Wenshuai Chen

List of Publications by Year
in descending order

67 papers	7,089 citations	87723 38 h-index	98622 67 g-index
72 all docs	72 docs citations	72 times ranked	7211 citing authors

#	Article	IF	Citations
1	Synergy effect between adsorption and heterogeneous photo-Fenton-like catalysis on LaFeO3/lignin-biochar composites for high efficiency degradation of ofloxacin under visible light. Separation and Purification Technology, 2022, 280, 119751.	3.9	68
2	A Nanostructured Moistureâ€Absorbing Gel for Fast and Largeâ€Scale Passive Dehumidification. Advanced Materials, 2022, 34, e2200865.	11.1	36
3	Monolithic NF@ZnO/Au@ZIF-8 photocatalyst with strong photo-thermal-magnetic coupling and selective-breathing effects for boosted conversion of CO2 to CH4. Applied Catalysis B: Environmental, 2022, 309, 121267.	10.8	46
4	A Mottâ€"Schottky Heterogeneous Layer for Liâ€"S Batteries: Enabling Both High Stability and Commercialâ€Sulfur Utilization. Advanced Energy Materials, 2022, 12, .	10.2	74
5	Mechanistic Study of Interfacial Modification for Stable Zn Anode Based on a Thin Separator. Small, 2022, 18, e2201045.	5.2	24
6	A Nanostructured Moistureâ€Absorbing Gel for Fast and Largeâ€Scale Passive Dehumidification (Adv.) Tj ETQq0 0 0 rgBT /Overlock 10 T	11.1	0
7	Multi-dimensional, transparent and foldable cellulose-based triboelectric nanogenerator for touching password recognition. Nano Energy, 2022, 98, 107307.	8.2	20
8	Transparent and flexible structurally colored biological nanofiber films for visual gas detection. Matter, 2022, 5, 2813-2828.	5.0	11
9	Celluloseâ€Based Flexible Functional Materials for Emerging Intelligent Electronics. Advanced Materials, 2021, 33, e2000619.	11.1	425
10	Recyclable nanocellulose-confined palladium nanoparticles with enhanced room-temperature catalytic activity and chemoselectivity. Science China Materials, 2021, 64, 621-630.	3.5	19
11	Biopolymer Nanofibers for Nanogenerator Development. Research, 2021, 2021, 1843061.	2.8	22
12	Solar-powered nanostructured biopolymer hygroscopic aerogels for atmospheric water harvesting. Nano Energy, 2021, 80, 105569.	8.2	99
13	Bioinspired Energy Storage and Harvesting Devices. Advanced Materials Technologies, 2021, 6, 2001301.	3.0	11
14	Woodâ€Derived Systems for Sustainable Oil/Water Separation. Advanced Sustainable Systems, 2021, 5, 2100039.	2.7	22
15	A <scp>nonâ€Newtonian</scp> fluidic celluloseâ€modified glass microfiber separator for flexible lithiumâ€ion batteries. EcoMat, 2021, 3, e12126.	6.8	23
16	Cellulose: Celluloseâ€Based Flexible Functional Materials for Emerging Intelligent Electronics (Adv.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	11.1	62
17	Electroâ€Blown Spun Silk/Graphene Nanoionotronic Skin for Multifunctional Fire Protection and Alarm. Advanced Materials, 2021, 33, e2102500.	11.1	50
18	Construction of a Photo-thermal-magnetic coupling reaction system for enhanced CO2 reduction to CH4. Chemical Engineering Journal, 2021, 421, 129940.	6.6	17

#	Article	IF	Citations
19	Moisture induced electricity for self-powered microrobots. Nano Energy, 2021, 90, 106499.	8.2	23
20	Highâ€Loading, Wellâ€Dispersed Phosphorus Confined on Nanoporous Carbon Surfaces with Enhanced Catalytic Activity and Cyclic Stability. Small Methods, 2021, 5, e2100964.	4.6	9
21	Preparation of Graphene Oxide/Cellulose Composites with Microcrystalline Cellulose Acid Hydrolysis Using the Waste Acids Generated by the Hummers Method of Graphene Oxide Synthesis. Polymers, 2021, 13, 4453.	2.0	15
22	Flexible, Electrically Conductive, Nanostructured, Asymmetric Aerogel Films for Lithiumâ€“Sulfur Batteries. ACS Applied Materials & Interfaces, 2021, 13, 59174-59184.	4.0	5
23	Solar Degradation of Toxic Colorants in Polluted Water by Thermally Tuned Ceria Nanocrystal-Based Nanofibers. ACS Applied Nano Materials, 2020, 3, 11194-11202.	2.4	7
24	Solvent-Assisted Nanochannel Encapsulation of a Natural Phase Change Material in Polystyrene Hollow Fibers for High-Performance Thermal Energy Storage. ACS Applied Energy Materials, 2020, 3, 10089-10096.	2.5	13
25	Stimuli-responsive composite biopolymer actuators with selective spatial deformation behavior. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 14602-14608.	3.3	63
26	Enhanced Ni/W/Ti Catalyst Stability from Tiâ€“Oâ€“W Linkage for Effective Conversion of Cellulose into Ethylene Glycol. ACS Sustainable Chemistry and Engineering, 2020, 8, 9650-9659.	3.2	31
27	Wood-Derived Carbon with Selectively Introduced Câ•O Groups toward Stable and High Capacity Anodes for Sodium Storage. ACS Applied Materials & Interfaces, 2020, 12, 27499-27507.	4.0	75
28	Woodâ€Derived Nanofibrillated Cellulose Hydrogel Filters for Fast and Efficient Separation of Nanoparticles. Advanced Sustainable Systems, 2019, 3, 1900063.	2.7	10
29	Polyvinyl Alcohol/Silk Fibroin/Borax Hydrogel Ionotronics: A Highly Stretchable, Self-Healable, and Biocompatible Sensing Platform. ACS Applied Materials & Interfaces, 2019, 11, 23632-23638.	4.0	154
30	Production of Nanocellulose Using Hydrated Deep Eutectic Solvent Combined with Ultrasonic Treatment. ACS Omega, 2019, 4, 8539-8547.	1.6	112
31	Lightweight, Flexible, Thermally-Stable, and Thermally-Insulating Aerogels Derived from Cotton Nanofibrillated Cellulose. ACS Sustainable Chemistry and Engineering, 2019, 7, 9202-9210.	3.2	52
32	Nanocellulose for Energy Storage Systems: Beyond the Limits of Synthetic Materials. Advanced Materials, 2019, 31, e1804826.	11.1	181
33	Nanoformulations of quercetin and cellulose nanofibers as healthcare supplements with sustained antioxidant activity. Carbohydrate Polymers, 2019, 207, 160-168.	5.1	63
34	Nanocellulose-Enabled, All-Nanofiber, High-Performance Supercapacitor. ACS Applied Materials & Interfaces, 2019, 11, 5919-5927.	4.0	91
35	Multiple hydrogen bond coordination in three-constituent deep eutectic solvents enhances lignin fractionation from biomass. Green Chemistry, 2018, 20, 2711-2721.	4.6	323
36	Thermally Triggered Nanocapillary Encapsulation of Lauric Acid in Polystyrene Hollow Fibers for Efficient Thermal Energy Storage. ACS Sustainable Chemistry and Engineering, 2018, 6, 2656-2666.	3.2	21

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37	Robust Nanofibrillated Cellulose Hydro/Aerogels from Benign Solution/Solvent Exchange Treatment. ACS Sustainable Chemistry and Engineering, 2018, 6, 6624-6634.	3.2	41
38	Nanocellulose: a promising nanomaterial for advanced electrochemical energy storage. Chemical Society Reviews, 2018, 47, 2837-2872.	18.7	586
39	Transparent triboelectric nanogenerator-induced high voltage pulsed electric field for a self-powered handheld printer. Nano Energy, 2018, 44, 468-475.	8.2	70
40	Biopolymer nanofibrils: Structure, modeling, preparation, and applications. Progress in Polymer Science, 2018, 85, 1-56.	11.8	312
41	High Performance, Flexible, Solidâ€State Supercapacitors Based on a Renewable and Biodegradable Mesoporous Cellulose Membrane. Advanced Energy Materials, 2017, 7, 1700739.	10.2	202
42	Combination of microsized mineral particles and rosin as a basis for converting cellulosic fibers into â€œstickyâ€•superhydrophobic paper. Carbohydrate Polymers, 2017, 174, 95-102.	5.1	19
43	Highly Flexible and Conductive Cellulose-Mediated PEDOT:PSS/MWCNT Composite Films for Supercapacitor Electrodes. ACS Applied Materials & Interfaces, 2017, 9, 13213-13222.	4.0	214
44	Efficient Cleavage of Ligninâ€“Carbohydrate Complexes and Ultrafast Extraction of Lignin Oligomers from Wood Biomass by Microwaveâ€Assisted Treatment with Deep Eutectic Solvent. ChemSusChem, 2017, 10, 1692-1700.	3.6	354
45	Efficient Cleavage of Strong Hydrogen Bonds in Cotton by Deep Eutectic Solvents and Facile Fabrication of Cellulose Nanocrystals in High Yields. ACS Sustainable Chemistry and Engineering, 2017, 5, 7623-7631.	3.2	161
46	Assembly of Organosolv Lignin Residues into Submicron Spheres: The Effects of Granulating in Ethanol/Water Mixtures and Homogenization. ACS Omega, 2017, 2, 2858-2865.	1.6	33
47	Embedding Lauric Acid into Polystyrene Nanofibers To Make High-Capacity Membranes for Efficient Thermal Energy Storage. ACS Sustainable Chemistry and Engineering, 2017, 5, 7249-7259.	3.2	24
48	Multifunctional Bionanocomposite Foams with a Chitosan Matrix Reinforced by Nanofibrillated Cellulose. ChemNanoMat, 2017, 3, 98-108.	1.5	37
49	Sustainable Carbon Aerogels Derived from Nanofibrillated Cellulose as Highâ€Performance Absorption Materials. Advanced Materials Interfaces, 2016, 3, 1600004.	1.9	47
50	Absorption Materials: Sustainable Carbon Aerogels Derived from Nanofibrillated Cellulose as High-Performance Absorption Materials (Adv. Mater. Interfaces 10/2016). Advanced Materials Interfaces, 2016, 3, .	1.9	1
51	Homogeneous Dispersion of Cellulose Nanofibers in Waterborne Acrylic Coatings with Improved Properties and Unreduced Transparency. ACS Sustainable Chemistry and Engineering, 2016, 4, 3766-3772.	3.2	61
52	Comparative study of the structure, mechanical and thermomechanical properties of cellulose nanopapers with different thickness. Cellulose, 2016, 23, 1375-1382.	2.4	33
53	Facile extraction of cellulose nanocrystals from wood using ethanol and peroxide solvothermal pretreatment followed by ultrasonic nanofibrillation. Green Chemistry, 2016, 18, 1010-1018.	4.6	183
54	Soy protein isolate/cellulose nanofiber complex gels as fat substitutes: rheological and textural properties and extent of cream imitation. Cellulose, 2015, 22, 2619-2627.	2.4	65

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55	Revealing the structures of cellulose nanofiber bundles obtained by mechanical nanofibrillation via TEM observation. Carbohydrate Polymers, 2015, 117, 950-956.	5.1	69
56	Comparative Study of Aerogels Obtained from Differently Prepared Nanocellulose Fibers. ChemSusChem, 2014, 7, 154-161.	3.6	258
57	Effect of cellulose nanofibers on induced polymerization of aniline and formation of nanostructured conducting composite. Cellulose, 2014, 21, 1757-1767.	2.4	40
58	Individual cotton cellulose nanofibers: pretreatment and fibrillation technique. Cellulose, 2014, 21, 1517-1528.	2.4	75
59	Composite aerogels based on dialdehyde nanocellulose and collagen for potential applications as wound dressing and tissue engineering scaffold. Composites Science and Technology, 2014, 94, 132-138.	3.8	162
60	Self-Assembly of Nanocellulose and Indomethacin into Hierarchically Ordered Structures with High Encapsulation Efficiency for Sustained Release Applications. ChemPlusChem, 2014, 79, 725-731.	1.3	35
61	A process of converting cellulosic fibers to a superhydrophobic fiber product by internal and surface applications of calcium carbonate in combination with bio-wax post-treatment. RSC Advances, 2014, 4, 52680-52685.	1.7	11
62	Concentration effects on the isolation and dynamic rheological behavior of cellulose nanofibers via ultrasonic processing. Cellulose, 2013, 20, 149-157.	2.4	117
63	Ultralight and highly flexible aerogels with long cellulose I nanofibers. Soft Matter, 2011, 7, 10360.	1.2	204
64	Isolation and characterization of cellulose nanofibers from four plant cellulose fibers using a chemical-ultrasonic process. Cellulose, 2011, 18, 433-442.	2.4	420
65	Individualization of cellulose nanofibers from wood using high-intensity ultrasonication combined with chemical pretreatments. Carbohydrate Polymers, 2011, 83, 1804-1811.	5.1	795
66	Preparation of millimeter-long cellulose I nanofibers with diameters of 30â€“80nm from bamboo fibers. Carbohydrate Polymers, 2011, 86, 453-461.	5.1	178
67	Evaluation of Wood-Based Materials' Effect on Physiological, Psychological and Environment Pollution with AHP. , 2009, , .		0