

Hang Hu

List of Publications by Year in descending order

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97
papers

6,087
citations

76294

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71651

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docs citations

97
times ranked

6630
citing authors

#	ARTICLE	IF	CITATIONS
1	Synthesis, properties, and applications of graphene oxide/reduced graphene oxide and their nanocomposites. <i>Nano Materials Science</i> , 2019, 1, 31-47.	3.9	941
2	A Self-Quenching-Resistant Carbon-Dot Powder with Tunable Solid-State Fluorescence and Construction of Dual-Fluorescence Morphologies for White Light Emission. <i>Advanced Materials</i> , 2016, 28, 312-318.	11.1	527
3	Preparation of Zr^{2+} -zirconium phosphate nanoplatelets with wide variations in aspect ratios. <i>New Journal of Chemistry</i> , 2007, 31, 39-43.	1.4	267
4	Ultralong lifetime and efficient room temperature phosphorescent carbon dots through multi-confinement structure design. <i>Nature Communications</i> , 2020, 11, 5591.	5.8	202
5	Biomimetic nanocoatings with exceptional mechanical, barrier, and flame-retardant properties from large-scale one-step coassembly. <i>Science Advances</i> , 2017, 3, e1701212.	4.7	195
6	High Performance Composite Polymer Electrolytes for Lithium-Ion Batteries. <i>Advanced Functional Materials</i> , 2021, 31, 2101380.	7.8	151
7	Ultrahigh-surface-area hierarchical porous carbon from chitosan: acetic acid mediated efficient synthesis and its application in superior supercapacitors. <i>Journal of Materials Chemistry A</i> , 2017, 5, 24775-24781.	5.2	149
8	Preparation of Exfoliated Epoxy/ Zr^{2+} -Zirconium Phosphate Nanocomposites Containing High Aspect Ratio Nanoplatelets. <i>Chemistry of Materials</i> , 2007, 19, 1749-1754.	3.2	148
9	Barrier properties of model epoxy nanocomposites. <i>Journal of Membrane Science</i> , 2008, 318, 129-136.	4.1	139
10	Flame retardant and hydrophobic coatings on cotton fabrics via sol-gel and self-assembly techniques. <i>Journal of Colloid and Interface Science</i> , 2017, 505, 892-899.	5.0	138
11	Effect of Crystallinity on the Intercalation of Monoamine in Zr^{2+} -Zirconium Phosphate Layer Structure. <i>Chemistry of Materials</i> , 2005, 17, 5606-5609.	3.2	133
12	Large-scale synthesis of porous carbon via one-step CuCl_2 activation of rape pollen for high-performance supercapacitors. <i>Journal of Materials Chemistry A</i> , 2018, 6, 12046-12055.	5.2	126
13	Three-dimensional honeycomb-like hierarchically structured carbon for high-performance supercapacitors derived from high-ash-content sewage sludge. <i>Journal of Materials Chemistry A</i> , 2015, 3, 15225-15234.	5.2	125
14	Sulfonic Acid-Functionalized Zr^{2+} -Zirconium Phosphate Single-Layer Nanosheets as a Strong Solid Acid for Heterogeneous Catalysis Applications. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 7417-7425.	4.0	107
15	Effect of nanoplatelet dispersion on mechanical behavior of polymer nanocomposites. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2007, 45, 1459-1469.	2.4	101
16	Synthesis of Layered Double Hydroxide Single-Layer Nanosheets in Formamide. <i>Inorganic Chemistry</i> , 2016, 55, 12036-12041.	1.9	87
17	Amorphous Ni-Co Binary Oxide with Hierarchical Porous Structure for Electrochemical Capacitors. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 24419-24429.	4.0	82
18	Rational Synthesis of Highly Porous Carbon from Waste Bagasse for Advanced Supercapacitor Application. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 15325-15332.	3.2	82

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19	Versatile Nanostructures from Rice Husk Biomass for Energy Applications. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 13722-13734.	7.2	81
20	Mixed-Biomass Wastes Derived Hierarchically Porous Carbons for High-Performance Electrochemical Energy Storage. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 10393-10402.	3.2	78
21	Interconnected 3D Network of Graphene Oxide Nanosheets Decorated with Carbon Dots for High-Performance Supercapacitors. <i>ChemSusChem</i> , 2017, 10, 2626-2634.	3.6	75
22	Photoluminescent carbon quantum dot grafted silica nanoparticles directly synthesized from rice husk biomass. <i>Journal of Materials Chemistry B</i> , 2017, 5, 4679-4689.	2.9	71
23	Effective Intercalation and Exfoliation of Nanoplatelets in Epoxy via Creation of Porous Pathways. <i>Journal of Physical Chemistry C</i> , 2007, 111, 10377-10381.	1.5	67
24	Effect of Nanoplatelets on the Rheological Behavior of Epoxy Monomers. <i>Macromolecular Materials and Engineering</i> , 2009, 294, 103-113.	1.7	67
25	Synthesis of dual-emissive carbon dots with a unique solvatochromism phenomenon. <i>Journal of Colloid and Interface Science</i> , 2019, 555, 607-614.	5.0	66
26	Layered intercalation compounds: Mechanisms, new methodologies, and advanced applications. <i>Progress in Materials Science</i> , 2020, 109, 100631.	16.0	66
27	Strategic Design of Clay-Based Multifunctional Materials: From Natural Minerals to Nanostructured Membranes. <i>Advanced Functional Materials</i> , 2019, 29, 1807611.	7.8	65
28	Designing Supported Ionic Liquids (ILs) within Inorganic Nanosheets for CO ₂ Capture Applications. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 5547-5555.	4.0	63
29	Bark-Based 3D Porous Carbon Nanosheet with Ultrahigh Surface Area for High Performance Supercapacitor Electrode Material. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 13827-13835.	3.2	63
30	Facile Synthesis of Highly Porous Carbon from Rice Husk. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 7111-7117.	3.2	56
31	The changing structure by component: Biomass-based porous carbon for high-performance supercapacitors. <i>Journal of Colloid and Interface Science</i> , 2021, 585, 778-786.	5.0	56
32	Natural Plant Template-Derived Cellular Framework Porous Carbon as a High-Rate and Long-Life Electrode Material for Energy Storage. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 5845-5855.	3.2	53
33	Reviving the Schottky Barrier for Flexible Polymer Dielectrics with a Superior 2D Nanoassembly Coating. <i>Advanced Materials</i> , 2021, 33, e2101374.	11.1	53
34	Extraordinary Thickness-Independent Electrochemical Energy Storage Enabled by Cross-Linked Microporous Carbon Nanosheets. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 26946-26955.	4.0	51
35	Scratch behavior of epoxy nanocomposites containing Zr^{4+} -zirconium phosphate and core-shell rubber particles. <i>Polymer Engineering and Science</i> , 2009, 49, 483-490.	1.5	50
36	Solid Acid Catalyst Based on Single-Layer Zr^{4+} -Zirconium Phosphate Nanosheets for Biodiesel Production via Esterification. <i>Catalysts</i> , 2018, 8, 17.	1.6	47

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37	The effect of guest molecular architecture and host crystallinity upon the mechanism of the intercalation reaction. <i>Journal of Colloid and Interface Science</i> , 2009, 333, 503-509.	5.0	46
38	Synthesis of Porous Carbon Material with Suitable Graphitization Strength for High Electrochemical Capacitors. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 6601-6610.	3.2	46
39	Nanofluidic energy conversion and molecular separation through highly stable clay-based membranes. <i>Journal of Materials Chemistry A</i> , 2019, 7, 14089-14096.	5.2	45
40	Flame retardant and hydrophobic cotton fabrics from intumescent coatings. <i>Advanced Composites and Hybrid Materials</i> , 2018, 1, 177-184.	9.9	44
41	Hierarchically Porous Carbon Derived from <i>Neolamarckia cadamba</i> for Electrochemical Capacitance and Hydrogen Storage. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 15385-15393.	3.2	44
42	Boosting zinc ion energy storage capability of inert MnO cathode by defect engineering. <i>Journal of Colloid and Interface Science</i> , 2021, 594, 540-549.	5.0	43
43	Polypropylene Nanocomposites Based on Designed Synthetic Nanoplatelets. <i>Chemistry of Materials</i> , 2009, 21, 1154-1161.	3.2	40
44	A mild method to prepare nitrogen-rich interlaced porous carbon nanosheets for high-performance supercapacitors. <i>Journal of Colloid and Interface Science</i> , 2021, 599, 381-389.	5.0	40
45	Studies of the thermal behavior of Nafion [®] membranes treated with aluminum(III). <i>Polymer Degradation and Stability</i> , 2005, 89, 43-49.	2.7	38
46	Sulfonated poly(fluorenyl ether ketone)/Sulfonated H_2ZrO_5 -zirconium phosphate Nanocomposite membranes for proton exchange membrane fuel cells. <i>Advanced Composites and Hybrid Materials</i> , 2020, 3, 498-507.	9.9	37
47	Immobilization of ionic liquids in H_2ZrO_5 -zirconium phosphate for catalyzing the coupling of CO ₂ and epoxides. <i>RSC Advances</i> , 2012, 2, 3810.	1.7	34
48	Small nitrogen-doped carbon dots as efficient nanoenhancer for boosting the electrochemical performance of three-dimensional graphene. <i>Journal of Colloid and Interface Science</i> , 2019, 536, 628-637.	5.0	34
49	Electrospun poly(vinyl alcohol)/ H_2ZrO_5 -zirconium phosphate nanocomposite fibers. <i>High Performance Polymers</i> , 2013, 25, 25-32.	0.8	33
50	Facile construction of hollow carbon nanosphere-interconnected network for advanced sodium-ion battery anode. <i>Journal of Colloid and Interface Science</i> , 2019, 546, 53-59.	5.0	31
51	Photoluminescent mesoporous carbon-doped silica from rice husks. <i>Materials Letters</i> , 2015, 142, 280-282.	1.3	28
52	Highly efficient polyvinyl alcohol/montmorillonite flame retardant nanocoating for corrugated cardboard. <i>Advanced Composites and Hybrid Materials</i> , 2021, 4, 662-669.	9.9	28
53	Preparation of intercalating agent-free epoxy/clay nanocomposites. <i>Polymer Engineering and Science</i> , 2007, 47, 1708-1714.	1.5	27
54	Titanium functionalized H_2ZrO_5 -zirconium phosphate single layer nanosheets for photocatalyst applications. <i>RSC Advances</i> , 2015, 5, 93969-93978.	1.7	27

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55	Bi-axially oriented polystyrene/montmorillonite nanocomposite films. RSC Advances, 2015, 5, 58191-58198.	1.7	26
56	Luminescence Mechanism of Carbon-Incorporated Silica Nanoparticles Derived from Rice Husk Biomass. Industrial & Engineering Chemistry Research, 2017, 56, 5906-5912.	1.8	26
57	Sulfonated poly(flourene ether ketone) (SPFEK)/ ZrP nanocomposite membranes for fuel cell applications. Advanced Composites and Hybrid Materials, 2020, 3, 546-550.	9.9	26
58	Na ⁺ and K ⁺ -Exchanged Zirconium Phosphate (ZrP) as High-Temperature CO ₂ Adsorbents. Science of Advanced Materials, 2013, 5, 469-474.	0.1	26
59	Fabrication and properties of polybutadiene rubber-interpenetrating cross-linking poly(propylene) Tj ETQq1 1 0.784314 rgBT /Overloc 52978-52984.	1.7	25
60	Covalently immobilized ionic liquids on single layer nanosheets for heterogeneous catalysis applications. Dalton Transactions, 2017, 46, 13126-13134.	1.6	25
61	A reinforced thermal barrier coat of a Na ⁺ -tannic acid complex from the view of thermal kinetics. RSC Advances, 2019, 9, 10914-10926.	1.7	24
62	Exfoliation of ZrP Using Tetraalkylammonium Hydroxides. Inorganic Chemistry, 2020, 59, 7822-7829.	1.9	24
63	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
64	Synthesis of green phosphors from highly active amorphous silica derived from rice husks. Journal of Materials Science, 2018, 53, 1824-1832.	1.7	23
65	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
66	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
67	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
68	Synthesis of Polylactide Nanocomposites Using an ZrP -Zirconium Phosphate Nanosheet-Supported Zinc Catalyst via in Situ Polymerization. ACS Applied Polymer Materials, 2019, 1, 1382-1389.	2.0	20
69	Advanced nanonetwork-structured carbon materials for high-performance formaldehyde capture. Journal of Colloid and Interface Science, 2019, 537, 562-568.	5.0	20
70	Intercalated polyfluorinated Pd complexes in ZrP for Sonogashira and Heck reactions. RSC Advances, 2014, 4, 27329-27336.	1.7	17
71	Gold nanoparticles immobilized on single-layer ZrP nanosheets as a highly effective heterogeneous catalyst. Advanced Composites and Hybrid Materials, 2019, 2, 520-529.	9.9	17
72	Facile Synthesis of Core-Shell Structured SiO ₂ @Carbon Composite Nanorods for High-Performance Lithium-Ion Batteries. Nanomaterials, 2020, 10, 513.	1.9	17

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73	Enhancement of Fluorescence Emission for Tricolor Quantum Dots Assembled in Polysiloxane toward Solar Spectrum- ϵ Simulated White Light- ϵ Emitting Devices. <i>Small</i> , 2020, 16, e1905266.	5.2	16
74	An environmentally-friendly sandwich-like structured nanocoating system for wash durable, flame retardant, and hydrophobic cotton fabrics. <i>Cellulose</i> , 2021, 28, 10277-10289.	2.4	15
75	Engineering of nanonetwork-structured carbon to enable high-performance potassium-ion storage. <i>Journal of Colloid and Interface Science</i> , 2020, 561, 195-202.	5.0	13
76	A general strategy for metal oxide nanoparticles embedded into heterogeneous carbon nanosheets as high-rate lithium-ion battery anodes. <i>Journal of Materials Chemistry A</i> , 2020, 8, 25382-25389.	5.2	13
77	Self-assembled Intumescent Flame Retardant Coatings: Influence of pH on the Flammability of Cotton Fabrics. <i>Engineered Science</i> , 2020, , .	1.2	13
78	Ultra-transparent nanostructured coatings via flow-induced one-step coassembly. <i>Nano Materials Science</i> , 2022, 4, 97-103.	3.9	12
79	Direct growth of layered intercalation compounds via single step one-pot in situ synthesis. <i>Chemical Communications</i> , 2015, 51, 11398-11400.	2.2	10
80	KCl-assisted activation: <i>Moringa oleifera</i> branch-derived porous carbon for high performance supercapacitor. <i>New Journal of Chemistry</i> , 2021, 45, 5712-5719.	1.4	10
81	Facile synthesis of photoluminescent mesoporous silica. <i>Advanced Composites and Hybrid Materials</i> , 2021, 4, 815-818.	9.9	10
82	Gelation Based on Host- ϵ Guest Interactions Induced by Multi-Functionalized Nanosheets. <i>Gels</i> , 2021, 7, 106.	2.1	8
83	Doctor-Blade-Assisted Casting for Forming Thin Composite Coatings of Montmorillonite and Poly(vinyl alcohol). <i>Industrial & Engineering Chemistry Research</i> , 2022, 61, 3766-3774.	1.8	8
84	Design and Fabrication of Highly Photoluminescent Carbon-Incorporated Silica from Rice Husk Biomass. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 4688-4694.	1.8	7
85	Polyolefin films with outstanding barrier properties based on one-step coassembled nanocoatings. <i>Advanced Composites and Hybrid Materials</i> , 2022, 5, 1067-1077.	9.9	7
86	Scalable self-assembly interfacial engineering for high-temperature dielectric energy storage. <i>IScience</i> , 2022, 25, 104601.	1.9	7
87	One-step Coassembled Nanocoatings on Paper for Potential Packaging Applications. <i>ES Materials & Manufacturing</i> , 2021, , .	1.1	6
88	Key to intimately coupling metal chalcogenides with a carbon nanonetwork for potassium-ion storage. <i>Journal of Materials Chemistry A</i> , 2022, 10, 8958-8965.	5.2	6
89	Tailoring the Growth of Nanosized $\hat{\pm}$ -Zirconium Phosphate. <i>Inorganic Chemistry</i> , 2022, 61, 2057-2065.	1.9	4
90	Assembly of exfoliated $\hat{\pm}$ -Zirconium phosphate nanosheets: Mechanisms and versatile applications. <i>Aggregate</i> , 2022, 3, .	5.2	4

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91	Spin Coating for Forming Thin Composite Coatings of Montmorillonite and Poly(vinyl alcohol). <i>Industrial & Engineering Chemistry Research</i> , 2022, 61, 4168-4177.	1.8	4
92	Active Nanointerface-Assisted Co-Assembly to Yolk-Shell Au@Ordered Mesoporous Carbon Nanospheres. <i>Advanced Materials Interfaces</i> , 2020, 7, 1901703.	1.9	3
93	Direct carbonization of black liquor powders into 3D honeycomb-like porous carbons with a tunable disordered degree for sodium-ion batteries. <i>New Journal of Chemistry</i> , 2020, 44, 10697-10702.	1.4	3
94	Homogeneous triple-phase interfaces enabling one-pot route to metal compound/carbon composites. <i>Journal of Colloid and Interface Science</i> , 2021, 599, 271-279.	5.0	3
95	Surface chemical functionality of carbon dots: influence on the structure and energy storage performance of the layered double hydroxide. <i>RSC Advances</i> , 2021, 11, 10785-10793.	1.7	3
96	From Lychee Seeds to Hierarchical Fe ₃ O ₄ /Carbon Composite Anodes for Lithium-Ion Batteries: A High Additional Value Conversion-Based Self-Assembly Strategy. <i>Energy & Fuels</i> , 2022, 36, 5027-5035.	2.5	2
97	Liquid-liquid micromixing strategy enables low KOH-amount synthesis of ultrahighly porous carbon for zinc-ion storage. <i>SN Applied Sciences</i> , 2020, 2, 1.	1.5	1