Xuewei Fu

List of Publications by Year in descending order

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 review of the electrical and mechanical properties of carbon nanofiller-reinforced polymer composites. Journal of Materials Science, 2019, 54, 1036-1076.	1.7	210
2	Advanced gel polymer electrolytes for safe and durable lithium metal batteries: Challenges, strategies, and perspectives. Energy Storage Materials, 2021, 34, 515-535.	9.5	165
3	Fabrication, properties and applications of soy-protein-based materials: A review. International Journal of Biological Macromolecules, 2018, 120, 475-490.	3.6	163
4	A robust and ion-conductive protein-based binder enabling strong polysulfide anchoring for high-energy lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2019, 7, 1835-1848.	5.2	96
5	Natural polypeptides treat pollution complex: Moisture-resistant multi-functional protein nanofabrics for sustainable air filtration. Nano Research, 2018, 11, 4265-4277.	5.8	78
6	An Ultrarobust Composite Gel Electrolyte Stabilizing Ion Deposition for Longâ€Life Lithium Metal Batteries. Advanced Functional Materials, 2019, 29, 1904547.	7.8	76
7	Biomaterials for Highâ€Energy Lithiumâ€Based Batteries: Strategies, Challenges, and Perspectives. Advanced Energy Materials, 2019, 9, 1901774.	10.2	73
8	Morphology engineering of protein fabrics for advanced and sustainable filtration. Journal of Materials Chemistry A, 2018, 6, 21585-21595.	5.2	69
9	Strategies for Building Robust Traffic Networks in Advanced Energy Storage Devices: A Focus on Composite Electrodes. Advanced Materials, 2019, 31, e1804204.	11.1	69
10	Configurational and structural design of separators toward shuttling-free and dendrite-free lithium-sulfur batteries: A review. Energy Storage Materials, 2022, 47, 629-648.	9.5	53
11	A Nanoprotein-Functionalized Hierarchical Composite Air Filter. ACS Sustainable Chemistry and Engineering, 2018, 6, 11606-11613.	3.2	47
12	Decoupled Ion Transport in a Protein-Based Solid Ion Conductor. Journal of Physical Chemistry Letters, 2016, 7, 4304-4310.	2.1	38
13	A Janus protein-based nanofabric for trapping polysulfides and stabilizing lithium metal in lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2020, 8, 7377-7389.	5.2	38
14	Let It Catch: A Shortâ€Branched Protein for Efficiently Capturing Polysulfides in Lithiumâ€“Sulfur Batteries. Advanced Energy Materials, 2020, 10, 1903642.	10.2	37
15	A protein-functionalized microfiber/protein nanofiber Bi-layered air filter with synergistically enhanced filtration performance by a viable method. Separation and Purification Technology, 2019, 229, 115837.	3.9	36
16	Self-Assembled Protein Nanofilter for Trapping Polysulfides and Promoting Li⁺ Transport in Lithiumâ€“Sulfur Batteries. Journal of Physical Chemistry Letters, 2018, 9, 2450-2459.	2.1	35
17	A bio-surfactant for defect control: Multifunctional gelatin coated MWCNTs for conductive epoxy nanocomposites. Composites Science and Technology, 2018, 159, 216-224.	3.8	33
18	A Janus nanofiber-based separator for trapping polysulfides and facilitating ion-transport in lithiumâ€“sulfur batteries. Nanoscale, 2019, 11, 18090-18098.	2.8	33

#	Article	IF	Citations
19	A polymeric nanocomposite interlayer as ion-transport-regulator for trapping polysulfides and stabilizing lithium metal. Energy Storage Materials, 2018, 15, 447-457.	9.5	27
20	An ultra-durable gel electrolyte stabilizing ion deposition and trapping polysulfides for lithium-sulfur batteries. Energy Storage Materials, 2020, 27, 25-34.	9.5	27
21	Building Ion-Conduction Highways in Polymeric Electrolytes by Manipulating Protein Configuration. ACS Applied Materials & Interfaces, 2018, 10, 4726-4736.	4.0	26
22	MOFâ€Enabled Ionâ€Regulating Gel Electrolyte for Longâ€Cycling Lithium Metal Batteries Under High Voltage. Small, 2022, 18, e2106225.	5.2	26
23	A Bimodal Protein Fabric Enabled via In Situ Diffusion for High-Performance Air Filtration. Environmental Science & Technology, 2020, 54, 12042-12050.	4.6	24
24	Proteinâ€Engineered Functional Materials for Bioelectronics. Advanced Functional Materials, 2021, 31, 2006744.	7.8	24
25	Coreâ€“Shell Hybrid Nanowires with Protein Enabling Fast Ion Conduction for Highâ€Performance Composite Polymer Electrolytes. Small, 2018, 14, e1803564.	5.2	22
26	Natural â€œreliefâ€•for lithium dendrites: Tailoring protein configurations for long-life lithium metal anodes. Energy Storage Materials, 2021, 42, 22-33.	9.5	22
27	A wet-processed, binder-free sulfur cathode integrated with a dual-functional separator for flexible Liâ€“S batteries. Nanoscale, 2020, 12, 5483-5493.	2.8	21
28	Poly(Vinylidene Fluoride)â€Based Blends as New Binders for Lithiumâ€Ion Batteries. ChemElectroChem, 2018, 5, 2288-2294.	1.7	20
29	A protein-enabled protective film with functions of self-adapting and anion-anchoring for stabilizing lithium-metal batteries. Journal of Energy Chemistry, 2022, 64, 485-495.	7.1	20
30	Building bimodal structures by a wettability difference-driven strategy for high-performance protein air-filters. Journal of Hazardous Materials, 2021, 415, 125742.	6.5	17
31	A protein-reinforced adhesive composite electrolyte. Polymer, 2016, 106, 43-52.	1.8	16
32	A Multifunctional Protein Coating for Self-Assembled Porous Nanostructured Electrodes. ACS Omega, 2017, 2, 1679-1686.	1.6	15
33	Small Molecules Make a Big Difference: A Solventâ€Controlled Strategy for Building Robust Conductive Network Structures in Highâ€Capacity Electrode Composites. Small Methods, 2018, 2, 1800066.	4.6	15
34	Rational Design of Graphite Nanoplatelets Interlayers via a Surfactant-Controlled Strategy for Enhancing Lithiumâ€“Sulfur Batteries. ACS Sustainable Chemistry and Engineering, 2019, 7, 15267-15277.	3.2	15
35	A critical study on a 3D scaffold-based lithium metal anode. Electrochimica Acta, 2019, 318, 220-227.	2.6	15
36	A Super-breathable â€œWoven-likeâ€•Protein Nanofabric. ACS Applied Bio Materials, 2020, 3, 2958-2964.	2.3	13

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37	A UV-curable epoxy with â€œsoftâ€•segments for 3D-printable shape-memory materials. Journal of Materials Science, 2018, 53, 12650-12661.	1.7	12
38	â€œSeeâ€•the invisibles: Inspecting battery separator defects via pressure drop. Energy Storage Materials, 2019, 16, 589-596.	9.5	12
39	Dissipative Particle Dynamics Simulations of a Protein-Directed Self-Assembly of Nanoparticles. ACS Omega, 2019, 4, 10216-10224.	1.6	11
40	Robust supramolecular composite hydrogels for sustainable and â€œvisibleâ€•agriculture irrigation. Journal of Materials Chemistry A, 2021, 9, 24613-24621.	5.2	11
41	A Proteinâ€Based Janus Separator for Trapping Polysulfides and Regulating Ion Transport in Lithiumâ^'Sulfur Batteries. ChemSusChem, 2021, 14, 2226-2236.	3.6	10
42	A novel carbon aerogel enabling respiratory monitoring for bio-facial masks. Journal of Materials Chemistry A, 2021, 9, 13143-13150.	5.2	9
43	Tailoring bimodal protein fabrics for enhanced air filtration performance. Separation and Purification Technology, 2022, 290, 120913.	3.9	8
44	Natural protein as novel additive of a commercial electrolyte for Long-Cycling lithium metal batteries. Chemical Engineering Journal, 2022, 437, 135283.	6.6	7
45	Interface-tailored forces fluffing protein fiber membranes for high-performance filtration. Separation and Purification Technology, 2021, 278, 119570.	3.9	6
46	Inâ€Situ Synthesis of N, O, Pâ€Doped Hierarchical Porous Carbon from Polyâ€bis(phenoxy)phosphazene for Polysulfideâ€Trapping Interlayer in Lithiumâ€Sulfur Batteries. Chemistry - A European Journal, 2021, 27, 9876-9884.	1.7	5
47	Decoupled Ion Transport in Protein-Based Solid Electrolyte through Ab Initio Calculations and Experiments. Journal of Physical Chemistry Letters, 2021, 12, 9429-9435.	2.1	4