Hang Hu

List of Publications by Year
in descending order

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97 papers	6,087 citations	76294 40 h-index	71651 76 g-index
97 all docs	97 docs citations	97 times ranked	6630 citing authors

#	Article	IF	Citations
1	Ultra-transparent nanostructured coatings via flow-induced one-step coassembly. Nano Materials Science, 2022, 4, 97-103.	3.9	12
2	Polyolefin films with outstanding barrier properties based on one-step coassembled nanocoatings. Advanced Composites and Hybrid Materials, 2022, 5, 1067-1077.	9.9	7
3	Tailoring the Growth of Nanosized Î±-Zirconium Phosphate. Inorganic Chemistry, 2022, 61, 2057-2065.	1.9	4
4	Key to intimately coupling metal chalcogenides with a carbon nanonetwork for potassium-ion storage. Journal of Materials Chemistry A, 2022, 10, 8958-8965.	5.2	6
5	Assembly of exfoliated Î±â€zirconium phosphate nanosheets: Mechanisms and versatile applications. Aggregate, 2022, 3, .	5.2	4
6	Spin Coating for Forming Thin Composite Coatings of Montmorillonite and Poly(vinyl alcohol). Industrial & Engineering Chemistry Research, 2022, 61, 4168-4177.	1.8	4
7	Doctor-Blade-Assisted Casting for Forming Thin Composite Coatings of Montmorillonite and Poly(vinyl alcohol). Industrial & Engineering Chemistry Research, 2022, 61, 3766-3774.	1.8	8
8	From Lychee Seeds to Hierarchical Fe₃O₄/Carbon Composite Anodes for Lithium-Ion Batteries: A High Additional Value Conversion-Based Self-Assembly Strategy. Energy & Fuels, 2022, 36, 5027-5035.	2.5	2
9	Scalable self-assembly interfacial engineering for high-temperature dielectric energy storage. IScience, 2022, 25, 104601.	1.9	7
10	Calcium-chloride-assisted approach towards green and sustainable synthesis of hierarchical porous carbon microspheres for high-performance supercapacitive energy storage. Journal of Colloid and Interface Science, 2021, 582, 159-166.	5.0	22
11	Facile construction of uniform ultramicropores in porous carbon for advanced sodium-ion battery. Journal of Colloid and Interface Science, 2021, 582, 852-858.	5.0	24
12	The changing structure by component: Biomass-based porous carbon for high-performance supercapacitors. Journal of Colloid and Interface Science, 2021, 585, 778-786.	5.0	56
13	Propelling electrochemical kinetics of transition metal oxide for high-rate lithium-ion battery through in situ deoxidation. Journal of Colloid and Interface Science, 2021, 587, 590-596.	5.0	22
14	KCl-assisted activation: Moringa oleifera branch-derived porous carbon for high performance supercapacitor. New Journal of Chemistry, 2021, 45, 5712-5719.	1.4	10
15	One-step Coassembled Nanocoatings on Paper for Potential Packaging Applications. ES Materials & Manufacturing, 2021, , .	1.1	6
16	High Performance Composite Polymer Electrolytes for Lithiumâ€Ion Batteries. Advanced Functional Materials, 2021, 31, 2101380.	7.8	151
17	Facile synthesis of photoluminescent mesoporous silica. Advanced Composites and Hybrid Materials, 2021, 4, 815-818.	9.9	10
18	Reviving the â€œSchottkyâ€•Barrier for Flexible Polymer Dielectrics with a Superior 2D Nanoassembly Coating. Advanced Materials, 2021, 33, e2101374.	11.1	53

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19	Boosting zinc ion energy storage capability of inert MnO cathode by defect engineering. Journal of Colloid and Interface Science, 2021, 594, 540-549.	5.0	43
20	Highly efficient polyvinyl alcohol/montmorillonite flame retardant nanocoating for corrugated cardboard. Advanced Composites and Hybrid Materials, 2021, 4, 662-669.	9.9	28
21	Gelation Based on Hostâ€“Guest Interactions Induced by Multi-Functionalized Nanosheets. Gels, 2021, 7, 106.	2.1	8
22	An environmentally-friendly sandwich-like structured nanocoating system for wash durable, flame retardant, and hydrophobic cotton fabrics. Cellulose, 2021, 28, 10277-10289.	2.4	15
23	A mild method to prepare nitrogen-rich interlaced porous carbon nanosheets for high-performance supercapacitors. Journal of Colloid and Interface Science, 2021, 599, 381-389.	5.0	40
24	Homogeneous triple-phase interfaces enabling one-pot route to metal compound/carbon composites. Journal of Colloid and Interface Science, 2021, 599, 271-279.	5.0	3
25	Surface chemical functionality of carbon dots: influence on the structure and energy storage performance of the layered double hydroxide. RSC Advances, 2021, 11, 10785-10793.	1.7	3
26	Layered intercalation compounds: Mechanisms, new methodologies, and advanced applications. Progress in Materials Science, 2020, 109, 100631.	16.0	66
27	Enhancement of Fluorescence Emission for Tricolor Quantum Dots Assembled in Polysiloxane toward Solar Spectrumâ€Simulated White Lightâ€Emitting Devices. Small, 2020, 16, e1905266.	5.2	16
28	Engineering of nanonetwork-structured carbon to enable high-performance potassium-ion storage. Journal of Colloid and Interface Science, 2020, 561, 195-202.	5.0	13
29	Active Nanointerfaceâ€Assisted Coâ€Assembly to Yolkâ€“Shell Au@Ordered Mesoporous Carbon Nanospheres. Advanced Materials Interfaces, 2020, 7, 1901703.	1.9	3
30	Sulfonated poly(fluorenyl ether ketone)/Sulfonated Î±-zirconium phosphate Nanocomposite membranes for proton exchange membrane fuel cells. Advanced Composites and Hybrid Materials, 2020, 3, 498-507.	9.9	37
31	Non-tubular-biomass-derived nitrogen-doped carbon microtubes for ultrahigh-area-capacity lithium-ion batteries. Journal of Colloid and Interface Science, 2020, 580, 638-644.	5.0	22
32	A general strategy for metal oxide nanoparticles embedded into heterogeneous carbon nanosheets as high-rate lithium-ion battery anodes. Journal of Materials Chemistry A, 2020, 8, 25382-25389.	5.2	13
33	Sulfonated poly(fluorene ether ketone) (SPFEK)/Î±-zirconium phosphate (ZrP) nanocomposite membranes for fuel cell applications. Advanced Composites and Hybrid Materials, 2020, 3, 546-550.	9.9	26
34	Ultralong lifetime and efficient room temperature phosphorescent carbon dots through multi-confinement structure design. Nature Communications, 2020, 11, 5591.	5.8	202
35	Direct carbonization of black liquor powders into 3D honeycomb-like porous carbons with a tunable disordered degree for sodium-ion batteries. New Journal of Chemistry, 2020, 44, 10697-10702.	1.4	3
36	Exfoliation of Î±-Zirconium Phosphate Using Tetraalkylammonium Hydroxides. Inorganic Chemistry, 2020, 59, 7822-7829.	1.9	24

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37	Facile Synthesis of Core-Shell Structured SiO2@Carbon Composite Nanorods for High-Performance Lithium-Ion Batteries. Nanomaterials, 2020, 10, 513.	1.9	17
38	Liquidâ€“liquid micromixing strategy enables low KOH-amount synthesis of ultrahighly porous carbon for zinc-ion storage. SN Applied Sciences, 2020, 2, 1.	1.5	1
39	Self-assembled Intumescent Flame Retardant Coatings: Influence of pH on the Flammability of Cotton Fabrics. Engineered Science, 2020, , .	1.2	13
40	Gold nanoparticles immobilized on single-layer Î±-zirconium phosphate nanosheets as a highly effective heterogeneous catalyst. Advanced Composites and Hybrid Materials, 2019, 2, 520-529.	9.9	17
41	Bark-Based 3D Porous Carbon Nanosheet with Ultrahigh Surface Area for High Performance Supercapacitor Electrode Material. ACS Sustainable Chemistry and Engineering, 2019, 7, 13827-13835.	3.2	63
42	Synthesis of dual-emissive carbon dots with a unique solvatochromism phenomenon. Journal of Colloid and Interface Science, 2019, 555, 607-614.	5.0	66
43	Extraordinary Thickness-Independent Electrochemical Energy Storage Enabled by Cross-Linked Microporous Carbon Nanosheets. ACS Applied Materials & Interfaces, 2019, 11, 26946-26955.	4.0	51
44	Hierarchically Porous Carbon Derived from Neolamarckia cadamba for Electrochemical Capacitance and Hydrogen Storage. ACS Sustainable Chemistry and Engineering, 2019, 7, 15385-15393.	3.2	44
45	Strategic Design of Clayâ€Based Multifunctional Materials: From Natural Minerals to Nanostructured Membranes. Advanced Functional Materials, 2019, 29, 1807611.	7.8	65
46	Mixed-Biomass Wastes Derived Hierarchically Porous Carbons for High-Performance Electrochemical Energy Storage. ACS Sustainable Chemistry and Engineering, 2019, 7, 10393-10402.	3.2	78
47	Nanofluidic energy conversion and molecular separation through highly stable clay-based membranes. Journal of Materials Chemistry A, 2019, 7, 14089-14096.	5.2	45
48	Synthesis of Polylactide Nanocomposites Using an Î±-Zirconium Phosphate Nanosheet-Supported Zinc Catalyst via in Situ Polymerization. ACS Applied Polymer Materials, 2019, 1, 1382-1389.	2.0	20
49	Synthesis, properties, and applications of graphene oxide/reduced graphene oxide and their nanocomposites. Nano Materials Science, 2019, 1, 31-47.	3.9	941
50	Synthesis of Porous Carbon Material with Suitable Graphitization Strength for High Electrochemical Capacitors. ACS Sustainable Chemistry and Engineering, 2019, 7, 6601-6610.	3.2	46
51	Facile construction of hollow carbon nanosphere-interconnected network for advanced sodium-ion battery anode. Journal of Colloid and Interface Science, 2019, 546, 53-59.	5.0	31
52	A reinforced thermal barrier coat of a Naâ€“tannic acid complex from the view of thermal kinetics. RSC Advances, 2019, 9, 10914-10926.	1.7	24
53	Design and Fabrication of Highly Photoluminescent Carbon-Incorporated Silica from Rice Husk Biomass. Industrial & Engineering Chemistry Research, 2019, 58, 4688-4694.	1.8	7
54	Natural Plant Template-Derived Cellular Framework Porous Carbon as a High-Rate and Long-Life Electrode Material for Energy Storage. ACS Sustainable Chemistry and Engineering, 2019, 7, 5845-5855.	3.2	53

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55	Advanced nanonetwork-structured carbon materials for high-performance formaldehyde capture. Journal of Colloid and Interface Science, 2019, 537, 562-568.	5.0	20
56	Small nitrogen-doped carbon dots as efficient nanoenhancer for boosting the electrochemical performance of three-dimensional graphene. Journal of Colloid and Interface Science, 2019, 536, 628-637.	5.0	34
57	Synthesis of green phosphors from highly active amorphous silica derived from rice husks. Journal of Materials Science, 2018, 53, 1824-1832.	1.7	23
58	Flame retardant and hydrophobic cotton fabrics from intumescent coatings. Advanced Composites and Hybrid Materials, 2018, 1, 177-184.	9.9	44
59	Rational Synthesis of Highly Porous Carbon from Waste Bagasse for Advanced Supercapacitor Application. ACS Sustainable Chemistry and Engineering, 2018, 6, 15325-15332.	3.2	82
60	Large-scale synthesis of porous carbon via one-step CuCl₂ activation of rape pollen for high-performance supercapacitors. Journal of Materials Chemistry A, 2018, 6, 12046-12055.	5.2	126
61	Versatile Nanostructures from Rice Husk Biomass for Energy Applications. Angewandte Chemie - International Edition, 2018, 57, 13722-13734.	7.2	81
62	Solid Acid Catalyst Based on Single-Layer Î±-Zirconium Phosphate Nanosheets for Biodiesel Production via Esterification. Catalysts, 2018, 8, 17.	1.6	47
63	Interconnected 3â€‰D Network of Grapheneâ€Oxide Nanosheets Decorated with Carbon Dots for Highâ€Performance Supercapacitors. ChemSusChem, 2017, 10, 2626-2634.	3.6	75
64	Photoluminescent carbon quantum dot grafted silica nanoparticles directly synthesized from rice husk biomass. Journal of Materials Chemistry B, 2017, 5, 4679-4689.	2.9	71
65	Luminescence Mechanism of Carbon-Incorporated Silica Nanoparticles Derived from Rice Husk Biomass. Industrial & Engineering Chemistry Research, 2017, 56, 5906-5912.	1.8	26
66	Covalently immobilized ionic liquids on single layer nanosheets for heterogeneous catalysis applications. Dalton Transactions, 2017, 46, 13126-13134.	1.6	25
67	Biomimetic nanocoatings with exceptional mechanical, barrier, and flame-retardant properties from large-scale one-step coassembly. Science Advances, 2017, 3, e1701212.	4.7	195
68	Ultrahigh-surface-area hierarchical porous carbon from chitosan: acetic acid mediated efficient synthesis and its application in superior supercapacitors. Journal of Materials Chemistry A, 2017, 5, 24775-24781.	5.2	149
69	Facile Synthesis of Highly Porous Carbon from Rice Husk. ACS Sustainable Chemistry and Engineering, 2017, 5, 7111-7117.	3.2	56
70	Flame retardant and hydrophobic coatings on cotton fabrics via sol-gel and self-assembly techniques. Journal of Colloid and Interface Science, 2017, 505, 892-899.	5.0	138
71	Synthesis of Layered Double Hydroxide Single-Layer Nanosheets in Formamide. Inorganic Chemistry, 2016, 55, 12036-12041.	1.9	87
72	A Selfâ€Quenchingâ€Resistant Carbonâ€Dot Powder with Tunable Solidâ€State Fluorescence and Construction of Dualâ€Fluorescence Morphologies for White Lightâ€Emission. Advanced Materials, 2016, 28, 312-318.	11.1	527

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73	Designing Supported Ionic Liquids (ILs) within Inorganic Nanosheets for CO₂ Capture Applications. ACS Applied Materials & Interfaces, 2016, 8, 5547-5555.	4.0	63
74	Three-dimensional honeycomb-like hierarchically structured carbon for high-performance supercapacitors derived from high-ash-content sewage sludge. Journal of Materials Chemistry A, 2015, 3, 15225-15234.	5.2	125
75	Bi-axially oriented polystyrene/montmorillonite nanocomposite films. RSC Advances, 2015, 5, 58191-58198.	1.7	26
76	Photoluminescent mesoporous carbon-doped silica from rice husks. Materials Letters, 2015, 142, 280-282.	1.3	28
77	Amorphous Niâ€“Co Binary Oxide with Hierarchical Porous Structure for Electrochemical Capacitors. ACS Applied Materials & Interfaces, 2015, 7, 24419-24429.	4.0	82
78	Fabrication and properties of polybutadiene rubber-interpenetrating cross-linking poly(propylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 52978-52984.	1.7	25
79	Direct growth of layered intercalation compounds via single step one-pot in situ synthesis. Chemical Communications, 2015, 51, 11398-11400.	2.2	10
80	Titanium functionalized Î±-zirconium phosphate single layer nanosheets for photocatalyst applications. RSC Advances, 2015, 5, 93969-93978.	1.7	27
81	Intercalated polyfluorinated Pd complexes in Î±-zirconium phosphate for Sonogashira and Heck reactions. RSC Advances, 2014, 4, 27329-27336.	1.7	17
82	Sulfonic Acid-Functionalized Î±-Zirconium Phosphate Single-Layer Nanosheets as a Strong Solid Acid for Heterogeneous Catalysis Applications. ACS Applied Materials & Interfaces, 2014, 6, 7417-7425.	4.0	107
83	Electrospun poly(vinyl alcohol)/Î±-zirconium phosphate nanocomposite fibers. High Performance Polymers, 2013, 25, 25-32.	0.8	33
84	Na⁺ and K⁺-Exchanged Zirconium Phosphate (ZrP) as High-Temperature CO₂ Adsorbents. Science of Advanced Materials, 2013, 5, 469-474.	0.1	26
85	Immobilization of ionic liquids in Î¸-zirconium phosphate for catalyzing the coupling of CO2 and epoxides. RSC Advances, 2012, 2, 3810.	1.7	34
86	Effect of Nanoplatelets on the Rheological Behavior of Epoxy Monomers. Macromolecular Materials and Engineering, 2009, 294, 103-113.	1.7	67
87	Scratch behavior of epoxy nanocomposites containing Î±â€zirconium phosphate and coreâ€shell rubber particles. Polymer Engineering and Science, 2009, 49, 483-490.	1.5	50
88	The effect of guest molecular architecture and host crystallinity upon the mechanism of the intercalation reaction. Journal of Colloid and Interface Science, 2009, 333, 503-509.	5.0	46
89	Polypropylene Nanocomposites Based on Designed Synthetic Nanoplatelets. Chemistry of Materials, 2009, 21, 1154-1161.	3.2	40
90	Barrier properties of model epoxy nanocomposites. Journal of Membrane Science, 2008, 318, 129-136.	4.1	139

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91	Preparation of Exfoliated Epoxy/Î±-Zirconium Phosphate Nanocomposites Containing High Aspect Ratio Nanoplatelets. Chemistry of Materials, 2007, 19, 1749-1754.	3.2	148
92	Preparation of Î±-zirconium phosphate nanoplatelets with wide variations in aspect ratios. New Journal of Chemistry, 2007, 31, 39-43.	1.4	267
93	Effective Intercalation and Exfoliation of Nanoplatelets in Epoxy via Creation of Porous Pathways. Journal of Physical Chemistry C, 2007, 111, 10377-10381.	1.5	67
94	Preparation of intercalating agentâ€free epoxy/clay nanocomposites. Polymer Engineering and Science, 2007, 47, 1708-1714.	1.5	27
95	Effect of nanoplatelet dispersion on mechanical behavior of polymer nanocomposites. Journal of Polymer Science, Part B: Polymer Physics, 2007, 45, 1459-1469.	2.4	101
96	Studies of the thermal behavior of NafionÂ® membranes treated with aluminum(III). Polymer Degradation and Stability, 2005, 89, 43-49.	2.7	38
97	Effect of Crystallinity on the Intercalation of Monoamine in Î±-Zirconium Phosphate Layer Structure. Chemistry of Materials, 2005, 17, 5606-5609.	3.2	133