Anyuan Cao

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/1444200/publications.pdf

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122	10,289	36303	32842
papers	citations	51 h-index	100 g-index

125	125	125	15409
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Carbon Nanotube Sponges. Advanced Materials, 2010, 22, 617-621.	21.0	1,380
2	Highâ€Performance Epoxy Nanocomposites Reinforced with Threeâ€Dimensional Carbon Nanotube Sponge for Electromagnetic Interference Shielding. Advanced Functional Materials, 2016, 26, 447-455.	14.9	579
3	Large-area blown bubble films of aligned nanowires and carbon nanotubes. Nature Nanotechnology, 2007, 2, 372-377.	31.5	492
4	Openâ€Ended, Nâ€Doped Carbon Nanotubeâ€“Graphene Hybrid Nanostructures as Highâ€Performance Catalyst Support. Advanced Functional Materials, 2011, 21, 999-1006.	14.9	358
5	Graphene Reinforced Carbon Nanotube Networks for Wearable Strain Sensors. Advanced Functional Materials, 2016, 26, 2078-2084.	14.9	328
6	Core-Double-Shell, Carbon Nanotube@Polypyrrole@MnO₂ Sponge as Freestanding, Compressible Supercapacitor Electrode. ACS Applied Materials & Interfaces, 2014, 6, 5228-5234.	8.0	298
7	An Ultrathin Flexible 2D Membrane Based on Singleâ€Walled Nanotubeâ€“MoS₂ Hybrid Film for Highâ€Performance Solar Steam Generation. Advanced Functional Materials, 2018, 28, 1704505.	14.9	271
8	Hyperporous Sponge Interconnected by Hierarchical Carbon Nanotubes as a Highâ€Performance Potassiumâ€Ion Battery Anode. Advanced Materials, 2018, 30, e1802074.	21.0	268
9	Siliconâ€“Carbon Nanotube Coaxial Sponge as Liâ€Ion Anodes with High Areal Capacity. Advanced Energy Materials, 2011, 1, 523-527.	19.5	220
10	Two-Dimensional Flexible Bilayer Janus Membrane for Advanced Photothermal Water Desalination. ACS Energy Letters, 2018, 3, 1165-1171.	17.4	203
11	3D, Mutually Embedded MOF@Carbon Nanotube Hybrid Networks for Highâ€Performance Lithiumâ€Sulfur Batteries. Advanced Energy Materials, 2018, 8, 1800013.	19.5	198
12	Highly Dispersed Catalytic Co₃S₄ among a Hierarchical Carbon Nanostructure for High-Rate and Long-Life Lithiumâ€“Sulfur Batteries. ACS Nano, 2019, 13, 3982-3991.	14.6	198
13	Superâ€Stretchable Springâ€Like Carbon Nanotube Ropes. Advanced Materials, 2012, 24, 2896-2900.	21.0	193
14	Carbon Nanotube Sponges, Aerogels, and Hierarchical Composites: Synthesis, Properties, and Energy Applications. Advanced Energy Materials, 2016, 6, 1600554.	19.5	183
15	Robust Expandable Carbon Nanotube Scaffold for Ultrahighâ€Capacity Lithiumâ€Metal Anodes. Advanced Materials, 2018, 30, e1800884.	21.0	171
16	Membrane adsorbers with ultrahigh metal-organic framework loading for high flux separations. Nature Communications, 2019, 10, 4204.	12.8	157
17	Mechanical and dye adsorption properties of graphene oxide/chitosan composite fibers prepared by wet spinning. Carbohydrate Polymers, 2014, 102, 755-761.	10.2	152
18	Graphene Nanoribbon Aerogels Unzipped from Carbon Nanotube Sponges. Advanced Materials, 2014, 26, 3241-3247.	21.0	151

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19	Dislocationâ€Strained IrNi Alloy Nanoparticles Driven by Thermal Shock for the Hydrogen Evolution Reaction. Advanced Materials, 2020, 32, e2006034.	21.0	148
20	Colored and paintable bilayer coatings with high solar-infrared reflectance for efficient cooling. Science Advances, 2020, 6, eaaz5413.	10.3	148
21	Controlled Synthesis of Coreâ€“Shell Carbon@MoS₂ Nanotube Sponges as Highâ€Performance Battery Electrodes. Advanced Materials, 2016, 28, 10175-10181.	21.0	145
22	Novel Pliable Electrodes for Flexible Electrochemical Energy Storage Devices: Recent Progress and Challenges. Advanced Energy Materials, 2016, 6, 1600490.	19.5	136
23	Graphene aerogel composites derived from recycled cigarette filters for electromagnetic wave absorption. Journal of Materials Chemistry C, 2015, 3, 11893-11901.	5.5	134
24	Robust and Stable Cu Nanowire@Graphene Coreâ€“Shell Aerogels for Ultraeffective Electromagnetic Interference Shielding. Small, 2018, 14, e1800634.	10.0	125
25	Controllable growth of SnS₂ nanostructures on nanocarbon surfaces for lithium-ion and sodium-ion storage with high rate capability. Journal of Materials Chemistry A, 2018, 6, 1462-1472.	10.3	117
26	Carbon nanotube-polypyrrole core-shell sponge and its application as highly compressible supercapacitor electrode. Nano Research, 2014, 7, 209-218.	10.4	115
27	Ultrafine Graphene Nanomesh with Large On/Off Ratio for Highâ€Performance Flexible Biosensors. Advanced Functional Materials, 2017, 27, 1604096.	14.9	111
28	Integrated Ternary Bioinspired Nanocomposites via Synergistic Toughening of Reduced Graphene Oxide and Double-Walled Carbon Nanotubes. ACS Nano, 2015, 9, 11568-11573.	14.6	110
29	Targeting Ideal Dualâ€Absorber Tandem Water Splitting Using Perovskite Photovoltaics and CuIn_xGa_{1â€x}Se₂ Photocathodes. Advanced Energy Materials, 2015, 5, 1501520.	19.5	109
30	MOF-Derived ZnO Nanoparticles Covered by N-Doped Carbon Layers and Hybridized on Carbon Nanotubes for Lithium-Ion Battery Anodes. ACS Applied Materials & Interfaces, 2017, 9, 37813-37822.	8.0	107
31	Application-Driven Carbon Nanotube Functional Materials. ACS Nano, 2021, 15, 7946-7974.	14.6	102
32	Encapsulated carbon nanotube-oxide-silicon solar cells with stable 10% efficiency. Applied Physics Letters, 2011, 98, .	3.3	98
33	Perovskite-Type LaSrMnO Electrocatalyst with Uniform Porous Structure for an Efficient Liâ€“O₂ Battery Cathode. ACS Nano, 2016, 10, 1240-1248.	14.6	98
34	Facile Fabrication of Multifunctional Metalâ€“Organic Framework Hollow Tubes To Trap Pollutants. Journal of the American Chemical Society, 2017, 139, 16482-16485.	13.7	96
35	Carbon nanotubes as an efficient hole collector for high voltage methylammonium lead bromide perovskite solar cells. Nanoscale, 2016, 8, 6352-6360.	5.6	88
36	Single-Crystalline Permalloy Nanowires in Carbon Nanotubes:â€‰ Enhanced Encapsulation and Magnetization. Journal of Physical Chemistry C, 2007, 111, 11475-11479.	3.1	84

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37	Large area, highly transparent carbon nanotube spiderwebs for energy harvesting. Journal of Materials Chemistry, 2010, 20, 7236.	6.7	76
38	Shape-memory polymer nanocomposites with a 3D conductive network for bidirectional actuation and locomotion application. Nanoscale, 2016, 8, 18042-18049.	5.6	74
39	Multifunctional, Highly Flexible, Freeâ€Standing 3D Polypyrrole Foam. Small, 2016, 12, 4070-4076.	10.0	71
40	Dense monolithic MOF and carbon nanotube hybrid with enhanced volumetric and areal capacities for lithiumâ€“sulfur battery. Journal of Materials Chemistry A, 2019, 7, 9195-9201.	10.3	70
41	Densification by Compaction as an Effective Lowâ€Cost Method to Attain a High Areal Lithium Storage Capacity in a CNT@Co₃O₄ Sponge. Advanced Energy Materials, 2018, 8, 1702981.	19.5	69
42	Graphene-CdSe nanobelt solar cells with tunable configurations. Nano Research, 2011, 4, 891-900.	10.4	67
43	Polymer-Coated Graphene Aerogel Beads and Supercapacitor Application. ACS Applied Materials & Interfaces, 2016, 8, 11179-11187.	8.0	65
44	Single Carbon Fibers with a Macroscopicâ€Thickness, 3D Highly Porous Carbon Nanotube Coating. Advanced Materials, 2018, 30, e1704419.	21.0	62
45	Fabrication of large area hexagonal boron nitride thin films for bendable capacitors. Nano Research, 2013, 6, 602-610.	10.4	61
46	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
47	Highly Porous Coreâ€“Shell Structured Graphene-Chitosan Beads. ACS Applied Materials & Interfaces, 2015, 7, 14439-14445.	8.0	56
48	Free-standing three-dimensional carbon nanotubes/amorphous MnO2 cathodes for aqueous zinc-ion batteries with superior rate performance. Materials Today Energy, 2020, 18, 100548.	4.7	56
49	Investigation of the Cathodeâ€“Catalystâ€“Electrolyte Interface in Aprotic Liâ€“O₂ Batteries. Chemistry of Materials, 2015, 27, 5305-5313.	6.7	55
50	Highly Stable Carbon Nanotube/Polyaniline Porous Network for Multifunctional Applications. ACS Applied Materials & Interfaces, 2016, 8, 34027-34033.	8.0	55
51	Multifunctional graphene sheetâ€“nanoribbon hybrid aerogels. Journal of Materials Chemistry A, 2014, 2, 14994-15000.	10.3	54
52	Meter-Long Spiral Carbon Nanotube Fibers Show Ultrauniformity and Flexibility. Nano Letters, 2016, 16, 1768-1775.	9.1	51
53	Coaxial TiO₂â€“carbon nanotube sponges as compressible anodes for lithium-ion batteries. Journal of Materials Chemistry A, 2016, 4, 7398-7405.	10.3	50
54	Highly Sensitive, Flexible MEMS Based Pressure Sensor with Photoresist Insulation Layer. Small, 2017, 13, 1702422.	10.0	50

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55	Highly flexible all-solid-state supercapacitors based on carbon nanotube/polypyrrole composite films and fibers. RSC Advances, 2016, 6, 62062-62070.	3.6	47
56	Helical graphene oxide fibers as a stretchable sensor and an electrocapillary sucker. Nanoscale, 2016, 8, 10659-10668.	5.6	44
57	High-performance Li-ion batteries based on graphene quantum dot wrapped carbon nanotube hybrid anodes. Nano Research, 2020, 13, 1044-1052.	10.4	44
58	Single-layer graphene sheets as counter electrodes for fiber-shaped polymer solar cells. RSC Advances, 2013, 3, 13720.	3.6	40
59	Reticulate Dualâ€Nanowire Aerogel for Multifunctional Applications: a Highâ€Performance Strain Sensor and a High Areal Capacity Rechargeable Anode. Advanced Functional Materials, 2019, 29, 1807467.	14.9	40
60	Highly Crumpled All-Carbon Transistors for Brain Activity Recording. Nano Letters, 2017, 17, 71-77.	9.1	38
61	Photocatalytic, recyclable CdS nanoparticle-carbon nanotube hybrid sponges. Nano Research, 2012, 5, 265-271.	10.4	37
62	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
63	Direct Oil Recovery from Saturated Carbon Nanotube Sponges. ACS Applied Materials & Interfaces, 2016, 8, 12337-12343.	8.0	37
64	Graphene Oxide Glue-Electrode for Fabrication of Vertical, Elastic, Conductive Columns. ACS Nano, 2017, 11, 2944-2951.	14.6	37
65	Controlled Airâ€Etching Synthesis of Porousâ€Carbon Nanotube Aerogels with Ultrafast Charging at 1000 A g^{â^'1}. Small, 2018, 14, e1802394.	10.0	37
66	Largeâ€Deformation, Multifunctional Artificial Muscles Based on Singleâ€Walled Carbon Nanotube Yarns. Advanced Engineering Materials, 2015, 17, 14-20.	3.5	36
67	Double polymer sheathed carbon nanotube supercapacitors show enhanced cycling stability. Nanoscale, 2016, 8, 626-633.	5.6	36
68	Infrared-transparent polymer solar cells. Journal of Materials Chemistry, 2010, 20, 8478.	6.7	34
69	Rational Design of Hierarchical Carbon/Mesoporous Silicon Composite Sponges as High-Performance Flexible Energy Storage Electrodes. ACS Applied Materials & Interfaces, 2017, 9, 22819-22825.	8.0	34
70	Engineering sub-100Ânm Mo_(1â^'x)W_xSe₂ crystals for efficient hydrogen evolution catalysis. Journal of Materials Chemistry A, 2018, 6, 2900-2907.	10.3	34
71	Templated synthesis of TiO2 nanotube macrostructures and their photocatalytic properties. Nano Research, 2015, 8, 900-906.	10.4	32
72	Highâ€Efficiency Largeâ€Area Carbon Nanotubeâ€Silicon Solar Cells. Advanced Energy Materials, 2016, 6, 1600095.	19.5	32

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73	Highly Conductive Multifunctional rGO/CNT Hybrid Sponge for Electromagnetic Wave Shielding and Strain Sensor. Advanced Materials Technologies, 2019, 4, 1900443.	5.8	32
74	Analysis of photoluminescence behavior of high-quality single-layer MoS2. Nano Research, 2019, 12, 1619-1624.	10.4	30
75	Highly Stretchable and Compressible Carbon Nanofiberâ€“Polymer Hydrogel Strain Sensor for Human Motion Detection. Macromolecular Materials and Engineering, 2020, 305, 1900813.	3.6	28
76	Elastic shape recovery of carbon nanotube sponges in liquid oil. Journal of Materials Chemistry, 2012, 22, 18300.	6.7	27
77	A Switchable and Compressible Carbon Nanotube Sponge Electrocapillary Imbiber. Advanced Materials, 2015, 27, 7241-7246.	21.0	26
78	Flexible hybrid carbon nanotube sponges embedded with SnS₂ from tubular nanosheaths to nanosheets as free-standing anodes for lithium-ion batteries. RSC Advances, 2016, 6, 30098-30105.	3.6	26
79	Carbon-Nanotube-Wrapped Spider Silks for Directed Cardiomyocyte Growth and Electrophysiological Detection. ACS Applied Materials & Interfaces, 2018, 10, 6793-6798.	8.0	26
80	Soft-lock drawing of super-aligned carbon nanotube bundles for nanometre electrical contacts. Nature Nanotechnology, 2022, 17, 278-284.	31.5	24
81	Direct fabrication of carbon nanotube-graphene hybrid films by a blown bubble method. Nano Research, 2015, 8, 1746-1754.	10.4	21
82	CuI-Si heterojunction solar cells with carbon nanotube films as flexible top-contact electrodes. Nano Research, 2011, 4, 979-986.	10.4	20
83	Large-scale aligned crystalline CH₃NH₃PbI₃ perovskite array films. Journal of Materials Chemistry A, 2015, 3, 18847-18851.	10.3	19
84	Enhanced Transport of Nanoparticles Across a Porous Nanotube Sponge. Advanced Functional Materials, 2011, 21, 3439-3445.	14.9	18
85	Biomimetic Carbon Nanotube Films with Gradient Structure and Locally Tunable Mechanical Property. Advanced Functional Materials, 2015, 25, 7173-7179.	14.9	18
86	Efficient purification of single-walled carbon nanotube fibers by instantaneous current injection and acid washing. RSC Advances, 2016, 6, 97865-97872.	3.6	18
87	Improving Carbon Nanotubeâ€Silicon Solar Cells by Solution Processable Metal Chlorides. Solar Rrl, 2019, 3, 1900147.	5.8	18
88	Hydrophobic, Structureâ€Tunable Cu Nanowire@Graphene Coreâ€“Shell Aerogels for Piezoresistive Pressure Sensing. Advanced Materials Technologies, 2019, 4, 1900470.	5.8	17
89	Direct stamping multifunctional tactile sensor for pressure and temperature sensing. Nano Research, 2022, 15, 3614-3620.	10.4	17
90	Mechanical force-induced assembly of one-dimensional nanomaterials. Nano Research, 2020, 13, 1191-1204.	10.4	16

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91	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
92	MXeneâ€Supported, Atomicâ€Layered Iridium Catalysts Created by Nanoparticle Reâ€Dispersion for Efficient Alkaline Hydrogen Evolution. Small, 2022, 18, e2105226.	10.0	16
93	Blown-Bubble Assembly and in Situ Fabrication of Sausage-like Graphene Nanotubes Containing Copper Nanoblocks. Nano Letters, 2016, 16, 4917-4924.	9.1	13
94	Hybrid effect of gas flow and light excitation in carbon/silicon Schottky solar cells. Journal of Materials Chemistry, 2012, 22, 3330.	6.7	12
95	FeOF/TiO₂ Hetero-Nanostructures for High-Areal-Capacity Fluoride Cathodes. ACS Applied Materials & Interfaces, 2020, 12, 33803-33809.	8.0	12
96	A GQD-based composite film as photon down-converter in CNT/Si solar cells. Nano Research, 2021, 14, 3893-3899.	10.4	12
97	Nanobeltâ€“carbon nanotube cross-junction solar cells. Energy and Environmental Science, 2012, 5, 6119.	30.8	11
98	Material patterning on substrates by manipulation of fluidic behavior. National Science Review, 2019, 6, 758-766.	9.5	11
99	Synergistic CNFs/CoS₂/MoS₂ Flexible Films with Unprecedented Selectivity for NO Gas at Room Temperature. ACS Applied Materials & Interfaces, 2020, 12, 29778-29786.	8.0	11
100	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
101	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
102	Solution-processed bulk heterojunction solar cells based on interpenetrating CdS nanowires and carbon nanotubes. Nano Research, 2012, 5, 595-604.	10.4	9
103	Exposing residual catalyst in a carbon nanotube sponge. RSC Advances, 2016, 6, 45103-45111.	3.6	9
104	Carbon Nanotube/Polymer Coaxial Cables with Strong Interface for Damping Composites and Stretchable Conductors. Advanced Functional Materials, 2022, 32, .	14.9	9
105	Dark-blue mirror-like perovskite dense films for efficient organicâ€“inorganic hybrid solar cells. Journal of Materials Chemistry A, 2016, 4, 3689-3696.	10.3	8
106	Highly Stretchable Carbon Nanotube Fibers with Tunable and Stable Light Emission. Advanced Engineering Materials, 2019, 21, 1801126.	3.5	8
107	Flexible and Stable Carbon Nanotube Film Strain Sensors with Self-Derived Integrated Electrodes. ACS Applied Materials & Interfaces, 2021, 13, 55600-55610.	8.0	8
108	Improving CNT-Si solar cells by metal chloride-to-oxide transformation. Nano Research, 2020, 13, 543-550.	10.4	7

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109	Bubble-promoted assembly of hierarchical, porous Ag2S nanoparticle membranes. Journal of Materials Chemistry, 2012, 22, 24721.	6.7	5
110	Blown Bubble Assembly of Graphene Oxide Patches for Transparent Electrodes in Carbonâ€“Silicon Solar Cells. ACS Applied Materials & Interfaces, 2015, 7, 28330-28336.	8.0	5
111	Carbon-Based Fiber Materials as Implantable Depth Neural Electrodes. Frontiers in Neuroscience, 2021, 15, 771980.	2.8	5
112	Carbon Nanotubes: Threeâ€Dimensional Carbon Nanotube Spongeâ€Array Architectures with High Energy Dissipation (Adv. Mater. 8/2014). Advanced Materials, 2014, 26, 1307-1307.	21.0	4
113	Performance Improvement of Assembled Multiâ€Walled Carbon Nanotube Network/Si Solar Cells Decorated with Metal Nanoparticles. ChemistrySelect, 2018, 3, 9736-9742.	1.5	4
114	Flexible FeS@Fe₂O₃/CNT composite films as self-supporting anodes for high-performance lithium-ion batteries. Nanotechnology, 2021, 32, 285404.	2.6	4
115	High-efficiency CNT-Si solar cells based on a collaborative system enabled by oxide penetration. Nano Research, 2022, 15, 2497-2504.	10.4	4
116	Carbon Nanotubes: Superâ€Stretchable Springâ€Like Carbon Nanotube Ropes (Adv. Mater. 21/2012). Advanced Materials, 2012, 24, 2935-2935.	21.0	3
117	Flexible Electronics: Novel Pliable Electrodes for Flexible Electrochemical Energy Storage Devices: Recent Progress and Challenges (Adv. Energy Mater. 17/2016). Advanced Energy Materials, 2016, 6, .	19.5	3
118	Strain Sensing: Graphene Reinforced Carbon Nanotube Networks for Wearable Strain Sensors (Adv.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	14.9	3
119	Dual Network Sponge for Compressible Lithiumâ€Ion Batteries. Small, 2021, 17, e2100911.	10.0	3
120	Stretchable Carbon Nanotubeâ€Polymer Composites with Homogenous Deformation and as Liquid Droplet Sensors. Advanced Materials Interfaces, 2019, 6, 1901354.	3.7	2
121	Thermal and Electrical Transport Measurements of Single-Walled Carbon Nanotube Strands. Materials Research Society Symposia Proceedings, 2003, 788, 5111.	0.1	0
122	Nanomaterials for Energy at Peking University. Advanced Energy Materials, 2016, 6, .	19.5	0