

Hua Bai

List of Publications by Year in descending order

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110
papers

17,896
citations

34105
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22832
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113
docs citations

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times ranked

22451
citing authors

#	ARTICLE	IF	CITATIONS
1	Flexible Graphene Films via the Filtration of Water-Soluble Noncovalent Functionalized Graphene Sheets. <i>Journal of the American Chemical Society</i> , 2008, 130, 5856-5857.	13.7	3,085
2	Gas Sensors Based on Conducting Polymers. <i>Sensors</i> , 2007, 7, 267-307.	3.8	1,323
3	Functional Composite Materials Based on Chemically Converted Graphene. <i>Advanced Materials</i> , 2011, 23, 1089-1115.	21.0	973
4	Three-Dimensional Self-Assembly of Graphene Oxide and DNA into Multifunctional Hydrogels. <i>ACS Nano</i> , 2010, 4, 7358-7362.	14.6	788
5	Strong and ductile poly(vinyl alcohol)/graphene oxide composite films with a layered structure. <i>Carbon</i> , 2009, 47, 3538-3543.	10.3	671
6	A pH-sensitive graphene oxide composite hydrogel. <i>Chemical Communications</i> , 2010, 46, 2376.	4.1	617
7	Conducting polymer nanomaterials: electrosynthesis and applications. <i>Chemical Society Reviews</i> , 2009, 38, 2397.	38.1	615
8	On the Gelation of Graphene Oxide. <i>Journal of Physical Chemistry C</i> , 2011, 115, 5545-5551.	3.1	603
9	Graphene oxide-chitosan composite hydrogels as broad-spectrum adsorbents for water purification. <i>Journal of Materials Chemistry A</i> , 2013, 1, 1992-2001.	10.3	582
10	Non-covalent functionalization of graphene sheets by sulfonated polyaniline. <i>Chemical Communications</i> , 2009, , 1667.	4.1	569
11	Chemically Converted Graphene Induced Molecular Flattening of 5,10,15,20-Tetrakis(1-methyl-4-pyridinio)porphyrin and Its Application for Optical Detection of Cadmium(II) Ions. <i>Journal of the American Chemical Society</i> , 2009, 131, 13490-13497.	13.7	497
12	Preparation of Gold Nanoparticle/Graphene Composites with Controlled Weight Contents and Their Application in Biosensors. <i>Journal of Physical Chemistry C</i> , 2010, 114, 1822-1826.	3.1	389
13	Breath Figure: A Nature-Inspired Preparation Method for Ordered Porous Films. <i>Chemical Reviews</i> , 2015, 115, 9801-9868.	47.7	374
14	Size Fractionation of Graphene Oxide Sheets by pH-Assisted Selective Sedimentation. <i>Journal of the American Chemical Society</i> , 2011, 133, 6338-6342.	13.7	293
15	Chemically converted graphene as substrate for immobilizing and enhancing the activity of a polymeric catalyst. <i>Chemical Communications</i> , 2010, 46, 4740.	4.1	287
16	Graphene oxide/conducting polymer composite hydrogels. <i>Journal of Materials Chemistry</i> , 2011, 21, 18653.	6.7	283
17	Mechanism investigation and suppression of self-discharge in active electrolyte enhanced supercapacitors. <i>Energy and Environmental Science</i> , 2014, 7, 1750-1759.	30.8	267
18	An Asymmetrically Surface-Modified Graphene Film Electrochemical Actuator. <i>ACS Nano</i> , 2010, 4, 6050-6054.	14.6	242

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19	Electrochemical Deposition of Polypyrrole/Sulfonated Graphene Composite Films. <i>Journal of Physical Chemistry C</i> , 2010, 114, 22783-22789.	3.1	236
20	Electrically conductive and mechanically strong biomimetic chitosan/reduced graphene oxide composite films. <i>Journal of Materials Chemistry</i> , 2010, 20, 9032.	6.7	231
21	A graphene oxide/hemoglobin composite hydrogel for enzymatic catalysis in organic solvents. <i>Chemical Communications</i> , 2011, 47, 4962.	4.1	225
22	Three-dimensional porous graphene-based composite materials: electrochemical synthesis and application. <i>Journal of Materials Chemistry</i> , 2012, 22, 20968.	6.7	224
23	A self-assembly route to porous polyaniline/reduced graphene oxide composite materials with molecular-level uniformity for high-performance supercapacitors. <i>Energy and Environmental Science</i> , 2018, 11, 1280-1286.	30.8	213
24	Poly(dimethylsiloxane) Oil Absorbent with a Three-Dimensionally Interconnected Porous Structure and Swellable Skeleton. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 10201-10206.	8.0	206
25	A Hydrogel of Ultrathin Pure Polyaniline Nanofibers: Oxidant-Templating Preparation and Supercapacitor Application. <i>ACS Nano</i> , 2018, 12, 5888-5894.	14.6	177
26	Three-Dimensional Printing of Polyaniline/Reduced Graphene Oxide Composite for High-Performance Planar Supercapacitor. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 10437-10444.	8.0	175
27	High-performance supercapacitor electrodes based on graphene hydrogels modified with 2-aminoanthraquinone moieties. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 11193.	2.8	167
28	Breath Figure Arrays: Unconventional Fabrications, Functionalizations, and Applications. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 12240-12255.	13.8	163
29	Degradation-induced capacitance: a new insight into the superior capacitive performance of polyaniline/graphene composites. <i>Energy and Environmental Science</i> , 2017, 10, 2372-2382.	30.8	156
30	Copper Hydroxide Nanoneedle and Nanotube Arrays Fabricated by Anodization of Copper. <i>Journal of Physical Chemistry B</i> , 2005, 109, 22836-22842.	2.6	149
31	Layer-by-layer assembly of graphene/polyaniline multilayer films and their application for electrochromic devices. <i>Polymer</i> , 2011, 52, 5567-5572.	3.8	145
32	Phase-Separated Polyaniline/Graphene Composite Electrodes for High-Rate Electrochemical Supercapacitors. <i>Advanced Materials</i> , 2016, 28, 10211-10216.	21.0	130
33	Metallic Fabrics as the Current Collector for High-Performance Graphene-Based Flexible Solid-State Supercapacitor. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 4724-4729.	8.0	119
34	Pitch-based hyper-cross-linked polymers with high performance for gas adsorption. <i>Journal of Materials Chemistry A</i> , 2016, 4, 16490-16498.	10.3	110
35	Colorimetric and fluorescent dual probe based on a polythiophene derivative for the detection of cysteine and homocysteine. <i>Chemical Communications</i> , 2011, 47, 7431.	4.1	99
36	Composite nanofibers of conducting polymers and hydrophobic insulating polymers: Preparation and sensing applications. <i>Polymer</i> , 2009, 50, 3292-3301.	3.8	88

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37	Highly conductive and flexible mesoporous graphitic films prepared by graphitizing the composites of graphene oxide and nanodiamond. Journal of Materials Chemistry, 2011, 21, 7154.	6.7	85
38	Colorimetric Assays for Acetylcholinesterase Activity and Inhibitor Screening Based on the Disassembly~Assembly of a Water-Soluble Polythiophene Derivative. ACS Applied Materials & Interfaces, 2011, 3, 1306-1310.	8.0	81
39	3D printed stretchable smart fibers and textiles for self-powered e-skin. Nano Energy, 2021, 84, 105866.	16.0	75
40	Electrosynthesis of polypyrrole/sulfonated polyaniline composite films and their applications for ammonia gas sensing. Polymer, 2007, 48, 4015-4020.	3.8	73
41	Basic aluminum sulfate@graphene hydrogel composites: preparation and application for removal of fluoride. Journal of Materials Chemistry A, 2013, 1, 13101.	10.3	73
42	Controlled one-step fabrication of highly oriented ZnO nanoneedle/nanorods arrays at near room temperature. Chemical Communications, 2006, , 1655.	4.1	69
43	Bottom~Up Preparation of Ultrathin 2D Aluminum Oxide Nanosheets by Duplicating Graphene Oxide. Advanced Materials, 2016, 28, 1703-1708.	21.0	69
44	Hyper-Cross-Linked Organic Microporous Polymers Based on Alternating Copolymerization of Bismaleimide. ACS Macro Letters, 2016, 5, 377-381.	4.8	67
45	Rapid nitroaromatic compounds sensing based on oligopyrene. Sensors and Actuators B: Chemical, 2008, 130, 777-782.	7.8	66
46	Polymeric nanoporous materials fabricated with supercritical CO ₂ and CO ₂ -expanded liquids. Chemical Society Reviews, 2014, 43, 6938-6953.	38.1	65
47	Magnetron Sputtered Zinc Oxide Nanorods as Thickness-Insensitive Cathode Interlayer for Perovskite Planar-Heterojunction Solar Cells. ACS Applied Materials & Interfaces, 2014, 6, 20585-20589.	8.0	63
48	Massive preparation of pitch-based organic microporous polymers for gas storage. Chemical Communications, 2016, 52, 2780-2783.	4.1	62
49	Robust Microsieves with Excellent Solvent Resistance: Cross-Linkage of Perforated Polymer Films with Honeycomb Structure. ACS Macro Letters, 2013, 2, 27-30.	4.8	61
50	A water-soluble cationic oligopyrene derivative: Spectroscopic studies and sensing applications. Sensors and Actuators B: Chemical, 2009, 138, 563-571.	7.8	55
51	Load-tolerant, highly strain-responsive graphene sheets. Journal of Materials Chemistry, 2011, 21, 2057.	6.7	55
52	3D Printing of a Polydimethylsiloxane/Polytetrafluoroethylene Composite Elastomer and its Application in a Triboelectric Nanogenerator. ACS Applied Materials & Interfaces, 2020, 12, 57441-57449.	8.0	55
53	Drying Enhanced Adhesion of Polythiophene Nanotubule Arrays on Smooth Surfaces. ACS Nano, 2008, 2, 2342-2348.	14.6	52
54	Electrochemical detection of dioxygen and hydrogen peroxide by hemin immobilized on chemically converted graphene. Journal of Electroanalytical Chemistry, 2011, 657, 34-38.	3.8	52

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55	Breath figure in non-aqueous vapor. <i>Soft Matter</i> , 2013, 9, 506-514.	2.7	52
56	Electrochemical deposition of polyaniline nanosheets mediated by sulfonated polyaniline functionalized graphenes. <i>Journal of Materials Chemistry</i> , 2011, 21, 13978.	6.7	51
57	Electrochemical supercapacitor with polymeric active electrolyte. <i>Journal of Materials Chemistry A</i> , 2014, 2, 10526-10531.	10.3	46
58	Porosity-Enhanced Polymers from Hyper-Cross-Linked Polymer Precursors. <i>Macromolecules</i> , 2017, 50, 956-962.	4.8	46
59	Electrochemically reduced graphene oxide: Preparation, composites, and applications. <i>Carbon</i> , 2022, 191, 301-332.	10.3	44
60	Electrochemically reduced graphene porous material as light absorber for light-driven thermoelectric generator. <i>Journal of Materials Chemistry</i> , 2012, 22, 17800.	6.7	42
61	A high-performance electrochemical supercapacitor based on a polyaniline/reduced graphene oxide electrode and a copper(Cu^{2+}) ion active electrolyte. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 131-136.	2.8	41
62	Synthesis of CaCO_3 /graphene composite crystals for ultra-strong structural materials. <i>RSC Advances</i> , 2012, 2, 2154.	3.6	40
63	Polypyrrole Actuator with a Bioadhesive Surface for Accumulating Bacteria from Physiological Media. <i>ACS Applied Materials & Interfaces</i> , 2009, 1, 951-955.	8.0	39
64	Analyte-induced aggregation of conjugated polyelectrolytes: role of the charged moieties and its sensing application. <i>Chemical Communications</i> , 2010, 46, 5094.	4.1	39
65	Benzoyl Peroxide as an Efficient Dopant for Spiro-OMeTAD in Perovskite Solar Cells. <i>ChemSusChem</i> , 2017, 10, 3098-3104.	6.8	37
66	Aligned three-dimensional microstructures of conducting polymer composites. <i>Polymer</i> , 2007, 48, 5259-5267.	3.8	36
67	A Facile Method to Prepare Three-Dimensional Fe_2O_3 /Graphene Composites as the Electrode Materials for Supercapacitors. <i>Chinese Journal of Chemistry</i> , 2016, 34, 67-72.	4.9	35
68	Hierarchical porous carbon microspheres with superhydrophilic surface for efficient adsorption and detection of water-soluble contaminants. <i>Journal of Materials Chemistry A</i> , 2018, 6, 12153-12161.	10.3	35
69	Ultra-light and elastic graphene foams with a hierarchical structure and a high oil absorption capacity. <i>Journal of Materials Chemistry A</i> , 2015, 3, 22687-22694.	10.3	34
70	Layer-by-Layer Deposited Multilayer Films of Oligo(pyrenebutyric acid) and a Perylene Diimide Derivative: Structure and Photovoltaic Properties. <i>Langmuir</i> , 2008, 24, 4380-4387.	3.5	32
71	One-step synthesis of polyhydroquinone-graphene hydrogel composites for high performance supercapacitors. <i>Journal of Materials Chemistry A</i> , 2015, 3, 16033-16039.	10.3	31
72	Microporous Organic Polymers Based on Hyper-Crosslinked Coal Tar: Preparation and Application for Gas Adsorption. <i>ChemSusChem</i> , 2017, 10, 618-623.	6.8	30

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73	Fluorescence detection of mercury ions in aqueous media with the complex of a cationic oligopyrene derivative and oligothymine. <i>Analyst</i> , The, 2009, 134, 2081.	3.5	28
74	Synthesis of metal nanoparticle@graphene hydrogel composites by substrate-enhanced electroless deposition and their application in electrochemical sensors. <i>RSC Advances</i> , 2014, 4, 9133.	3.6	28
75	A mixed solvent for rapid fabrication of large-area methylammonium lead iodide layers by one-step coating at room temperature. <i>Journal of Materials Chemistry A</i> , 2019, 7, 18275-18284.	10.3	28
76	Constructing honeycomb micropatterns on nonplanar substrates with high glass transition temperature polymers. <i>Journal of Colloid and Interface Science</i> , 2012, 380, 99-104.	9.4	27
77	Disassembly-driven colorimetric and fluorescent sensor for anionic surfactants in water based on a conjugated polyelectrolyte/dye complex. <i>Soft Matter</i> , 2011, 7, 6873.	2.7	25
78	Inhibiting the growth of lithium dendrites at high current densities with oriented graphene foam. <i>Journal of Materials Chemistry A</i> , 2018, 6, 15603-15609.	10.3	25
79	Electrosynthesis of oligo(methoxyl pyrene) for turn-on fluorescence detection of volatile aromatic compounds. <i>Journal of Materials Chemistry</i> , 2010, 20, 2993.	6.7	23
80	Multi-length scale porous polymer films from hypercrosslinked breath figure arrays. <i>Journal of Colloid and Interface Science</i> , 2016, 461, 179-184.	9.4	20
81	Electrosynthesis of small polypyrrole microcontainers. <i>Journal of Electroanalytical Chemistry</i> , 2006, 597, 13-18.	3.8	19
82	Influence of microstructural features on thermal expansion coefficient in graphene/epoxy composites. <i>Heliyon</i> , 2016, 2, e00094.	3.2	18
83	Micro-nanoscale binary structured silver films fabricated by electrochemical deposition. <i>Materials Chemistry and Physics</i> , 2009, 114, 120-124.	4.0	17
84	Formation of nanoscale networks: selectively swelling amphiphilic block copolymers with CO ₂ -expanded liquids. <i>Nanoscale</i> , 2013, 5, 1195.	5.6	17
85	Formation of Breath Figure Arrays in Methanol Vapor Assisted by Surface Active Agents. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 8921-8927.	8.0	17
86	One-step preparation of hierarchically porous polyureas: Simultaneous foaming and hyper-crosslinking. <i>Polymer</i> , 2017, 108, 332-338.	3.8	16
87	Three-Dimensional Printing and Recycling of Multifunctional Composite Material Based on Commercial Epoxy Resin and Graphene Nanoplatelet. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 13758-13767.	8.0	16
88	Electrochemical Fabrication of Superhydrophobic Surfaces on Metal and Semiconductor Substrates. <i>Journal of Adhesion Science and Technology</i> , 2008, 22, 1819-1839.	2.6	15
89	Hybrid microporous polymers from double-decker-shaped silsesquioxane building blocks via Friedel-Crafts reaction. <i>Polymer</i> , 2016, 101, 388-394.	3.8	14
90	Facile synthesis of multi-functional elastic polyaniline/polyvinyl alcohol composite gels by a solution assembly method. <i>RSC Advances</i> , 2020, 10, 22019-22026.	3.6	14

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91	Synthesis and characterization of poly(1,5-naphthylene vinylene) and its copolymers with poly(2-methoxy-5-(2-ethylhexyloxy)-p-phenylene vinylene). Polymer, 2006, 47, 1533-1537.	3.8	13
92	Flexible Sandwich Photodetectors Based on Thick Polythiophene Films. Journal of Physical Chemistry C, 2009, 113, 7411-7415.	3.1	13
93	Functional Composite Materials Based on Chemically Converted Graphene (Adv. Mater. 9/2011). Advanced Materials, 2011, 23, 1088-1088.	21.0	13
94	Nanocombing Effect Leads to Nanowire-Based, in-Plane, Uniaxial Thin Films. ACS Nano, 2018, 12, 12701-12712.	14.6	12
95	Breath Figure in Reactive Vapor: A New Route to Nanopore Array. Langmuir, 2017, 33, 347-352.	3.5	11
96	Superacid-doped polyaniline as a soluble polymeric active electrolyte for supercapacitors. Soft Matter, 2020, 16, 7305-7311.	2.7	10
97	Continuous and Patterned Conducting Polymer Coatings on Diverse Substrates: Rapid Fabrication by Oxidant-Mediated Surface Polymerization and Application in Flexible Devices. ACS Applied Materials & Interfaces, 2021, 13, 5583-5591.	8.0	10
98	Pyrenyl Excimers Induced by the Crystallization of POSS Moieties: Spectroscopic Studies and Sensing Applications. ChemPhysChem, 2008, 9, 1908-1913.	2.1	9
99	Effects of CO ₂ accumulation during cycling of a Li-O ₂ battery on the transition of discharge product and performance fading. Nano Energy, 2019, 66, 104171.	16.0	8
100	Electric field-induced switching among multiple conductance pathways in single-molecule junctions. Chemical Communications, 2021, 57, 7160-7163.	4.1	8
101	Preparation of PAN nanofiltration membranes by supercritical-CO ₂ -induced phase separation. Journal of Supercritical Fluids, 2016, 118, 89-95.	3.2	7
102	Bioinspired Compartmentalization Strategy for Coating Polymers with Self-Organized Prismatic Films. Chemistry of Materials, 2021, 33, 9240-9251.	6.7	7
103	Organic Solvent-Assisted Lyophilization: A Universal Method of Preparing Two-Dimensional Material Nanoscrolls. ACS Omega, 2019, 4, 7420-7427.	3.5	6
104	Thymine as a Biocompatible Surface Passivator for a Highly Efficient and Stable Planar Perovskite Solar Cell. ACS Applied Energy Materials, 2021, 4, 3310-3316.	5.1	6
105	Memory devices based on organic electric bistable materials. Science Bulletin, 2007, 52, 2017-2023.	1.7	5
106	Hierarchically porous polystyrene membranes fabricated via a CO ₂ -expanded liquid selective swelling and in situ hyper-cross-linking method. RSC Advances, 2015, 5, 68639-68645.	3.6	5
107	High-Quality Concentrated Precursor Solution in N,N-Dimethylformamide for Thick Methylammonium Triiodoplumbate Layer in Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 25972-25979.	8.0	5
108	Manipulating the elasticity of chemically modified graphene aerogel through water surface plasticization. Carbon, 2021, 184, 43-52.	10.3	5

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109	Spontaneous Adsorption of Graphene Oxide on Multiple Polymeric Surfaces. Langmuir, 2021, 37, 8829-8839.	3.5	3
110	Improving the volumetric specific capacitance of flexible polyaniline electrode: solution casting method and effect of reduced graphene oxide sheets. Science China Materials, 2021, 64, 571-580.	6.3	2