

Anyuan Cao

List of Publications by Year in descending order

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122
papers

10,289
citations

36303

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32842

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125
all docs

125
docs citations

125
times ranked

15409
citing authors

#	ARTICLE	IF	CITATIONS
1	High-efficiency CNT-Si solar cells based on a collaborative system enabled by oxide penetration. Nano Research, 2022, 15, 2497-2504.	10.4	4
2	Direct stamping multifunctional tactile sensor for pressure and temperature sensing. Nano Research, 2022, 15, 3614-3620.	10.4	17
3	Soft-lock drawing of super-aligned carbon nanotube bundles for nanometre electrical contacts. Nature Nanotechnology, 2022, 17, 278-284.	31.5	24
4	MXene-supported, Atomic-layered Iridium Catalysts Created by Nanoparticle Re-dispersion for Efficient Alkaline Hydrogen Evolution. Small, 2022, 18, e2105226.	10.0	16
5	Carbon Nanotube/Polymer Coaxial Cables with Strong Interface for Damping Composites and Stretchable Conductors. Advanced Functional Materials, 2022, 32, .	14.9	9
6	pH-Responsive Carbon Nanotube Film-Based Microfluidic Chip for Efficient Capture and Release of Cancer Cells. ACS Applied Nano Materials, 2022, 5, 6911-6924.	5.0	11
7	Carbon Nanotube-Coupled Seaweed-like Cobalt Sulfide as a Dual-Functional Catalyst for Overall Water Splitting. ACS Applied Materials & Interfaces, 2022, 14, 30847-30856.	8.0	10
8	A GQD-based composite film as photon down-converter in CNT/Si solar cells. Nano Research, 2021, 14, 3893-3899.	10.4	12
9	Flexible FeS@Fe ₂ O ₃ /CNT composite films as self-supporting anodes for high-performance lithium-ion batteries. Nanotechnology, 2021, 32, 285404.	2.6	4
10	Application-Driven Carbon Nanotube Functional Materials. ACS Nano, 2021, 15, 7946-7974.	14.6	102
11	Dual Network Sponge for Compressible Lithium-ion Batteries. Small, 2021, 17, e2100911.	10.0	3
12	Flexible and Stable Carbon Nanotube Film Strain Sensors with Self-Derived Integrated Electrodes. ACS Applied Materials & Interfaces, 2021, 13, 55600-55610.	8.0	8
13	Carbon-Based Fiber Materials as Implantable Depth Neural Electrodes. Frontiers in Neuroscience, 2021, 15, 771980.	2.8	5
14	Mechanical force-induced assembly of one-dimensional nanomaterials. Nano Research, 2020, 13, 1191-1204.	10.4	16
15	Free-standing three-dimensional carbon nanotubes/amorphous MnO ₂ cathodes for aqueous zinc-ion batteries with superior rate performance. Materials Today Energy, 2020, 18, 100548.	4.7	56
16	Dislocation-strained IrNi Alloy Nanoparticles Driven by Thermal Shock for the Hydrogen Evolution Reaction. Advanced Materials, 2020, 32, e2006034.	21.0	148
17	Porous-Carbon Aerogels with Tailored Sub-Nanopores for High Cycling Stability and Rate Capability Potassium-Ion Battery Anodes. ACS Applied Materials & Interfaces, 2020, 12, 27045-27054.	8.0	16
18	Synergistic CNFs/CoS ₂ /MoS ₂ Flexible Films with Unprecedented Selectivity for NO Gas at Room Temperature. ACS Applied Materials & Interfaces, 2020, 12, 29778-29786.	8.0	11

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19	FeOF/TiO ₂ Hetero-Nanostructures for High-Areal-Capacity Fluoride Cathodes. ACS Applied Materials & Interfaces, 2020, 12, 33803-33809.	8.0	12
20	Improving CNT-Si solar cells by metal chloride-to-oxide transformation. Nano Research, 2020, 13, 543-550.	10.4	7
21	Highly Stretchable and Compressible Carbon Nanofiber@Polymer Hydrogel Strain Sensor for Human Motion Detection. Macromolecular Materials and Engineering, 2020, 305, 1900813.	3.6	28
22	Colored and paintable bilayer coatings with high solar-infrared reflectance for efficient cooling. Science Advances, 2020, 6, eaaz5413.	10.3	148
23	High-performance Li-ion batteries based on graphene quantum dot wrapped carbon nanotube hybrid anodes. Nano Research, 2020, 13, 1044-1052.	10.4	44
24	Highly Conductive Multifunctional rGO/CNT Hybrid Sponge for Electromagnetic Wave Shielding and Strain Sensor. Advanced Materials Technologies, 2019, 4, 1900443.	5.8	32
25	Hydrophobic, Structure-tunable Cu Nanowire@Graphene Core-shell Aerogels for Piezoresistive Pressure Sensing. Advanced Materials Technologies, 2019, 4, 1900470.	5.8	17
26	Stretchable Carbon Nanotube@Polymer Composites with Homogenous Deformation and as Liquid Droplet Sensors. Advanced Materials Interfaces, 2019, 6, 1901354.	3.7	2
27	Membrane adsorbers with ultrahigh metal-organic framework loading for high flux separations. Nature Communications, 2019, 10, 4204.	12.8	157
28	Improving Carbon Nanotube@Silicon Solar Cells by Solution Processable Metal Chlorides. Solar Rrl, 2019, 3, 1900147.	5.8	18
29	Analysis of photoluminescence behavior of high-quality single-layer MoS ₂ . Nano Research, 2019, 12, 1619-1624.	10.4	30
30	Material patterning on substrates by manipulation of fluidic behavior. National Science Review, 2019, 6, 758-766.	9.5	11
31	Highly Dispersed Catalytic Co ₃ S ₄ among a Hierarchical Carbon Nanostructure for High-Rate and Long-Life Lithium-Sulfur Batteries. ACS Nano, 2019, 13, 3982-3991.	14.6	198
32	Dense monolithic MOF and carbon nanotube hybrid with enhanced volumetric and areal capacities for lithium-sulfur battery. Journal of Materials Chemistry A, 2019, 7, 9195-9201.	10.3	70
33	Reticulate Dual-Nanowire Aerogel for Multifunctional Applications: a High-Performance Strain Sensor and a High Areal Capacity Rechargeable Anode. Advanced Functional Materials, 2019, 29, 1807467.	14.9	40
34	Highly Stretchable Carbon Nanotube Fibers with Tunable and Stable Light Emission. Advanced Engineering Materials, 2019, 21, 1801126.	3.5	8
35	Two-Dimensional Flexible Bilayer Janus Membrane for Advanced Photothermal Water Desalination. ACS Energy Letters, 2018, 3, 1165-1171.	17.4	203
36	3D, Mutually Embedded MOF@Carbon Nanotube Hybrid Networks for High-Performance Lithium-Sulfur Batteries. Advanced Energy Materials, 2018, 8, 1800013.	19.5	198

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37	Single Carbon Fibers with a Macroscopic Thickness, 3D Highly Porous Carbon Nanotube Coating. <i>Advanced Materials</i> , 2018, 30, e1704419.	21.0	62
38	Carbon-Nanotube-Wrapped Spider Silks for Directed Cardiomyocyte Growth and Electrophysiological Detection. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 6793-6798.	8.0	26
39	Controllable growth of SnS ₂ nanostructures on nanocarbon surfaces for lithium-ion and sodium-ion storage with high rate capability. <i>Journal of Materials Chemistry A</i> , 2018, 6, 1462-1472.	10.3	117
40	Engineering sub-100Ånm Mo(1-x)W _x Se ₂ crystals for efficient hydrogen evolution catalysis. <i>Journal of Materials Chemistry A</i> , 2018, 6, 2900-2907.	10.3	34
41	Densification by Compaction as an Effective Low-Cost Method to Attain a High Areal Lithium Storage Capacity in a CNT@Co ₃ O ₄ Sponge. <i>Advanced Energy Materials</i> , 2018, 8, 1702981.	19.5	69
42	An Ultrathin Flexible 2D Membrane Based on Single-Walled Nanotube-MoS ₂ Hybrid Film for High-Performance Solar Steam Generation. <i>Advanced Functional Materials</i> , 2018, 28, 1704505.	14.9	271
43	Performance Improvement of Assembled Multi-Walled Carbon Nanotube Network/Si Solar Cells Decorated with Metal Nanoparticles. <i>ChemistrySelect</i> , 2018, 3, 9736-9742.	1.5	4
44	Controlled Air-Etching Synthesis of Porous Carbon Nanotube Aerogels with Ultrafast Charging at 1000 A g ⁻¹ . <i>Small</i> , 2018, 14, e1802394.	10.0	37
45	Hyperporous Sponge Interconnected by Hierarchical Carbon Nanotubes as a High-Performance Potassium-Ion Battery Anode. <i>Advanced Materials</i> , 2018, 30, e1802074.	21.0	268
46	Robust and Stable Cu Nanowire@Graphene Core-Shell Aerogels for Ultraeffective Electromagnetic Interference Shielding. <i>Small</i> , 2018, 14, e1800634.	10.0	125
47	Robust Expandable Carbon Nanotube Scaffold for Ultrahigh-Capacity Lithium-Metal Anodes. <i>Advanced Materials</i> , 2018, 30, e1800884.	21.0	171
48	Graphene Oxide Glue-Electrode for Fabrication of Vertical, Elastic, Conductive Columns. <i>ACS Nano</i> , 2017, 11, 2944-2951.	14.6	37
49	Ultrafine Graphene Nanomesh with Large On/Off Ratio for High-Performance Flexible Biosensors. <i>Advanced Functional Materials</i> , 2017, 27, 1604096.	14.9	111
50	Rational Design of Hierarchical Carbon/Mesoporous Silicon Composite Sponges as High-Performance Flexible Energy Storage Electrodes. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 22819-22825.	8.0	34
51	Highly Crumpled All-Carbon Transistors for Brain Activity Recording. <i>Nano Letters</i> , 2017, 17, 71-77.	9.1	38
52	Facile Fabrication of Multifunctional Metal-Organic Framework Hollow Tubes To Trap Pollutants. <i>Journal of the American Chemical Society</i> , 2017, 139, 16482-16485.	18.7	96
53	MOF-Derived ZnO Nanoparticles Covered by N-Doped Carbon Layers and Hybridized on Carbon Nanotubes for Lithium-Ion Battery Anodes. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 37813-37822.	8.0	107
54	Highly Sensitive, Flexible MEMS Based Pressure Sensor with Photoresist Insulation Layer. <i>Small</i> , 2017, 13, 1702422.	10.0	50

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55	Carbon Nanotube Sponges, Aerogels, and Hierarchical Composites: Synthesis, Properties, and Energy Applications. <i>Advanced Energy Materials</i> , 2016, 6, 1600554.	19.5	183
56	High-Efficiency Large-Area Carbon Nanotube-Silicon Solar Cells. <i>Advanced Energy Materials</i> , 2016, 6, 1600095.	19.5	32
57	High-Performance Epoxy Nanocomposites Reinforced with Three-Dimensional Carbon Nanotube Sponge for Electromagnetic Interference Shielding. <i>Advanced Functional Materials</i> , 2016, 26, 447-455.	14.9	579
58	Graphene Reinforced Carbon Nanotube Networks for Wearable Strain Sensors. <i>Advanced Functional Materials</i> , 2016, 26, 2078-2084.	14.9	328
59	Novel Pliable Electrodes for Flexible Electrochemical Energy Storage Devices: Recent Progress and Challenges. <i>Advanced Energy Materials</i> , 2016, 6, 1600490.	19.5	136
60	Coaxial TiO ₂ -carbon nanotube sponges as compressible anodes for lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2016, 4, 7398-7405.	10.3	50
61	Polymer-Coated Graphene Aerogel Beads and Supercapacitor Application. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 11179-11187.	8.0	65
62	Helical graphene oxide fibers as a stretchable sensor and an electrocapillary sucker. <i>Nanoscale</i> , 2016, 8, 10659-10668.	5.6	44
63	Exposing residual catalyst in a carbon nanotube sponge. <i>RSC Advances</i> , 2016, 6, 45103-45111.	3.6	9
64	Direct Oil Recovery from Saturated Carbon Nanotube Sponges. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 12337-12343.	8.0	37
65	Nanomaterials for Energy at Peking University. <i>Advanced Energy Materials</i> , 2016, 6, .	19.5	0
66	Flexible Electronics: Novel Pliable Electrodes for Flexible Electrochemical Energy Storage Devices: Recent Progress and Challenges (Adv. Energy Mater. 17/2016). <i>Advanced Energy Materials</i> , 2016, 6, .	19.5	3
67	Controlled Synthesis of Core-Shell Carbon@MoS ₂ Nanotube Sponges as High-Performance Battery Electrodes. <i>Advanced Materials</i> , 2016, 28, 10175-10181.	21.0	145
68	Shape-memory polymer nanocomposites with a 3D conductive network for bidirectional actuation and locomotion application. <i>Nanoscale</i> , 2016, 8, 18042-18049.	5.6	74
69	Highly Stable Carbon Nanotube/Polyaniline Porous Network for Multifunctional Applications. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 34027-34033.	8.0	55
70	Blown-Bubble Assembly and in Situ Fabrication of Sausage-like Graphene Nanotubes Containing Copper Nanoblocks. <i>Nano Letters</i> , 2016, 16, 4917-4924.	9.1	13
71	Multifunctional, Highly Flexible, Free-Standing 3D Polypyrrole Foam. <i>Small</i> , 2016, 12, 4070-4076.	10.0	71
72	Efficient purification of single-walled carbon nanotube fibers by instantaneous current injection and acid washing. <i>RSC Advances</i> , 2016, 6, 97865-97872.	3.6	18

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73	Strain Sensing: Graphene Reinforced Carbon Nanotube Networks for Wearable Strain Sensors (Adv.) Tj ETQq1 1 0.784314 rgBT /Over	14.9	93
74	Highly flexible all-solid-state supercapacitors based on carbon nanotube/polypyrrole composite films and fibers. RSC Advances, 2016, 6, 62062-62070.	3.6	47
75	Dark-blue mirror-like perovskite dense films for efficient organic-inorganic hybrid solar cells. Journal of Materials Chemistry A, 2016, 4, 3689-3696.	10.3	8
76	Flexible hybrid carbon nanotube sponges embedded with SnS ₂ from tubular nanosheaths to nanosheets as free-standing anodes for lithium-ion batteries. RSC Advances, 2016, 6, 30098-30105.	3.6	26
77	Meter-Long Spiral Carbon Nanotube Fibers Show Ultrauniformity and Flexibility. Nano Letters, 2016, 16, 1768-1775.	9.1	51
78	Perovskite-Type LaSrMnO Electrolyte with Uniform Porous Structure for an Efficient Li-O ₂ Battery Cathode. ACS Nano, 2016, 10, 1240-1248.	14.6	98
79	Carbon nanotubes as an efficient hole collector for high voltage methylammonium lead bromide perovskite solar cells. Nanoscale, 2016, 8, 6352-6360.	5.6	88
80	Double polymer sheathed carbon nanotube supercapacitors show enhanced cycling stability. Nanoscale, 2016, 8, 626-633.	5.6	36
81	A Switchable and Compressible Carbon Nanotube Sponge Electrocapillary Imbiber. Advanced Materials, 2015, 27, 7241-7246.	21.0	26
82	Targeting Ideal Dual-Absorber Tandem Water Splitting Using Perovskite Photovoltaics and CuIn _x Ga _{1-x} Se ₂ Photocathodes. Advanced Energy Materials, 2015, 5, 1501520.	19.5	109
83	Biomimetic Carbon Nanotube Films with Gradient Structure and Locally Tunable Mechanical Property. Advanced Functional Materials, 2015, 25, 7173-7179.	14.9	18
84	Blown Bubble Assembly of Graphene Oxide Patches for Transparent Electrodes in Carbon-Silicon Solar Cells. ACS Applied Materials & Interfaces, 2015, 7, 28330-28336.	8.0	5
85	Highly Porous Core-Shell Structured Graphene-Chitosan Beads. ACS Applied Materials & Interfaces, 2015, 7, 14439-14445.	8.0	56
86	In-Situ Welding Carbon Nanotubes into a Porous Solid with Super-High Compressive Strength and Fatigue Resistance. Scientific Reports, 2015, 5, 11336.	3.3	37
87	Investigation of the Cathode-Electrolyte Interface in Aprotic Li-O ₂ Batteries. Chemistry of Materials, 2015, 27, 5305-5313.	6.7	55
88	Direct fabrication of carbon nanotube-graphene hybrid films by a blown bubble method. Nano Research, 2015, 8, 1746-1754.	10.4	21
89	Graphene aerogel composites derived from recycled cigarette filters for electromagnetic wave absorption. Journal of Materials Chemistry C, 2015, 3, 11893-11901.	5.5	134
90	Large-scale aligned crystalline CH ₃ NH ₃ Pb ₃ perovskite array films. Journal of Materials Chemistry A, 2015, 3, 18847-18851.	10.3	19

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91	Integrated Ternary Bioinspired Nanocomposites <i>via</i> Synergistic Toughening of Reduced Graphene Oxide and Double-Walled Carbon Nanotubes. ACS Nano, 2015, 9, 11568-11573.	14.6	110
92	Large-Deformation, Multifunctional Artificial Muscles Based on Single-Walled Carbon Nanotube Yarns. Advanced Engineering Materials, 2015, 17, 14-20.	3.5	36
93	Templated synthesis of TiO ₂ nanotube macrostructures and their photocatalytic properties. Nano Research, 2015, 8, 900-906.	10.4	32
94	Graphene Nanoribbon Aerogels Unzipped from Carbon Nanotube Sponges. Advanced Materials, 2014, 26, 3241-3247.	21.0	151
95	Carbon nanotube-polypyrrole core-shell sponge and its application as highly compressible supercapacitor electrode. Nano Research, 2014, 7, 209-218.	10.4	115
96	Core-Double-Shell, Carbon Nanotube@Polypyrrole@MnO ₂ Sponge as Freestanding, Compressible Supercapacitor Electrode. ACS Applied Materials & Interfaces, 2014, 6, 5228-5234.	8.0	298
97	Carbon Nanotubes: Three-Dimensional Carbon Nanotube Sponge-Array Architectures with High Energy Dissipation (Adv. Mater. 8/2014). Advanced Materials, 2014, 26, 1307-1307.	21.0	4
98	Mechanical and dye adsorption properties of graphene oxide/chitosan composite fibers prepared by wet spinning. Carbohydrate Polymers, 2014, 102, 755-761.	10.2	152
99	Multifunctional graphene sheet-nanoribbon hybrid aerogels. Journal of Materials Chemistry A, 2014, 2, 14994-15000.	10.3	54
100	Fabrication of large area hexagonal boron nitride thin films for bendable capacitors. Nano Research, 2013, 6, 602-610.	10.4	61
101	Single-layer graphene sheets as counter electrodes for fiber-shaped polymer solar cells. RSC Advances, 2013, 3, 13720.	3.6	40
102	Bubble-promoted assembly of hierarchical, porous Ag ₂ S nanoparticle membranes. Journal of Materials Chemistry, 2012, 22, 24721.	6.7	5
103	Hybrid effect of gas flow and light excitation in carbon/silicon Schottky solar cells. Journal of Materials Chemistry, 2012, 22, 3330.	6.7	12
104	Solution-processed bulk heterojunction solar cells based on interpenetrating CdS nanowires and carbon nanotubes. Nano Research, 2012, 5, 595-604.	10.4	9
105	Nanobelt-carbon nanotube cross-junction solar cells. Energy and Environmental Science, 2012, 5, 6119.	30.8	11
106	Elastic shape recovery of carbon nanotube sponges in liquid oil. Journal of Materials Chemistry, 2012, 22, 18300.	6.7	27
107	Wide Range Control of Microstructure and Mechanical Properties of Carbon Nanotube Forests: A Comparison Between Fixed and Floating Catalyst CVD Techniques. Advanced Functional Materials, 2012, 22, 5028-5037.	14.9	58
108	Super-Stretchable Spring-Like Carbon Nanotube Ropes. Advanced Materials, 2012, 24, 2896-2900.	21.0	193

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109	Carbon Nanotubes: Superstretchable Spring-Like Carbon Nanotube Ropes (Adv. Mater. 21/2012). Advanced Materials, 2012, 24, 2935-2935.	21.0	3
110	Photocatalytic, recyclable CdS nanoparticle-carbon nanotube hybrid sponges. Nano Research, 2012, 5, 265-271.	10.4	37
111	Encapsulated carbon nanotube-oxide-silicon solar cells with stable 10% efficiency. Applied Physics Letters, 2011, 98, .	3.3	98
112	Graphene-CdSe nanobelt solar cells with tunable configurations. Nano Research, 2011, 4, 891-900.	10.4	67
113	CuI-Si heterojunction solar cells with carbon nanotube films as flexible top-contact electrodes. Nano Research, 2011, 4, 979-986.	10.4	20
114	Open-Ended, N-Doped Carbon Nanotube-Graphene Hybrid Nanostructures as High-Performance Catalyst Support. Advanced Functional Materials, 2011, 21, 999-1006.	14.9	358
115	Enhanced Transport of Nanoparticles Across a Porous Nanotube Sponge. Advanced Functional Materials, 2011, 21, 3439-3445.	14.9	18
116	Silicon-Carbon Nanotube Coaxial Sponge as Li-Ion Anodes with High Areal Capacity. Advanced Energy Materials, 2011, 1, 523-527.	19.5	220
117	Carbon Nanotube Sponges. Advanced Materials, 2010, 22, 617-621.	21.0	1,380
118	Large area, highly transparent carbon nanotube spiderwebs for energy harvesting. Journal of Materials Chemistry, 2010, 20, 7236.	6.7	76
119	Infrared-transparent polymer solar cells. Journal of Materials Chemistry, 2010, 20, 8478.	6.7	34
120	Single-Crystalline Permalloy Nanowires in Carbon Nanotubes: Enhanced Encapsulation and Magnetization. Journal of Physical Chemistry C, 2007, 111, 11475-11479.	3.1	84
121	Large-area blown bubble films of aligned nanowires and carbon nanotubes. Nature Nanotechnology, 2007, 2, 372-377.	31.5	492
122	Thermal and Electrical Transport Measurements of Single-Walled Carbon Nanotube Strands. Materials Research Society Symposia Proceedings, 2003, 788, 5111.	0.1	0