Peng-Xiang Hou

List of Publications by Year
in descending order

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84 papers	7,727 citations	66343 42 h-index	53230 85 g-index
89 all docs	89 docs citations	89 times ranked	11091 citing authors

#	Article	IF	Citations
1	Synthesis of Carbon Nanotubes by Floating Catalyst Chemical Vapor Deposition and Their Applications. Advanced Functional Materials, 2022, 32, 2108541.	14.9	63
2	Kinetics-Controlled Growth of Metallic Single-Wall Carbon Nanotubes from CoRe_x Nanoparticles. ACS Nano, 2022, 16, 232-240.	14.6	13
3	Preparation of isolated semiconducting single-wall carbon nanotubes by oxygen-assisted floating catalyst chemical vapor deposition. Chemical Engineering Journal, 2022, 450, 137861.	12.7	7
4	Air-stable room-temperature photodetector based on large-diameter small-bundle single-wall carbon nanotube films. Journal of Materials Science and Technology, 2021, 73, 205-209.	10.7	7
5	Highly Dispersive Cerium Atoms on Carbon Nanowires as Oxygen Reduction Reaction Electrocatalysts for Znâ€“Air Batteries. Nano Letters, 2021, 21, 4508-4515.	9.1	89
6	Dualâ€Phasic Carbon with Co Single Atoms and Nanoparticles as a Bifunctional Oxygen Electrocatalyst for Rechargeable Znâ€“Air Batteries. Advanced Functional Materials, 2021, 31, 2103360.	14.9	107
7	Fluorination-assisted preparation of self-supporting single-atom Fe-N-doped single-wall carbon nanotube film as bifunctional oxygen electrode for rechargeable Zn-Air batteries. Applied Catalysis B: Environmental, 2021, 294, 120239.	20.2	70
8	Ionothermal-Transformation Strategy to Synthesize Hierarchically Tubular Porous Single-Iron-Atom Catalysts for High-Performance Zincâ€“Air Batteries. ACS Applied Materials & Interfaces, 2021, 13, 58576-58584.	8.0	12
9	Aerosol Jet Printing of Graphene and Carbon Nanotube Patterns on Realistically Rugged Substrates. ACS Omega, 2021, 6, 34301-34313.	3.5	11
10	Semiconductor nanochannels in metallic carbon nanotubes by thermomechanical chirality alteration. Science, 2021, 374, 1616-1620.	12.6	32
11	High-efficiency and stable silicon heterojunction solar cells with lightly fluorinated single-wall carbon nanotube films. Nano Energy, 2020, 69, 104442.	16.0	28
12	MXene-Carbon Nanotube Hybrid Membrane for Robust Recovery of Au from Trace-Level Solution. ACS Applied Materials & Interfaces, 2020, 12, 43032-43041.	8.0	53
13	The importance of H2 in the controlled growth of semiconducting single-wall carbon nanotubes. Journal of Materials Science and Technology, 2020, 54, 105-111.	10.7	9
14	Monolayer carbon-encapsulated Mo-doped Ni nanoparticles anchored on single-wall carbon nanotube film for total water splitting. Applied Catalysis B: Environmental, 2020, 269, 118823.	20.2	46
15	High-performance single-wall carbon nanotube transparent conductive films. Journal of Materials Science and Technology, 2019, 35, 2447-2462.	10.7	51
16	Nitrogenâ€Doped Reduced Graphene Oxide Hydrogel Achieved via a Oneâ€Step Hydrothermal Process. ChemNanoMat, 2019, 5, 1144-1151.	2.8	9
17	Transparent and flexible hydrogen sensor based on semiconducting single-wall carbon nanotube networks. Carbon, 2019, 151, 156-159.	10.3	19
18	A Freestanding Singleâ€Wall Carbon Nanotube Film Decorated with Nâ€Doped Carbonâ€Encapsulated Ni Nanoparticles as a Bifunctional Electrocatalyst for Overall Water Splitting. Advanced Science, 2019, 6, 1802177.	11.2	56

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19	Identification of active sites in nitrogen and sulfur co-doped carbon-based oxygen reduction catalysts. Carbon, 2019, 147, 303-311.	10.3	44
20	Vertically aligned carbon nanotube arrays as a thermal interface material. APL Materials, 2019, 7, .	5.1	43
21	Preparation of metallic single-wall carbon nanotubes. Carbon, 2019, 147, 187-198.	10.3	22
22	Flexible layer-structured Bi2Te3 thermoelectric on a carbon nanotube scaffold. Nature Materials, 2019, 18, 62-68.	27.5	316
23	Highâ€Throughput Fabrication of Flexible and Transparent Allâ€Carbon Nanotube Electronics. Advanced Science, 2018, 5, 1700965.	11.2	34
24	N-doped carbon nanotubes containing a high concentration of single iron atoms for efficient oxygen reduction. NPG Asia Materials, 2018, 10, e461-e461.	7.9	103
25	Selective growth of semiconducting single-wall carbon nanotubes using SiC as a catalyst. Carbon, 2018, 135, 195-201.	10.3	11
26	Ultrahigh-performance transparent conductive films of carbon-welded isolated single-wall carbon nanotubes. Science Advances, 2018, 4, eaap9264.	10.3	178
27	Clean, fast and scalable transfer of ultrathin/patterned vertically-aligned carbon nanotube arrays. Carbon, 2018, 133, 275-282.	10.3	21
28	A MnO2 nanosheet/single-wall carbon nanotube hybrid fiber for wearable solid-state supercapacitors. Carbon, 2018, 140, 634-643.	10.3	48
29	Continuous Fabrication of Meterâ€Scale Singleâ€Wall Carbon Nanotube Films and their Use in Flexible and Transparent Integrated Circuits. Advanced Materials, 2018, 30, e1802057.	21.0	63
30	The effect of carbon support on the oxygen reduction activity and durability of single-atom iron catalysts. MRS Communications, 2018, 8, 1158-1166.	1.8	27
31	Small-bundle single-wall carbon nanotubes for high-efficiency silicon heterojunction solar cells. Nano Energy, 2018, 50, 521-527.	16.0	43
32	Carbon nanotube encapsulated in nitrogen and phosphorus co-doped carbon as a bifunctional electrocatalyst for oxygen reduction and evolution reactions. Carbon, 2018, 139, 156-163.	10.3	97
33	A carbon nanotube non-volatile memory device using a photoresist gate dielectric. Carbon, 2017, 124, 700-707.	10.3	10
34	Surface-restrained growth of vertically aligned carbon nanotube arrays with excellent thermal transport performance. Nanoscale, 2017, 9, 8213-8219.	5.6	17
35	Selective Growth of Metalâ€Free Metallic and Semiconducting Singleâ€Wall Carbon Nanotubes. Advanced Materials, 2017, 29, 1605719.	21.0	21
36	Heteroatomâ€Doped Carbon Nanotube and Grapheneâ€Based Electrocatalysts for Oxygen Reduction Reaction. Small, 2017, 13, 1702002.	10.0	202

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37	Applications of carbon nanotubes and graphene produced by chemical vapor deposition. MRS Bulletin, 2017, 42, 825-833.	3.5	14
38	Carbon-encapsulated NiO nanoparticle decorated single-walled carbon nanotube thin films for binderless flexible electrodes of supercapacitors. Journal of Materials Chemistry A, 2017, 5, 24813-24819.	10.3	25
39	Synthesis and Electrochemical Lithium Storage Behavior of Carbon Nanotubes Filled with Iron Sulfide Nanoparticles. Advanced Science, 2016, 3, 1600113.	11.2	44
40	Hierarchically porous Fe-N-doped carbon nanotubes as efficient electrocatalyst for oxygen reduction. Carbon, 2016, 109, 632-639.	10.3	74
41	A 3D bi-functional porous N-doped carbon microtube sponge electrocatalyst for oxygen reduction and oxygen evolution reactions. Energy and Environmental Science, 2016, 9, 3079-3084.	30.8	260
42	Toward More Reliable Lithiumâ€“Sulfur Batteries: An All-Graphene Cathode Structure. ACS Nano, 2016, 10, 8676-8682.	14.6	246
43	Growth of semiconducting single-wall carbon nanotubes with a narrow band-gap distribution. Nature Communications, 2016, 7, 11160.	12.8	75
44	High Reversible Lithium Storage Capacity and Structural Changes of Fe₂O₃ Nanoparticles Confined inside Carbon Nanotubes. Advanced Energy Materials, 2016, 6, 1501755.	19.5	109
45	A flexible cotton-derived carbon sponge for high-performance capacitive deionization. Carbon, 2016, 101, 1-8.	10.3	100
46	Epitaxial growth of single-wall carbon nanotubes. Carbon, 2016, 102, 181-197.	10.3	32
47	Efficient adsorption of organic dyes on a flexible single-wall carbon nanotube film. Journal of Materials Chemistry A, 2016, 4, 1191-1194.	10.3	48
48	Amorphization and Directional Crystallization of Metals Confined in Carbon Nanotubes Investigated by in Situ Transmission Electron Microscopy. Nano Letters, 2015, 15, 4922-4927.	9.1	12
49	Lithiation of Silicon Nanoparticles Confined in Carbon Nanotubes. ACS Nano, 2015, 9, 5063-5071.	14.6	105
50	Synthesis of high quality nitrogen-doped single-wall carbon nanotubes. Science China Materials, 2015, 58, 603-610.	6.3	9
51	A nitrogen-doped mesoporous carbon containing an embedded network of carbon nanotubes as a highly efficient catalyst for the oxygen reduction reaction. Nanoscale, 2015, 7, 19201-19206.	5.6	55
52	De-bundling of single-wall carbon nanotubes induced by an electric field during arc discharge synthesis. Carbon, 2014, 74, 370-373.	10.3	13
53	Honeycomb-like single-wall carbon nanotube networks. Journal of Materials Chemistry A, 2014, 2, 3308-3311.	10.3	2
54	Double-wall carbon nanotube transparent conductive films with excellent performance. Journal of Materials Chemistry A, 2014, 2, 1159-1164.	10.3	42

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55	Growth of metal-catalyst-free nitrogen-doped metallic single-wall carbon nanotubes. Nanoscale, 2014, 6, 12065-12070.	5.6	21
56	Structural Changes in Iron Oxide and Gold Catalysts during Nucleation of Carbon Nanotubes Studied by In Situ Transmission Electron Microscopy. ACS Nano, 2014, 8, 292-301.	14.6	52
57	In Situ TEM Observations on the Sulfur-Assisted Catalytic Growth of Single-Wall Carbon Nanotubes. Journal of Physical Chemistry Letters, 2014, 5, 1427-1432.	4.6	26
58	Preparation of Metallic Single-Wall Carbon Nanotubes by Selective Etching. ACS Nano, 2014, 8, 7156-7162.	14.6	81
59	High-Quality, Highly Concentrated Semiconducting Single-Wall Carbon Nanotubes for Use in Field Effect Transistors and Biosensors. ACS Nano, 2013, 7, 6831-6839.	14.6	101
60	Growth of a cup-stacked carbon nanotube carpet with a superhydrophobic surface. New Carbon Materials, 2013, 28, 295-299.	6.1	9
61	Growth of double-walled carbon nanotubes from silicon oxide nanoparticles. Carbon, 2013, 56, 167-172.	10.3	18
62	Synthesis of coaxial nanocables of single-walled carbon nanotubes sheathed with amorphous silicon oxide. New Carbon Materials, 2013, 28, 8-13.	6.1	2
63	Growth of tadpole-like carbon nanotubes from TiO2 nanoparticles. Carbon, 2013, 55, 253-259.	10.3	7
64	A nanosized Fe2O3 decorated single-walled carbon nanotube membrane as a high-performance flexible anode for lithium ion batteries. Journal of Materials Chemistry, 2012, 22, 17942.	6.7	153
65	Enrichment of Semiconducting Single-Walled Carbon Nanotubes by Carbothermic Reaction for Use in All-Nanotube Field Effect Transistors. ACS Nano, 2012, 6, 9657-9661.	14.6	27
66	Improved electrochemical performance of Fe2O3 nanoparticles confined in carbon nanotubes. Journal of Materials Chemistry, 2012, 22, 13756.	6.7	142
67	Heteroepitaxial Growth of Single-Walled Carbon Nanotubes from Boron Nitride. Scientific Reports, 2012, 2, 971.	3.3	16
68	A flexible nanostructured sulphurâ€“carbon nanotube cathode with high rate performance for Li-S batteries. Energy and Environmental Science, 2012, 5, 8901.	30.8	468
69	Template synthesis of ultra-thin and short carbon nanotubes with two open ends. Journal of Materials Chemistry, 2012, 22, 15221.	6.7	16
70	Bulk Synthesis of Large Diameter Semiconducting Single-Walled Carbon Nanotubes by Oxygen-Assisted Floating Catalyst Chemical Vapor Deposition. Journal of the American Chemical Society, 2011, 133, 5232-5235.	13.7	134
71	Synthesis and field emission property of carbon nanotubes with sharp tips. New Carbon Materials, 2011, 26, 52-56.	6.1	21
72	Selective removal of metallic single-walled carbon nanotubes by combined in situ and post-synthesis oxidation. Carbon, 2010, 48, 2941-2947.	10.3	50

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73	Carbon nanotube-clamped metal atomic chain. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 9055-9059.	7.1	36
74	Preparation and electrochemical property of Fe2O3 nanoparticles-filled carbon nanotubes. Chemical Communications, 2010, 46, 8576.	4.1	116
75	Selfâ€Assembled Freeâ€Standing Graphite Oxide Membrane. Advanced Materials, 2009, 21, 3007-3011.	21.0	868
76	Investigation of the Ion Storage/Transfer Behavior in an Electrical Doubleâ€Layer Capacitor by Using Ordered Microporous Carbons as Model Materials. Chemistry - A European Journal, 2009, 15, 5355-5363.	3.3	155
77	A possible buckybowl-like structure of zeolite templated carbon. Carbon, 2009, 47, 1220-1230.	10.3	243
78	High-Pressure Hydrogen Storage in Zeolite-Templated Carbon. Journal of Physical Chemistry C, 2009, 113, 3189-3196.	3.1	181
79	Low-Temperature Exfoliated Graphenes: Vacuum-Promoted Exfoliation and Electrochemical Energy Storage. ACS Nano, 2009, 3, 3730-3736.	14.6	694
80	Purification of carbon nanotubes. Carbon, 2008, 46, 2003-2025.	10.3	660
81	Controlled filling of Permalloy into one-end-opened carbon nanotubes. Journal of Materials Chemistry, 2007, 17, 986-991.	6.7	38
82	Densification of ordered microporous carbons and controlling their micropore size by hot-pressing. Carbon, 2007, 45, 2011-2016.	10.3	51
83	Bulk Storage Capacity of Hydrogen in Purified Multiwalled Carbon Nanotubes. Journal of Physical Chemistry B, 2002, 106, 963-966.	2.6	64
84	FeCl3-functionalized graphene oxide/single-wall carbon nanotube/silicon heterojunction solar cells with an efficiency of 17.5%. Journal of Materials Chemistry A, 0, , .	10.3	9