Maoshuai He

List of Publications by Year
in descending order

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75 papers	3,217 citations	172457 29 h-index	155660 55 g-index
75 all docs	75 docs citations	75 times ranked	3725 citing authors

#	Article	IF	Citations
1	Solutions of Negatively Charged Graphene Sheets and Ribbons. Journal of the American Chemical Society, 2008, 130, 15802-15804.	13.7	444
2	Chiral-Selective Growth of Single-Walled Carbon Nanotubes on Lattice-Mismatched Epitaxial Cobalt Nanoparticles. Scientific Reports, 2013, 3, 1460.	3.3	175
3	Predominant (6,5) Single-Walled Carbon Nanotube Growth on a Copper-Promoted Iron Catalyst. Journal of the American Chemical Society, 2010, 132, 13994-13996.	13.7	164
4	Effect of a multiscale reinforcement by carbon fiber surface treatment with graphene oxide/carbon nanotubes on the mechanical properties of reinforced carbon/carbon composites. Composites Part A: Applied Science and Manufacturing, 2016, 90, 433-440.	7.6	157
5	Thionine-mediated chemistry of carbon nanotubes. Carbon, 2004, 42, 287-291.	10.3	147
6	Bioinspired Fluffy Fabric with In Situ Grown Carbon Nanotubes for Ultrasensitive Wearable Airflow Sensor. Advanced Materials, 2020, 32, e1908214.	21.0	146
7	Ribbon- and Boardlike Nanostructures of Nickel Hydroxide:Â Synthesis, Characterization, and Electrochemical Properties. Journal of Physical Chemistry B, 2005, 109, 7654-7658.	2.6	139
8	Linking growth mode to lengths of single-walled carbon nanotubes. Carbon, 2017, 113, 231-236.	10.3	75
9	Horizontal Single-Walled Carbon Nanotube Arrays: Controlled Synthesis, Characterizations, and Applications. Chemical Reviews, 2020, 120, 12592-12684.	47.7	74
10	CVD Growth of N-Doped Carbon Nanotubes on Silicon Substrates and Its Mechanism. Journal of Physical Chemistry B, 2005, 109, 9275-9279.	2.6	68
11	Interfacial Microstructure and Enhanced Mechanical Properties of Carbon Fiber Composites Caused by Growing Generation 1â€“4 Dendritic Poly(amidoamine) on a Fiber Surface. Langmuir, 2016, 32, 8339-8349.	3.5	67
12	Growth modes and chiral selectivity of single-walled carbon nanotubes. Nanoscale, 2018, 10, 6744-6750.	5.6	67
13	Selective growth of SWNTs on partially reduced monometallic cobalt catalyst. Chemical Communications, 2011, 47, 1219-1221.	4.1	64
14	Growth Mechanism of Single-Walled Carbon Nanotubes on Ironâ€“Copper Catalyst and Chirality Studies by Electron Diffraction. Chemistry of Materials, 2012, 24, 1796-1801.	6.7	63
15	One-Pot Synthesis of Concave Platinumâ€“Cobalt Nanocrystals and Their Superior Catalytic Performances for Methanol Electrochemical Oxidation and Oxygen Electrochemical Reduction. ACS Applied Materials & Interfaces, 2017, 9, 36164-36172.	8.0	62
16	Growth Termination and Multiple Nucleation of Single-Wall Carbon Nanotubes Evidenced by in Situ Transmission Electron Microscopy. ACS Nano, 2017, 11, 4483-4493.	14.6	60
17	Designing Catalysts for Chiralityâ€Selective Synthesis of Singleâ€Walled Carbon Nanotubes: Past Success and Future Opportunity. Advanced Materials, 2019, 31, e1800805.	21.0	59
18	Diameter and chiral angle distribution dependencies on the carbon precursors in surface-grown single-walled carbon nanotubes. Nanoscale, 2012, 4, 7394.	5.6	57

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19	Interfacial microstructure and mechanical properties of carbon fiber composites by fiber surface modification with poly(amidoamine)/polyhedral oligomeric silsesquioxane. Composites Part A: Applied Science and Manufacturing, 2016, 90, 653-661.	7.6	55
20	Chiral-selective growth of single-walled carbon nanotubes on Fe-based catalysts using CO as carbon source. Carbon, 2016, 108, 521-528.	10.3	53
21	Low temperature growth of SWNTs on a nickel catalyst by thermal chemical vapor deposition. Nano Research, 2011, 4, 334-342.	10.4	50
22	Bimetallic Catalysts for the Efficient Growth of SWNTs on Surfaces. Chemistry of Materials, 2004, 16, 799-805.	6.7	47
23	Precise Determination of the Threshold Diameter for a Single-Walled Carbon Nanotube To Collapse. ACS Nano, 2014, 8, 9657-9663.	14.6	43
24	Growth kinetics of single-walled carbon nanotubes with a (2 n , n) chirality selection. Science Advances, 2019, 5, eaav9668.	10.3	42
25	Iron Catalysts Reactivation for Efficient CVD Growth of SWNT with Base-growth Mode on Surface. Journal of Physical Chemistry B, 2004, 108, 12665-12668.	2.6	38
26	Controllable Growth of (n, n â^'1) Family of Semiconducting Carbon Nanotubes. CheM, 2019, 5, 1182-1193.	11.7	38
27	Single-walled carbon nanotube networks for ethanol vapor sensing applications. Nano Research, 2013, 6, 77-86.	10.4	36
28	Chirality-controlled synthesis of single-walled carbon nanotubesâ€"From mechanistic studies toward experimental realization. Materials Today, 2018, 21, 845-860.	14.2	34
29	Synergistic effects in FeCu bimetallic catalyst for low temperature growth of single-walled carbon nanotubes. Carbon, 2013, 52, 590-594.	10.3	30
30	Ptâ€Pd Bimetal Popcorn Nanocrystals: Enhancing the Catalytic Performance by Combination Effect of Stable Multipetals Nanostructure and Highly Accessible Active Sites. Small, 2018, 14, e1703613.	10.0	29
31	Chemical vapor deposition growth of single-walled carbon nanotubes from plastic polymers. Carbon, 2022, 187, 29-34.	10.3	29
32	Chiral-selective growth of single-walled carbon nanotubes on stainless steel wires. Carbon, 2012, 50, 4294-4297.	10.3	28
33	High Durable Ternary Nanodendrites as Effective Catalysts for Oxygen Reduction Reaction. ACS Applied Materials & Interfaces, 2016, 8, 23646-23654.	8.0	28
34	Anchoring effect of Ni2+ in stabilizing reduced metallic particles for growing single-walled carbon nanotubes. Carbon, 2018, 128, 249-256.	10.3	28
35	Effect of Hydrogen Pressure on the Size of Nickel Nanoparticles Formed during Dewetting and Reduction of Thin Nickel Films. Journal of Physical Chemistry C, 2010, 114, 89-92.	3.1	27
36	Key roles of carbon solubility in single-walled carbon nanotube nucleation and growth. Nanoscale, 2015, 7, 20284-20289.	5.6	27

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37	Environmental transmission electron microscopy investigations of Pt-Fe2O3 nanoparticles for nucleating carbon nanotubes. Carbon, 2016, 110, 243-248.	10.3	27
38	Insights into chirality distributions of single-walled carbon nanotubes grown on different Co_xMg_{1â^'x}O solid solutions. Journal of Materials Chemistry A, 2014, 2, 5883-5889.	10.3	26
39	Synthesis of octahedral Ptâ€“Niâ€“Ir yolkâ€“shell nanoparticles and their catalysis in oxygen reduction and methanol oxidization under both acidic and alkaline conditions. Nanoscale, 2019, 11, 23206-23216.	5.6	24
40	High temperature growth of single-walled carbon nanotubes with a narrow chirality distribution by tip-growth mode. Chemical Engineering Journal, 2018, 341, 344-350.	12.7	23
41	Temperature Dependent Raman Spectra of Carbon Nanobuds. Journal of Physical Chemistry C, 2010, 114, 13540-13545.	3.1	22
42	A robust CoxMg1-xO catalyst for predominantly growing (6, 5) single-walled carbon nanotubes. Carbon, 2019, 153, 389-395.	10.3	22
43	Concentrated solutions of individualized single walled carbon nanotubes. Carbon, 2014, 67, 360-367.	10.3	20
44	Advance in Closeâ€Edged Graphene Nanoribbon: Property Investigation and Structure Fabrication. Small, 2019, 15, e1804473.	10.0	20
45	SiO2-promoted growth of single-walled carbon nanotubes on an alumina supported catalyst. Carbon, 2021, 176, 367-373.	10.3	18
46	Iron silicide-catalyzed growth of single-walled carbon nanotubes with a narrow diameter distribution. Carbon, 2019, 149, 139-143.	10.3	17
47	Is there chiral correlation between graphitic layers in double-wall carbon nanotubes?. Carbon, 2019, 144, 147-151.	10.3	16
48	Designed borophene/TMDs hybrid catalysts for enhanced hydrogen evolution reactions. Journal of Materials Chemistry C, 2021, 9, 15877-15885.	5.5	15
49	Growth and surface engineering of vertically-aligned low-wall-number carbon nanotubes. Carbon, 2012, 50, 4750-4754.	10.3	14
50	Surfactant-Resisted Assembly of Fe-Containing Nanoparticles for Site-Specific Growth of SWNTs on Si Surface. Journal of Physical Chemistry B, 2005, 109, 10946-10951.	2.6	13
51	Study of the Thermal Stability of Supported Catalytic Nanoparticles for the Growth of Single-Walled Carbon Nanotubes with Narrow Diameter Distribution by Chemical Vapor Deposition of Methane. Journal of Physical Chemistry C, 2012, 116, 24123-24129.	3.1	13
52	Temperature-dependent selective nucleation of single-walled carbon nanotubes from stabilized catalyst nanoparticles. Chemical Engineering Journal, 2022, 431, 133487.	12.7	13
53	Interfacial boron modification on mesoporous octahedral rhodium shell and its enhanced electrocatalysis for water splitting and oxygen reduction. Chemical Engineering Journal, 2022, 435, 134982.	12.7	13
54	Carbon fiber-promoted activation of catalyst for efficient growth of single-walled carbon nanotubes. Carbon, 2020, 156, 410-415.	10.3	12

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55	A Facile Route to Homogeneous High Density Networks of Metal Nanoparticles. Langmuir, 2009, 25, 11285-11288.	3.5	11
56	Fe Ti O based catalyst for large-chiral-angle single-walled carbon nanotube growth. Carbon, 2016, 107, 865-871.	10.3	11
57	Palladium Nanobelts with Expanded Lattice Spacing for Electrochemical Oxygen Reduction in Alkaline Media. ACS Applied Nano Materials, 2021, 4, 2118-2125.	5.0	11
58	Narrow-chirality distributed single-walled carbon nanotube synthesized from oxide promoted Feâ€“SiC catalyst. Carbon, 2022, 191, 146-152.	10.3	11
59	Chirality distribution of single-walled carbon nanotubes grown from gold nanoparticles. Carbon, 2022, 192, 259-264.	10.3	10
60	Stability of iron-containing nanoparticles for selectively growing single-walled carbon nanotubes. Carbon, 2020, 158, 795-801.	10.3	9
61	Growth of single-walled carbon nanotubes with large chiral angles on rhodium nanoparticles. Nanoscale, 2013, 5, 10200.	5.6	8
62	Iridium-catalyzed growth of single-walled carbon nanotubes with a bicentric diameter distribution. Materials Chemistry Frontiers, 2019, 3, 1882-1887.	5.9	8
63	Sizable bandgaps of graphene in 3d transition metal intercalated defective graphene/WSe₂ heterostructures. RSC Advances, 2019, 9, 18157-18164.	3.6	8
64	Chemical vapor deposition synthesis of carbon nanosprouts on calcined stainless steel. Materials Letters, 2019, 238, 290-293.	2.6	8
65	Solid supported ruthenium catalyst for growing single-walled carbon nanotubes with narrow chirality distribution. Carbon, 2022, 193, 35-41.	10.3	7
66	Subnanometer Single-Walled carbon nanotube growth from Fe-Containing Layered double hydroxides. Chemical Engineering Journal, 2022, 446, 137087.	12.7	7
67	Direct synthesis of high-quality single-walled carbon nanotubes by the physical nucleation of iron nanoparticles in an atmospheric pressure carbon monoxide flow. Carbon, 2012, 50, 5343-5345.	10.3	6
68	3d Transition Metal-Metallofullerene-Ligand Molecular Wires: Robust One-Dimensional Antiferromagnetic Semiconductors. Journal of Physical Chemistry C, 2019, 123, 30571-30577.	3.1	6
69	Temperature Dependence of Gâ˜ Mode in Raman Spectra of Metallic Single-Walled Carbon Nanotubes. Journal of Nanomaterials, 2018, 2018, 1-6.	2.7	4
70	Organic sulfate modified carbon nantube/polypyrrole core-shell nanocomposites with improved electrochemical performance. Synthetic Metals, 2016, 217, 288-294.	3.9	3
71	Ni-Foam Structured Ni-Phyllosilicate Ensemble as an Efficient Monolithic Catalyst for CO2 Methanation. Catalysis Letters, 0, , 1.	2.6	3
72	Laser switching characteristics of enriched (7,5) single-walled carbon nanotubes at 640 nm. Carbon, 2022, 191, 433-438.	10.3	3

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73	Bulk growth and separation of single-walled carbon nanotubes from rhenium catalyst. Nano Research, 2022, 15, 5775-5780.	10.4	3
74	Low-temperature growth of carbon shells on gold and copper nanoparticles in transmission electron microscope. Carbon, 2020, 167, 541-547.	10.3	2
75	Laser Irradiation-Hindered Growth of Small-Diameter Single-Walled Carbon Nanotubes by Chemical Vapor Deposition. Journal of Nanomaterials, 2019, 2019, 1-7.	2.7	0