Haitao Liu

List of Publications by Year
in descending order

61 papers	4,401 citations	218677 26 h-index	149698 56 g-index
62 all docs	62 docs citations	62 times ranked	7332 citing authors

#	Article	IF	Citations
1	DNAâ€Based Nanofabrication for Nanoelectronics. Advanced Functional Materials, 2022, 32, .	14.9	27
2	Real-Time Modulation of Hydrogen Evolution Activity of Graphene Electrodes Using Mechanical Strain. ACS Applied Materials & Interfaces, 2022, 14, 10691-10700.	8.0	2
3	Fabrication of DNA-Templated Pt Nanostructures by Area-Selective Atomic Layer Deposition. ACS Applied Materials & Interfaces, 2022, 14, 16538-16545.	8.0	0
4	(Digital Presentation) Electrical Properties of Nanocarbon-Polyaniline Nanocomposites. ECS Meeting Abstracts, 2022, MA2022-01, 760-760.	0.0	0
5	(Digital Presentation) Recovery of Copper from Wastewater By Electrodeposition Onto Nanocarbon Composites. ECS Meeting Abstracts, 2022, MA2022-01, 761-761.	0.0	0
6	DNAâ€Based Strategies for Siteâ€Specific Doping. Advanced Functional Materials, 2021, 31, .	14.9	3
7	Capture and Kill: Selective Eradication of Target Bacteria by a Flexible Bacteria-Imprinted Chip. ACS Biomaterials Science and Engineering, 2021, 7, 90-95.	5.2	4
8	On the Reactivity Enhancement of Graphene by Metallic Substrates towards Aryl Nitrene Cycloadditions. Chemistry - A European Journal, 2021, 27, 7887-7896.	3.3	6
9	Single sheets of graphene for fabrication of fibers with enhanced mechanical properties. Physical Chemistry Chemical Physics, 2021, 23, 23124-23129.	2.8	1
10	Self-assembled DNA structures for nanofabrication. , 2021, , .		0
11	Area-Selective Atomic Layer Deposition of Metal Oxides on DNA Nanostructures and Its Applications. ACS Nano, 2020, 14, 13047-13055.	14.6	14
12	Electric Field Effect on the Reactivity of Solid State Materials: The Case of Single Layer Graphene. Advanced Functional Materials, 2020, 30, 1909269.	14.9	10
13	3D Freestanding DNA Nanostructure Hybrid as a Low-Density High-Strength Material. ACS Nano, 2020, 14, 6582-6588.	14.6	12
14	Assessing and Mitigating Surface Contamination of Carbon Electrode Materials. Chemistry of Materials, 2019, 31, 7133-7142.	6.7	5
15	DNA-Based Nanofabrication for Antifouling Applications. Langmuir, 2019, 35, 12543-12549.	3.5	9
16	Airborne contamination of graphite as analyzed by ultra-violet photoelectron spectroscopy. Journal of Electron Spectroscopy and Related Phenomena, 2019, 235, 8-15.	1.7	22
17	The effect of physical adsorption on the capacitance of activated carbon electrodes. Carbon, 2019, 150, 334-339.	10.3	8
18	Facile <i>in situ</i> synthesis of coreâ€"shell MOF@Ag nanoparticle composites on screen-printed electrodes for ultrasensitive SERS detection of polycyclic aromatic hydrocarbons. Journal of Materials Chemistry A, 2019, 7, 14108-14117.	10.3	87

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19	DNAâ€Based Nanofabrication: Pathway to Applications in Surface Engineering. Small, 2019, 15, e1805428.	10.0	24
20	Synthesis of Colloidal Nanocrystals through Thermolysis of Precursors. World Scientific Series in Nanoscience and Nanotechnology, 2019, , 1-21.	0.1	0
21	Adventitious hydrocarbons and the graphite-water interface. Carbon, 2018, 134, 464-469.	10.3	25
22	Probing Ligand-Induced Cooperative Orbital Redistribution That Dominates Nanoscale Moleculeâ€"Surface Interactions with One-Unit-Thin TiO₂ Nanosheets. Nano Letters, 2018, 18, 7809-7815.	9.1	30
23	DNA-templated nanofabrication. Current Opinion in Colloid and Interface Science, 2018, 38, 88-99.	7.4	16
24	Graphene-Encapsulated DNA Nanostructure: Preservation of Topographic Features at High Temperature and Site-Specific Oxidation of Graphene. Langmuir, 2018, 34, 15045-15054.	3.5	5
25	Characterization of the Intrinsic Water Wettability of Graphite Using Contact Angle Measurements: Effect of Defects on Static and Dynamic Contact Angles. Langmuir, 2017, 33, 959-967.	3.5	100
26	Graphitic materials: Intrinsic hydrophilicity and its implications. Extreme Mechanics Letters, 2017, 14, 44-50.	4.1	27
27	Deposition of DNA Nanostructures on Highly Oriented Pyrolytic Graphite. Langmuir, 2017, 33, 3991-3997.	3.5	13
28	Influence of O₂, H₂O and airborne hydrocarbons on the properties of selected 2D materials. RSC Advances, 2017, 7, 27048-27057.	3.6	33
29	DNA Nanostructures-Mediated Molecular Imprinting Lithography. ACS Nano, 2017, 11, 227-238.	14.6	43
30	Vacancyâ€Controlled Contact Friction in Graphene. Advanced Functional Materials, 2017, 27, 1702832.	14.9	21
31	DNA origami: The bridge from bottom to top. MRS Bulletin, 2017, 42, 943-950.	3.5	24
32	Direct Nanofabrication Using DNA Nanostructure. Methods in Molecular Biology, 2017, 1500, 217-235.	0.9	1
33	Nanofabrication using unmodified DNA nanostructures. , 2017, , .		0
34	Raman Enhancement and Photo-Bleaching of Organic Dyes in the Presence of Chemical Vapor Deposition-Grown Graphene. Nanomaterials, 2017, 7, 337.	4.1	8
35	Increasing the stability of DNA nanostructure templates by atomic layer deposition of Al₂O₃ and its application in imprinting lithography. Beilstein Journal of Nanotechnology, 2017, 8, 2363-2375.	2.8	9
36	Scalable and Costâ€Effective Synthesis of Highly Efficient Fe₂Nâ€Based Oxygen Reduction Catalyst Derived from Seaweed Biomass. Small, 2016, 12, 1295-1301.	10.0	148

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37	Are Graphitic Surfaces Hydrophobic?. Accounts of Chemical Research, 2016, 49, 2765-2773.	15.6	143
38	Synthesizing and Characterizing Graphene via Raman Spectroscopy: An Upper-Level Undergraduate Experiment That Exposes Students to Raman Spectroscopy and a 2D Nanomaterial. Journal of Chemical Education, 2016, 93, 1798-1803.	2.3	20
39	Substrate dependent photochemical oxidation of monolayer graphene. RSC Advances, 2016, 6, 8489-8494.	3.6	4
40	Effect of precursor purity and flow rate on the CVD growth of hexagonal boron nitride. Journal of Alloys and Compounds, 2016, 688, 1006-1012.	5.5	14
41	Origin of Asymmetry of Paired Nanogap Voltammograms Based on Scanning Electrochemical Microscopy: Contamination Not Adsorption. Analytical Chemistry, 2016, 88, 8323-8331.	6.5	33
42	Bottom-up Nanofabrication Using DNA Nanostructures. Chemistry of Materials, 2016, 28, 1012-1021.	6.7	45
43	Water Protects Graphitic Surface from Airborne Hydrocarbon Contamination. ACS Nano, 2016, 10, 349-359.	14.6	97
44	Programmably Shaped Carbon Nanostructure from Shape-Conserving Carbonization of DNA. ACS Nano, 2016, 10, 3069-3077.	14.6	37
45	Ultrafast Electron Transfer Kinetics of Graphene Grown by Chemical Vapor Deposition. Angewandte Chemie - International Edition, 2015, 54, 15134-15137.	13.8	49
46	Mechanistic Study of the Nanoscale Negative-Tone Pattern Transfer from DNA Nanostructures to SiO₂. Chemistry of Materials, 2015, 27, 1692-1698.	6.7	25
47	Understanding the Intrinsic Water Wettability of Molybdenum Disulfide (MoS₂). Langmuir, 2015, 31, 8429-8435.	3.5	167
48	Surface Disinfection Enabled by a Layer-by-Layer Thin Film of Polyelectrolyte-Stabilized Reduced Graphene Oxide upon Solar Near-Infrared Irradiation. ACS Applied Materials & Interfaces, 2015, 7, 10511-10517.	8.0	62
49	Copper substrate as a catalyst for the oxidation of chemical vapor deposition-grown graphene. Journal of Solid State Chemistry, 2015, 224, 14-20.	2.9	8
50	Stability of DNA Origami Nanostructure under Diverse Chemical Environments. Chemistry of Materials, 2014, 26, 5265-5273.	6.7	89
51	Study on the Surface Energy of Graphene by Contact Angle Measurements. Langmuir, 2014, 30, 8598-8606.	3.5	380
52	Understanding the intrinsic water wettability of graphite. Carbon, 2014, 74, 218-225.	10.3	178
53	Enhanced Room-Temperature Corrosion of Copper in the Presence of Graphene. ACS Nano, 2013, 7, 6939-6947.	14.6	320
54	Effect of airborne contaminants on the wettability of supported graphene and graphite. Nature Materials, 2013, 12, 925-931.	27.5	712

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55	DNA nanostructure meets nanofabrication. Chemical Society Reviews, 2013, 42, 2488-2496.	38.1	88
56	Conversion Reactions of Cadmium Chalcogenide Nanocrystal Precursors. Chemistry of Materials, 2013, 25, 1233-1249.	6.7	184
57	Nanoscale Growth and Patterning of Inorganic Oxides Using DNA Nanostructure Templates. Journal of the American Chemical Society, 2013, 135, 6778-6781.	13.7	97
58	Thermal Oxidation and Unwrinkling of Chemical Vapor Deposition-Grown Graphene. Journal of Physical Chemistry C, 2012, 116, 20600-20606.	3.1	58
59	Photochemical oxidation of CVD-grown single layer graphene. Nanotechnology, 2012, 23, 355703.	2.6	52
60	Molecular Lithography through DNA-Mediated Etching and Masking of SiO₂. Journal of the American Chemical Society, 2011, 133, 11868-11871.	13.7	90
61	Atmospheric Oxygen Binding and Hole Doping in Deformed Graphene on a SiO₂ Substrate. Nano Letters, 2010, 10, 4944-4951.	9.1	706