Weiqiang Lv

List of Publications by Year
in descending order

90 papers	4,945 citations	109321 35 h-index	91884 69 g-index
91 all docs	91 docs citations	91 times ranked	6003 citing authors

#	Article	IF	Citations
1	Cathode infiltration with enhanced catalytic activity and durability for intermediate-temperature solid oxide fuel cells. Chinese Chemical Letters, 2022, 33, 674-682.	9.0	21
2	Reproducible Single-Droplet multiplexed detection through Excitation-Encoded Tri-mode upconversion solid sensors. Chemical Engineering Journal, 2022, 430, 131242.	12.7	4
3	Polybenzimidazole functionalized electrolyte with Liâ€wetting and selfâ€fluorination functionalities for practical Li metal batteries. InformaÄnÃ-MateriÃ¡ly, 2022, 4, .	17.3	33
4	Highly Active and Durable Air Electrodes for Reversible Protonic Ceramic Electrochemical Cells Enabled by an Efficient Bifunctional Catalyst. Advanced Energy Materials, 2022, 12, .	19.5	57
5	Photoluminescence of Î²-Ba2ScAlO5: Eu3+ red emitting phosphors effectively activated by UV light. Journal of Luminescence, 2022, 245, 118800.	3.1	9
6	Synergistic effect enhances the peroxidase-like activity in platinum nanoparticle-supported metalâ€"organic framework hybrid nanozymes for ultrasensitive detection of glucose. Nano Research, 2021, 14, 4689-4695.	10.4	57
7	Enhancing Oxygen Reduction Activity and Cr Tolerance of Solid Oxide Fuel Cell Cathodes by a Multiphase Catalyst Coating. Advanced Functional Materials, 2021, 31, 2100034.	14.9	56
8	Recent progress in flame-retardant separators for safe lithium-ion batteries. Energy Storage Materials, 2021, 37, 628-647.	18.0	94
9	Enhance the performance of dye-sensitized solar cells by constructing upconversion-core/semiconductor-shell structured NaYF4:Yb,Er @BiOCl microprisms. Solar Energy, 2021, 224, 563-568.	6.1	16
10	Synthesis and upconversion luminescence of Î±-Ba2ScAlO5 hosted compounds. Journal of Solid State Chemistry, 2021, 304, 122559.	2.9	10
11	Heatâ€Resistant Trilayer Separators for Highâ€Performance Lithiumâ€Ion Batteries. Physica Status Solidi - Rapid Research Letters, 2020, 14, 1900504.	2.4	6
12	Genetic engineering of porous sulfur species with molecular target prevents host passivation in lithium sulfur batteries. Energy Storage Materials, 2020, 26, 65-72.	18.0	31
13	Heterostructured NiS₂/ZnIn₂S₄ Realizing Toroid-like Li₂O₂ Deposition in Lithiumâ€"Oxygen Batteries with Low-Donor-Number Solvents. ACS Nano, 2020, 14, 3490-3499.	14.6	113
14	A model study on correlation between microstructure-gas diffusion and Cr deposition in porous LSM/YSZ cathodes of solid oxide fuel cells. International Journal of Hydrogen Energy, 2019, 44, 18319-18329.	7.1	9
15	A sandwich-structured double-battery device for direct evaluation of lithium diffusion coefficients and phase transition in electrodes of lithium ion batteries. Chemical Engineering Science, 2019, 200, 80-86.	3.8	15
16	An Upgraded Lithium Ion Battery Based on a Polymeric Separator Incorporated with Anode Active Materials. Advanced Energy Materials, 2019, 9, 1803627.	19.5	53
17	Lithiophilic montmorillonite serves as lithium ion reservoir to facilitate uniform lithium deposition. Nature Communications, 2019, 10, 4973.	12.8	144
18	Composite nanofibers through in-situ reduction with abundant active sites as flexible and stable anode for lithium ion batteries. Composites Part B: Engineering, 2019, 161, 369-375.	12.0	24

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19	Highâ€Performance PEâ€BN/PVDFâ€HFP Bilayer Separator for Lithiumâ€Ion Batteries. Advanced Materials Interfaces, 2019, 6, 1801330.	3.7	67
20	Inhibiting Polysulfide Shuttling with a Graphene Composite Separator for Highly Robust Lithium-Sulfur Batteries. Joule, 2019, 3, 303.	24.0	14
21	A quasi-solid composite separator with high ductility for safe and high-performance lithium-ion batteries. Journal of Power Sources, 2019, 414, 225-232.	7.8	38
22	A Nanostructured Si/SiOC Composite Anode with Volumeâ€Changeâ€Buffering Microstructure for Lithiumâ€Ion Batteries. Chemistry - A European Journal, 2019, 25, 2604-2609.	3.3	27
23	Three-Dimensional Nanoporous Polyethylene-Reinforced PVDF-HFP Separator Enabled by Dual-Solvent Hierarchical Gas Liberation for Ultrahigh-Rate Lithium Ion Batteries. ACS Applied Energy Materials, 2018, 1, 921-927.	5.1	21
24	Coherent Bi2O3-TiO2 hetero-junction material through oriented growth as an efficient photo-catalyst for methyl orange degradation. Materials Today Chemistry, 2018, 8, 36-41.	3.5	5
25	Lithiumâ€Ion Batteries: A Singleâ€Step Hydrothermal Route to 3D Hierarchical Cu₂O/CuO/rGO Nanosheets as Highâ€Performance Anode of Lithiumâ€Ion Batteries (Small 5/2018). Small, 2018, 14, 1870020.	10.0	10
26	Designing Safe Electrolyte Systems for a Highâ€Stability Lithiumâ€“Sulfur Battery. Advanced Energy Materials, 2018, 8, 1702348.	19.5	266
27	Confining excitation energy of Er³⁺-sensitized upconversion nanoparticles through introducing various energy trapping centers. Journal of Materials Chemistry C, 2018, 6, 3869-3875.	5.5	62
28	A New Hydrophilic Binder Enabling Strongly Anchoring Polysulfides for Highâ€Performance Sulfur Electrodes in Lithiumâ€Sulfur Battery. Advanced Energy Materials, 2018, 8, 1702889.	19.5	270
29	Highly Efficient PVDFâ€HFP/Colloidal Alumina Composite Separator for Highâ€Temperature Lithiumâ€Ion Batteries. Advanced Materials Interfaces, 2018, 5, 1701147.	3.7	89
30	Direct impregnation of SeS₂ into a MOF-derived 3D nanoporous Coâ€“Nâ€“C architecture towards superior rechargeable lithium batteries. Journal of Materials Chemistry A, 2018, 6, 10466-10473.	10.3	120
31	A Singleâ€Step Hydrothermal Route to 3D Hierarchical Cu₂O/CuO/rGO Nanosheets as Highâ€Performance Anode of Lithiumâ€Ion Batteries. Small, 2018, 14, 1702667.	10.0	84
32	Synergistic effects of sulfur poisoning and gas diffusion on polarization loss in anodes of solid oxide fuel cells. AICHE Journal, 2018, 64, 1127-1134.	3.6	4
33	Constructing a â€œNativeâ€•Oxyfluoride Layer on Fluoride Particles for Enhanced Upconversion Luminescence. Advanced Functional Materials, 2018, 28, 1803946.	14.9	38
34	A Nonflammable and Thermotolerant Separator Suppresses Polysulfide Dissolution for Safe and Longâ€Cycle Lithiumâ€Sulfur Batteries. Advanced Energy Materials, 2018, 8, 1802441.	19.5	133
35	Inhibiting Polysulfide Shuttling with a Graphene Composite Separator for Highly Robust Lithium-Sulfur Batteries. Joule, 2018, 2, 2091-2104.	24.0	345
36	Advanced materials for flexible electrochemical energy storage devices. Journal of Materials Research, 2018, 33, 2281-2296.	2.6	7

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37	Separator Modification and Functionalization for Inhibiting the Shuttle Effect in Lithiumâ€Sulfur Batteries. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1800249.	2.4	32
38	A Highlyâ€Efficient Composite Separator with Strong Ligand Interaction for Highâ€Temperature Lithiumâ€Ion Batteries. ChemElectroChem, 2018, 5, 2722-2728.	3.4	37
39	Atomic Interlamellar Ion Path in High Sulfur Content Lithiumâ€Montmorillonite Host Enables Highâ€Rate and Stable Lithiumâ€“Sulfur Battery. Advanced Materials, 2018, 30, e1804084.	21.0	201
40	An Efficient, Scalable Route to Robust PVDFâ€coâ€HFP/SiO₂ Separator for Longâ€Cycle Lithium Ion Batteries. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1800319.	2.4	30
41	Distinctive Supercapacitive Properties of Copper and Copper Oxide Nanocrystals Sharing a Similar Colloidal Synthetic Route. Advanced Energy Materials, 2017, 7, 1700105.	19.5	42
42	Ionic conductivity evolution of isotropic crystal with double strained interfaces. Solid State Ionics, 2017, 303, 167-171.	2.7	2
43	A highly-efficient route to three-dimensional nanoporous copper leaves with high surface enhanced Raman scattering properties. Chemical Engineering Journal, 2017, 321, 394-400.	12.7	24
44	A critical look into effects of electrode pore morphology in solid oxide fuel cells. AICHE Journal, 2017, 63, 2312-2317.	3.6	8
45	Facile electrophoretic deposition of functionalized Bi2O3 nanoparticles. Materials and Design, 2017, 116, 359-364.	7.0	17
46	On the polarization loss induced by thermal expansion in solid oxide fuel cells. Solid State Ionics, 2017, 311, 63-68.	2.7	5
47	Tellurium-Impregnated Porous Cobalt-Doped Carbon Polyhedra as Superior Cathodes for Lithiumâ€“Tellurium Batteries. ACS Nano, 2017, 11, 8144-8152.	14.6	137
48	Three-dimensional hierarchical C-Co-N/Se derived from metal-organic framework as superior cathode for Li-Se batteries. Journal of Power Sources, 2017, 363, 103-109.	7.8	82
49	Insights into van der Waals interaction between nanotubes and planar surfaces. Materials Today Physics, 2017, 2, 35-39.	6.0	1
50	Reviewâ€”Gassing Mechanism and Suppressing Solutions in Li₄Ti₅O₁₂-Based Lithium-Ion Batteries. Journal of the Electrochemical Society, 2017, 164, A2213-A2224.	2.9	40
51	Highly Efficient Materials Assembly Via Electrophoretic Deposition for Electrochemical Energy Conversion and Storage Devices. Advanced Energy Materials, 2016, 6, 1502018.	19.5	50
52	From Metalâ€“Organic Framework to Li₂S@Câ€“Coâ€“N Nanoporous Architecture: A High-Capacity Cathode for Lithiumâ€“Sulfur Batteries. ACS Nano, 2016, 10, 10981-10987.	14.6	273
53	Space matters: Li+ conduction versus strain effect at FePO4/LiFePO4 interface. Applied Physics Letters, 2016, 108, .	3.3	18
54	Crystal-isotropicity dependence of ionic conductivity enhancement at strained interfaces. Solid State Ionics, 2016, 289, 168-172.	2.7	2

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55	Three-Dimensional Hierarchical Graphene-CNT@Se: A Highly Efficient Freestanding Cathode for Liâ€“Se Batteries. ACS Energy Letters, 2016, 1, 16-20.	17.4	161
56	Fe3C/helical carbon nanotube hybrid: Facile synthesis and spin-induced enhancement in microwave-absorbing properties. Composites Part B: Engineering, 2016, 107, 51-58.	12.0	76
57	Reduced electrochemical performances of proton exchange membrane fuel cells due to gaseous diffusion in electrolytes. RSC Advances, 2016, 6, 97194-97198.	3.6	2
58	Three-Dimensional CNT/Grapheneâ€“Li₂S Aerogel as Freestanding Cathode for High-Performance Liâ€“S Batteries. ACS Energy Letters, 2016, 1, 820-826.	17.4	148
59	Vaporâ€“Dissociationâ€“Solid Growth of Three-Dimensional Graphite-like Capsules with Delicate Morphology and Atomic-level Thickness Control. Crystal Growth and Design, 2016, 16, 5040-5048.	3.0	27
60	Highly-flexible 3D Li2S/graphene cathode for high-performance lithium sulfur batteries. Journal of Power Sources, 2016, 327, 474-480.	7.8	114
61	Three-Dimensional Hierarchical Reduced Graphene Oxide/Tellurium Nanowires: A High-Performance Freestanding Cathode for Liâ€“Te Batteries. ACS Nano, 2016, 10, 8837-8842.	14.6	197
62	Three-dimensional hierarchically structured aerogels constructed with layered MoS 2 /graphene nanosheets as free-standing anodes for high-performance lithium ion batteries. Electrochimica Acta, 2016, 215, 12-18.	5.2	126
63	Ionic conductivity evolution at strained crystal interfaces in solid oxide fuel cells (SOFCs). International Journal of Hydrogen Energy, 2016, 41, 22254-22259.	7.1	5
64	Three-dimensional ionic conduction in the strained electrolytes of solid oxide fuel cells. Journal of Applied Physics, 2016, 119, 174904.	2.5	2
65	Energy Storage: Highly Efficient Materials Assembly Via Electrophoretic Deposition for Electrochemical Energy Conversion and Storage Devices (Adv. Energy Mater. 7/2016). Advanced Energy Materials, 2016, 6, .	19.5	0
66	Gas leak diffusion induced polarization in submicro/nanoscale non-tight electrolytes of solid oxide fuel cells. RSC Advances, 2016, 6, 62052-62061.	3.6	3
67	Gas convection in fuel cells: An overlooked factor. Electrochimica Acta, 2015, 176, 1476-1483.	5.2	1
68	A new insight into the oxygen diffusion in porous cathodes ofÂlithium-air batteries. Energy, 2015, 83, 669-673.	8.8	29
69	Assembly of anisotropic one dimensional Ag nanostructures through orientated attachment: on-axis or off-axis growth?. RSC Advances, 2015, 5, 20783-20787.	3.6	7
70	Oriented-attachment dimensionality build-up via van der Waals interaction. CrystEngComm, 2015, 17, 729-733.	2.6	19
71	Physical justification for ionic conductivity enhancement at strained coherent interfaces. Journal of Power Sources, 2015, 285, 37-42.	7.8	23
72	Interfacial strain effect on gas transport in nanostructured electrodes of solid oxide fuel cells. Journal of Power Sources, 2015, 291, 126-131.	7.8	11

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73	Initial-stage oriented-attachment one-dimensional assembly of nanocrystals: fundamental insight with a collisionâ€“recrystallization model. RSC Advances, 2015, 5, 54605-54612.	3.6	2
74	Advanced Oxygen Sensing for Accurate Gas Diffusivity Measurements in Fuel Cells. ChemElectroChem, 2015, 2, 819-823.	3.4	2
75	Materials insights into low-temperature performances of lithium-ion batteries. Journal of Power Sources, 2015, 300, 29-40.	7.8	250
76	Analytical insight into the oxygen diffusion in wetted porous cathodes of Li-air batteries. Energy, 2015, 93, 416-420.	8.8	13
77	Interfacial lattice-strain effects on improving the overall performance of micro-solid oxide fuel cells. Journal of Materials Chemistry A, 2015, 3, 20031-20050.	10.3	81
78	Lithiumâ€“Air Batteries: Performance Interplays with Instability Factors. ChemElectroChem, 2015, 2, 312-323.	3.4	30
79	A facile and scalable route to nano-crystallized kesterite Cu2ZnSnS4 fibers via electrospinning/sulfurization. Materials Research Bulletin, 2015, 61, 504-510.	5.2	2
80	Gas transport evaluation in lithiumâ€“air batteries with micro/nano-structured cathodes. Journal of Power Sources, 2015, 274, 762-767.	7.8	15
81	The evaluation of van der Waals interaction in the oriented-attachment growth of nanotubes. Materials Research Society Symposia Proceedings, 2014, 1705, 1.	0.1	0
82	Understanding the oriented-attachment growth of nanocrystals from an energy point of view: a review. Nanoscale, 2014, 6, 2531-2547.	5.6	156
83	Length evolution of helical micro/nano-scale structures. RSC Advances, 2014, 4, 31308-31312.	3.6	2
84	Gas Transport in Solid Oxide Fuel Cells. SpringerBriefs in Energy, 2014, , .	0.3	30
85	An electrochemical device for the Knudsen and bulk diffusivity measurement in the anodes of solid oxide fuel cells. International Journal of Hydrogen Energy, 2014, 39, 15057-15062.	7.1	7
86	Additive-Free Shape-Invariant Nano-to-Micron Size-Tuning of Cu₂O Cubic Crystals by Square-Wave Voltammetry. Journal of Physical Chemistry C, 2014, 118, 11062-11077.	3.1	18
87	Electrochemical devices with optimized gas tightness for the diffusivity measurement in fuel cells. International Journal of Hydrogen Energy, 2014, 39, 2334-2339.	7.1	5
88	An Energy Investigation into 1D/2D Orientedâ€Attachment Assemblies of 1D Ag Nanocrystals. ChemPhysChem, 2014, 15, 2688-2691.	2.1	21
89	Diffusivity Measurement Techniques. SpringerBriefs in Energy, 2014, , 19-44.	0.3	0
90	Controlled Synthesis and Up-Conversion Emission of Rare-Earth Tri-Doped NaYF₄ Nanocrystals Under Femtosecond-Laser Excitation. Journal of Nanoscience and Nanotechnology, 2011, 11, 7700-7708.	0.9	2