

Xuwei Fu

List of Publications by Year in descending order

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Version: 2024-02-01

47
papers

1,809
citations

304368

22
h-index

276539

41
g-index

47
all docs

47
docs citations

47
times ranked

2088
citing authors

#	ARTICLE	IF	CITATIONS
1	A protein-enabled protective film with functions of self-adapting and anion-anchoring for stabilizing lithium-metal batteries. <i>Journal of Energy Chemistry</i> , 2022, 64, 485-495.	7.1	20
2	Configurational and structural design of separators toward shuttling-free and dendrite-free lithium-sulfur batteries: A review. <i>Energy Storage Materials</i> , 2022, 47, 629-648.	9.5	53
3	Natural protein as novel additive of a commercial electrolyte for Long-Cycling lithium metal batteries. <i>Chemical Engineering Journal</i> , 2022, 437, 135283.	6.6	7
4	Tailoring bimodal protein fabrics for enhanced air filtration performance. <i>Separation and Purification Technology</i> , 2022, 290, 120913.	3.9	8
5	MOF-Enabled Ion-Regulating Gel Electrolyte for Long-Cycling Lithium Metal Batteries Under High Voltage. <i>Small</i> , 2022, 18, e2106225.	5.2	26
6	Advanced gel polymer electrolytes for safe and durable lithium metal batteries: Challenges, strategies, and perspectives. <i>Energy Storage Materials</i> , 2021, 34, 515-535.	9.5	165
7	Protein-Engineered Functional Materials for Bioelectronics. <i>Advanced Functional Materials</i> , 2021, 31, 2006744.	7.8	24
8	A Protein-Based Janus Separator for Trapping Polysulfides and Regulating Ion Transport in Lithium-Sulfur Batteries. <i>ChemSusChem</i> , 2021, 14, 2226-2236.	3.6	10
9	In-Situ Synthesis of N, O, P-Doped Hierarchical Porous Carbon from Poly(bis(phenoxy)phosphazene for Polysulfide-Trapping Interlayer in Lithium-Sulfur Batteries. <i>Chemistry - A European Journal</i> , 2021, 27, 9876-9884.	1.7	5
10	Building bimodal structures by a wettability difference-driven strategy for high-performance protein air-filters. <i>Journal of Hazardous Materials</i> , 2021, 415, 125742.	6.5	17
11	Decoupled Ion Transport in Protein-Based Solid Electrolyte through <i>Ab Initio</i> Calculations and Experiments. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 9429-9435.	2.1	4
12	Natural "core-relief" for lithium dendrites: Tailoring protein configurations for long-life lithium metal anodes. <i>Energy Storage Materials</i> , 2021, 42, 22-33.	9.5	22
13	Interface-tailored forces fluffing protein fiber membranes for high-performance filtration. <i>Separation and Purification Technology</i> , 2021, 278, 119570.	3.9	6
14	A novel carbon aerogel enabling respiratory monitoring for bio-facial masks. <i>Journal of Materials Chemistry A</i> , 2021, 9, 13143-13150.	5.2	9
15	Robust supramolecular composite hydrogels for sustainable and "evisible" agriculture irrigation. <i>Journal of Materials Chemistry A</i> , 2021, 9, 24613-24621.	5.2	11
16	A Bimodal Protein Fabric Enabled via In Situ Diffusion for High-Performance Air Filtration. <i>Environmental Science & Technology</i> , 2020, 54, 12042-12050.	4.6	24
17	A Janus protein-based nanofabric for trapping polysulfides and stabilizing lithium metal in lithium-sulfur batteries. <i>Journal of Materials Chemistry A</i> , 2020, 8, 7377-7389.	5.2	38
18	A Super-breathable "Woven-like" Protein Nanofabric. <i>ACS Applied Bio Materials</i> , 2020, 3, 2958-2964.	2.3	13

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19	A wet-processed, binder-free sulfur cathode integrated with a dual-functional separator for flexible Li-S batteries. <i>Nanoscale</i> , 2020, 12, 5483-5493.	2.8	21
20	An ultra-durable gel electrolyte stabilizing ion deposition and trapping polysulfides for lithium-sulfur batteries. <i>Energy Storage Materials</i> , 2020, 27, 25-34.	9.5	27
21	Let It Catch: A Short-Branched Protein for Efficiently Capturing Polysulfides in Lithium-Sulfur Batteries. <i>Advanced Energy Materials</i> , 2020, 10, 1903642.	10.2	37
22	See the invisibles: Inspecting battery separator defects via pressure drop. <i>Energy Storage Materials</i> , 2019, 16, 589-596.	9.5	12
23	Rational Design of Graphite Nanoplatelets Interlayers via a Surfactant-Controlled Strategy for Enhancing Lithium-Sulfur Batteries. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 15267-15277.	3.2	15
24	A Janus nanofiber-based separator for trapping polysulfides and facilitating ion-transport in lithium-sulfur batteries. <i>Nanoscale</i> , 2019, 11, 18090-18098.	2.8	33
25	Biomaterials for High-Energy Lithium-Based Batteries: Strategies, Challenges, and Perspectives. <i>Advanced Energy Materials</i> , 2019, 9, 1901774.	10.2	73
26	An Ultrarobust Composite Gel Electrolyte Stabilizing Ion Deposition for Long-Life Lithium Metal Batteries. <i>Advanced Functional Materials</i> , 2019, 29, 1904547.	7.8	76
27	A protein-functionalized microfiber/protein nanofiber Bi-layered air filter with synergistically enhanced filtration performance by a viable method. <i>Separation and Purification Technology</i> , 2019, 229, 115837.	3.9	36
28	A robust and ion-conductive protein-based binder enabling strong polysulfide anchoring for high-energy lithium-sulfur batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 1835-1848.	5.2	96
29	Dissipative Particle Dynamics Simulations of a Protein-Directed Self-Assembly of Nanoparticles. <i>ACS Omega</i> , 2019, 4, 10216-10224.	1.6	11
30	A critical study on a 3D scaffold-based lithium metal anode. <i>Electrochimica Acta</i> , 2019, 318, 220-227.	2.6	15
31	Strategies for Building Robust Traffic Networks in Advanced Energy Storage Devices: A Focus on Composite Electrodes. <i>Advanced Materials</i> , 2019, 31, e1804204.	11.1	69
32	A review of the electrical and mechanical properties of carbon nanofiller-reinforced polymer composites. <i>Journal of Materials Science</i> , 2019, 54, 1036-1076.	1.7	210
33	Natural polypeptides treat pollution complex: Moisture-resistant multi-functional protein nanofabrics for sustainable air filtration. <i>Nano Research</i> , 2018, 11, 4265-4277.	5.8	78
34	Self-Assembled Protein Nanofilter for Trapping Polysulfides and Promoting Li ⁺ Transport in Lithium-Sulfur Batteries. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 2450-2459.	2.1	35
35	Building Ion-Conduction Highways in Polymeric Electrolytes by Manipulating Protein Configuration. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 4726-4736.	4.0	26
36	Small Molecules Make a Big Difference: A Solvent-Controlled Strategy for Building Robust Conductive Network Structures in High-Capacity Electrode Composites. <i>Small Methods</i> , 2018, 2, 1800066.	4.6	15

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37	A bio-surfactant for defect control: Multifunctional gelatin coated MWCNTs for conductive epoxy nanocomposites. <i>Composites Science and Technology</i> , 2018, 159, 216-224.	3.8	33
38	Morphology engineering of protein fabrics for advanced and sustainable filtration. <i>Journal of Materials Chemistry A</i> , 2018, 6, 21585-21595.	5.2	69
39	Core-Shell Hybrid Nanowires with Protein Enabling Fast Ion Conduction for High-Performance Composite Polymer Electrolytes. <i>Small</i> , 2018, 14, e1803564.	5.2	22
40	Poly(Vinylidene Fluoride)-Based Blends as New Binders for Lithium-Ion Batteries. <i>ChemElectroChem</i> , 2018, 5, 2288-2294.	1.7	20
41	A polymeric nanocomposite interlayer as ion-transport-regulator for trapping polysulfides and stabilizing lithium metal. <i>Energy Storage Materials</i> , 2018, 15, 447-457.	9.5	27
42	A Nanoprotein-Functionalized Hierarchical Composite Air Filter. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 11606-11613.	3.2	47
43	Fabrication, properties and applications of soy-protein-based materials: A review. <i>International Journal of Biological Macromolecules</i> , 2018, 120, 475-490.	3.6	163
44	A UV-curable epoxy with soft-segments for 3D-printable shape-memory materials. <i>Journal of Materials Science</i> , 2018, 53, 12650-12661.	1.7	12
45	A Multifunctional Protein Coating for Self-Assembled Porous Nanostructured Electrodes. <i>ACS Omega</i> , 2017, 2, 1679-1686.	1.6	15
46	Decoupled Ion Transport in a Protein-Based Solid Ion Conductor. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 4304-4310.	2.1	38
47	A protein-reinforced adhesive composite electrolyte. <i>Polymer</i> , 2016, 106, 43-52.	1.8	16