Organic Ionic Plastic Crystals. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 3904-3909.	2.1	20
25	Ternary lithium-salt organic ionic plastic crystal polymer composite electrolytes for high voltage, all-solid-state batteries. <i>Energy Storage Materials</i> , 2018, 15, 407-414.	9.5	45
26	Improved Li-Ion Transport by DME Chelation in a Novel Ionic Liquid-Based Hybrid Electrolyte for Li-S Battery Application. <i>Journal of Physical Chemistry C</i> , 2018, 122, 14373-14382.	1.5	33
27	Influence of Electrospun Poly(vinylidene difluoride) Nanofiber Matrix on the Ion Dynamics of a Protic Organic Ionic Plastic Crystal. <i>Journal of Physical Chemistry C</i> , 2018, 122, 14546-14553.	1.5	10
28	Structure and Property Changes in Self-Assembled Lubricin Layers Induced by Calcium Ion Interactions. <i>Langmuir</i> , 2017, 33, 2559-2570.	1.6	38
29	Phosphonium plastic crystal salt alloyed with a sodium salt as a solid-state electrolyte for sodium devices: phase behaviour and electrochemical performance. <i>Journal of Materials Chemistry A</i> , 2017, 5, 5770-5780.	5.2	40
30	Organic Ionic Plastic Crystal-Based Composite Electrolyte with Surface Enhanced Ion Transport and Its Use in All-Solid-State Lithium Batteries. <i>Advanced Materials Technologies</i> , 2017, 2, 1700046.	3.0	49
31	Solid-State Lithium Conductors for Lithium Metal Batteries Based on Electrospun Nanofiber/Plastic Crystal Composites. <i>ChemSusChem</i> , 2017, 10, 3135-3145.	3.6	58
32	N-ethyl-N-methylpyrrolidinium bis(fluorosulfonyl)imide-electrospun polyvinylidene fluoride composite electrolytes: characterization and lithium cell studies. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 2225-2234.	1.3	61
33	Preparation and characterization of gel polymer electrolytes using poly(ionic liquids) and high lithium salt concentration ionic liquids. <i>Journal of Materials Chemistry A</i> , 2017, 5, 23844-23852.	5.2	109
34	Comb-like solid polymer electrolyte based on polyethylene glycol-grafted sulfonated polyether ether ketone. <i>Electrochimica Acta</i> , 2017, 255, 396-404.	2.6	59
35	Novel sound insulation materials based on epoxy/hollow silica nanotubes composites. <i>Composites Part B: Engineering</i> , 2017, 131, 125-133.	5.9	27
36	Enhancement of ion dynamics in organic ionic plastic crystal/PVDF composite electrolytes prepared by co-electrospinning. <i>Journal of Materials Chemistry A</i> , 2016, 4, 9873-9880.	5.2	49

#	ARTICLE	IF	CITATIONS
37	Microporous polymer electrolyte based on PVDF/PEO star polymer blends for lithium ion batteries. <i>Journal of Membrane Science</i> , 2015, 491, 82-89.	4.1	161
38	Synthesis of Sodium Poly[4-styrenesulfonyl(trifluoromethylsulfonyl)imide]-co-ethylacrylate] Solid Polymer Electrolytes. <i>Electrochimica Acta</i> , 2015, 175, 232-239.	2.6	27
39	Increased ion conduction in dual cation [sodium] [tetraalkylammonium] poly[4-styrenesulfonyl(trifluoromethylsulfonyl)imide-co-ethylacrylate] ionomers. <i>Journal of Materials Chemistry A</i> , 2015, 3, 19989-19995.	5.2	19
40	Poly(ethylene glycol) grafted multi-walled carbon nanotubes/LiFePO ₄ composite cathodes for lithium ion batteries. <i>Journal of Power Sources</i> , 2014, 246, 260-268.	4.0	59
41	Gelled microporous polymer electrolyte with low liquid leakage for lithium-ion batteries. <i>Journal of Membrane Science</i> , 2014, 454, 298-304.	4.1	64
42	Durable perfluorosulfonic polymer electrolyte membranes prepared from alkaline-ion-assisted heat treatment. <i>Journal of Membrane Science</i> , 2011, 379, 106-111.	4.1	9
43	Fabrication and characterization of PFSI/ePTFE composite proton exchange membranes of polymer electrolyte fuel cells. <i>Electrochimica Acta</i> , 2007, 52, 5304-5311.	2.6	56
44	Fabrication and characterization of improved PFSA/ePTFE composite polymer electrolyte membranes. <i>Journal of Membrane Science</i> , 2007, 306, 298-306.	4.1	35
45	A Self-Humidifying Composite Membrane with Self-Assembled Pt Nanoparticles for Polymer Electrolyte Membrane Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2006, 153, A1868.	1.3	16