Maoshuai He

List of Publications by Year in Descending Order

75 papers	2,541 citations	27 h-index	49 g-index
75 ext. papers	2,880 ext. citations	10.2 avg, IF	4.84 L-index

#	Paper	IF	Citations
75	Narrow-chirality distributed single-walled carbon nanotube synthesized from oxide promoted Fe5SiC catalyst. *Carbon*, **2022**, 191, 146-152	10.4	2
74	Interfacial boron modification on mesoporous octahedral rhodium shell and its enhanced electrocatalysis for water splitting and oxygen reduction. *Chemical Engineering Journal*, **2022**, 435, 134982	14.7	3
73	Laser switching characteristics of enriched (7,5) single-walled carbon nanotubes at 640 nm. *Carbon*, **2022**, 191, 433-438	10.4	1
72	Chirality distribution of single-walled carbon nanotubes grown from gold nanoparticles. *Carbon*, **2022**, 192, 259-264	10.4	1
71	Solid supported ruthenium catalyst for growing single-walled carbon nanotubes with narrow chirality distribution. *Carbon*, **2022**, 193, 35-41	10.4	1
70	Subnanometer Single-Walled carbon nanotube growth from Fe-Containing Layered double hydroxides. *Chemical Engineering Journal*, **2022**, 446, 137087	14.7	1
69	Temperature-dependent selective nucleation of single-walled carbon nanotubes from stabilized catalyst nanoparticles. *Chemical Engineering Journal*, **2021**, 431, 133487	14.7	5
68	Chemical vapor deposition growth of single-walled carbon nanotubes from plastic polymers. *Carbon*, **2021**,	10.4	4
67	SiO2-promoted growth of single-walled carbon nanotubes on an alumina supported catalyst. *Carbon*, **2021**, 176, 367-373	10.4	8
66	Palladium Nanobelts with Expanded Lattice Spacing for Electrochemical Oxygen Reduction in Alkaline Media. *ACS Applied Nano Materials*, **2021**, 4, 2118-2125	5.6	4
65	Low-temperature growth of carbon shells on gold and copper nanoparticles in transmission electron microscope. *Carbon*, **2020**, 167, 541-547	10.4	0
64	Stability of iron-containing nanoparticles for selectively growing single-walled carbon nanotubes. *Carbon*, **2020**, 158, 795-801	10.4	7
63	Horizontal Single-Walled Carbon Nanotube Arrays: Controlled Synthesis, Characterizations, and Applications. *Chemical Reviews*, **2020**, 120, 12592-12684	68.1	27
62	Carbon fiber-promoted activation of catalyst for efficient growth of single-walled carbon nanotubes. *Carbon*, **2020**, 156, 410-415	10.4	10
61	Bioinspired Fluffy Fabric with In Situ Grown Carbon Nanotubes for Ultrasensitive Wearable Airflow Sensor. *Advanced Materials*, **2020**, 32, e1908214	24	80
60	Laser Irradiation-Hindered Growth of Small-Diameter Single-Walled Carbon Nanotubes by Chemical Vapor Deposition. *Journal of Nanomaterials*, **2019**, 2019, 1-7	3.2	
59	Iron silicide-catalyzed growth of single-walled carbon nanotubes with a narrow diameter distribution. *Carbon*, **2019**, 149, 139-143	10.4	9

58	Advance in Close-Edged Graphene Nanoribbon: Property Investigation and Structure Fabrication. *Small*, **2019**, 15, e1804473	11	16
57	Controllable Growth of (n, n 1) Family of Semiconducting Carbon Nanotubes. *CheM*, **2019**, 5, 1182-1193	16.2	27
56	A robust CoxMg1-xO catalyst for predominantly growing (6, 5) single-walled carbon nanotubes. *Carbon*, **2019**, 153, 389-395	10.4	14
55	Iridium-catalyzed growth of single-walled carbon nanotubes with a bicentric diameter distribution. *Materials Chemistry Frontiers*, **2019**, 3, 1882-1887	7.8	5
54	Sizable bandgaps of graphene in 3d transition metal intercalated defective graphene/WSe heterostructures.. *RSC Advances*, **2019**, 9, 18157-18164	3.7	2
53	Growth kinetics of single-walled carbon nanotubes with a (2,) chirality selection. *Science Advances*, **2019**, 5, eaav9668	14.3	32
52	3d Transition Metal-Metallofullerene-Ligand Molecular Wires: Robust One-Dimensional Antiferromagnetic Semiconductors. *Journal of Physical Chemistry C*, **2019**, 123, 30571-30577	3.8	3
51	Synthesis of octahedral Pt-Ni-Ir yolk-shell nanoparticles and their catalysis in oxygen reduction and methanol oxidization under both acidic and alkaline conditions. *Nanoscale*, **2019**, 11, 23206-23216	7.7	15
50	Designing Catalysts for Chirality-Selective Synthesis of Single-Walled Carbon Nanotubes: Past Success and Future Opportunity. *Advanced Materials*, **2019**, 31, e1800805	24	43
49	Chemical vapor deposition synthesis of carbon nanosprouts on calcined stainless steel. *Materials Letters*, **2019**, 238, 290-293	3.3	6
48	Is there chiral correlation between graphitic layers in double-wall carbon nanotubes?. *Carbon*, **2019**, 144, 147-151	10.4	14
47	Pt-Pd Bimetal Popcorn Nanocrystals: Enhancing the Catalytic Performance by Combination Effect of Stable Multipetals Nanostructure and Highly Accessible Active Sites. *Small*, **2018**, 14, e1703613	11	24
46	High temperature growth of single-walled carbon nanotubes with a narrow chirality distribution by tip-growth mode. *Chemical Engineering Journal*, **2018**, 341, 344-350	14.7	14
45	Growth modes and chiral selectivity of single-walled carbon nanotubes. *Nanoscale*, **2018**, 10, 6744-6750	7.7	44
44	Chirality-controlled synthesis of single-walled carbon nanotubes: From mechanistic studies toward experimental realization. *Materials Today*, **2018**, 21, 845-860	21.8	21
43	Temperature Dependence of G Mode in Raman Spectra of Metallic Single-Walled Carbon Nanotubes. *Journal of Nanomaterials*, **2018**, 2018, 1-6	3.2	2
42	Anchoring effect of Ni2+ in stabilizing reduced metallic particles for growing single-walled carbon nanotubes. *Carbon*, **2018**, 128, 249-256	10.4	25
41	Growth Termination and Multiple Nucleation of Single-Wall Carbon Nanotubes Evidenced by in Situ Transmission Electron Microscopy. *ACS Nano*, **2017**, 11, 4483-4493	16.7	39

40	One-Pot Synthesis of Concave Platinum-Cobalt Nanocrystals and Their Superior Catalytic Performances for Methanol Electrochemical Oxidation and Oxygen Electrochemical Reduction. *ACS Applied Materials & Interfaces*, **2017**, 9, 36164-36172	9.5	50
39	Linking growth mode to lengths of single-walled carbon nanotubes. *Carbon*, **2017**, 113, 231-236	10.4	58
38	High Durable Ternary Nanodendrites as Effective Catalysts for Oxygen Reduction Reaction. *ACS Applied Materials & Interfaces*, **2016**, 8, 23646-54	9.5	22
37	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	8.4	117
36	Environmental transmission electron microscopy investigations of Pt-Fe2O3 nanoparticles for nucleating carbon nanotubes. *Carbon*, **2016**, 110, 243-248	10.4	22
35	FeTiO based catalyst for large-chiral-angle single-walled carbon nanotube growth. *Carbon*, **2016**, 107, 865-871	10.4	11
34	Organic sulfate modified carbon nantube/polypyrrole core-shell nanocomposites with improved electrochemical performance. *Synthetic Metals*, **2016**, 217, 288-294	3.6	3
33	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	8.4	46
32	Interfacial Microstructure and Enhanced Mechanical Properties of Carbon Fiber Composites Caused by Growing Generation 1-4 Dendritic Poly(amidoamine) on a Fiber Surface. *Langmuir*, **2016**, 32, 8339-49	4	57
31	Chiral-selective growth of single-walled carbon nanotubes on Fe-based catalysts using CO as carbon source. *Carbon*, **2016**, 108, 521-528	10.4	43
30	Key roles of carbon solubility in single-walled carbon nanotube nucleation and growth. *Nanoscale*, **2015**, 7, 20284-9	7.7	23
29	Insights into chirality distributions of single-walled carbon nanotubes grown on different CoxMg1⊠O solid solutions. *Journal of Materials Chemistry A*, **2014**, 2, 5883-5889	13	22
28	Concentrated solutions of individualized single walled carbon nanotubes. *Carbon*, **2014**, 67, 360-367	10.4	20
27	Precise determination of the threshold diameter for a single-walled carbon nanotube to collapse. *ACS Nano*, **2014**, 8, 9657-63	16.7	35
26	Growth of single-walled carbon nanotubes with large chiral angles on rhodium nanoparticles. *Nanoscale*, **2013**, 5, 10200-2	7.7	8
25	Single-walled carbon nanotube networks for ethanol vapor sensing applications. *Nano Research*, **2013**, 6, 77-86	10	31
24	Synergistic effects in FeCu bimetallic catalyst for low temperature growth of single-walled carbon nanotubes. *Carbon*, **2013**, 52, 590-594	10.4	25
23	Chiral-selective growth of single-walled carbon nanotubes on lattice-mismatched epitaxial cobalt nanoparticles. *Scientific Reports*, **2013**, 3, 1460	4.9	149

22	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	10.4	4
21	Diameter and chiral angle distribution dependencies on the carbon precursors in surface-grown single-walled carbon nanotubes. *Nanoscale*, **2012**, 4, 7394-8	7.7	48
20	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	3.8	10
19	Growth Mechanism of Single-Walled Carbon Nanotubes on Iron□Copper Catalyst and Chirality Studies by Electron Diffraction. *Chemistry of Materials*, **2012**, 24, 1796-1801	9.6	59
18	Chiral-selective growth of single-walled carbon nanotubes on stainless steel wires. *Carbon*, **2012**, 50, 4294-4297	10.4	27
17	Growth and surface engineering of vertically-aligned low-wall-number carbon nanotubes. *Carbon*, **2012**, 50, 4750-4754	10.4	13
16	Low temperature growth of SWNTs on a nickel catalyst by thermal chemical vapor deposition. *Nano Research*, **2011**, 4, 334-342	10	39
15	Selective growth of SWNTs on partially reduced monometallic cobalt catalyst. *Chemical Communications*, **2011**, 47, 1219-21	5.8	59
14	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	3.8	26
13	Temperature Dependent Raman Spectra of Carbon Nanobuds. *Journal of Physical Chemistry C*, **2010**, 114, 13540-13545	3.8	20
12	Predominant (6,5) single-walled carbon nanotube growth on a copper-promoted iron catalyst. *Journal of the American Chemical Society*, **2010**, 132, 13994-6	16.4	148
11	A facile route to homogeneous high density networks of metal nanoparticles. *Langmuir*, **2009**, 25, 11285-8	4	11
10	Solutions of negatively charged graphene sheets and ribbons. *Journal of the American Chemical Society*, **2008**, 130, 15802-4	16.4	410
9	CVD growth of N-doped carbon nanotubes on silicon substrates and its mechanism. *Journal of Physical Chemistry B*, **2005**, 109, 9275-9	3.4	63
8	Surfactant-resisted assembly of Fe-containing nanoparticles for site-specific growth of SWNTs on Si surface. *Journal of Physical Chemistry B*, **2005**, 109, 10946-51	3.4	13
7	Ribbon- and boardlike nanostructures of nickel hydroxide: synthesis, characterization, and electrochemical properties. *Journal of Physical Chemistry B*, **2005**, 109, 7654-8	3.4	130
6	Thionine-mediated chemistry of carbon nanotubes. *Carbon*, **2004**, 42, 287-291	10.4	133
5	Iron Catalysts Reactivation for Efficient CVD Growth of SWNT with Base-growth Mode on Surface. *Journal of Physical Chemistry B*, **2004**, 108, 12665-12668	3.4	35

4	Bimetallic Catalysts for the Efficient Growth of SWNTs on Surfaces. *Chemistry of Materials*, **2004**, 16, 799-805	9.6	39
3	Ni-Foam Structured Ni-Phyllosilicate Ensemble as an Efficient Monolithic Catalyst for CO2 Methanation. *Catalysis Letters*,1	2.8	0
2	Designed borophene/TMDs hybrid catalysts for enhanced hydrogen evolution reactions. *Journal of Materials Chemistry C*,	7.1	2
1	Bulk growth and separation of single-walled carbon nanotubes from rhenium catalyst. *Nano Research*,1	10	1