

# Mengxi Liu

## List of Publications by Year in descending order

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61  
papers

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citations

186209

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63  
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63  
docs citations

63  
times ranked

6931  
citing authors

#	ARTICLE	IF	CITATIONS
1	Controlled Growth of High-Quality Monolayer WS <sub>2</sub> Layers on Sapphire and Imaging Its Grain Boundary. ACS Nano, 2013, 7, 8963-8971.	7.3	696
2	Epitaxial Monolayer MoS <sub>2</sub> on Mica with Novel Photoluminescence. Nano Letters, 2013, 13, 3870-3877.	4.5	512
3	Toward Single-Layer Uniform Hexagonal Boron Nitride "Graphene Patchworks with Zigzag Linking Edges. Nano Letters, 2013, 13, 3439-3443.	4.5	242
4	Angle-Dependent van Hove Singularities in a Slightly Twisted Graphene Bilayer. Physical Review Letters, 2012, 109, 126801.	2.9	222
5	Strain and curvature induced evolution of electronic band structures in twisted graphene bilayer. Nature Communications, 2013, 4, 2159.	5.8	165
6	Graphene-like nanoribbons periodically embedded with four- and eight-membered rings. Nature Communications, 2017, 8, 14924.	5.8	139
7	Hexagonal Boron Nitride "Graphene Heterostructures: Synthesis and Interfacial Properties. Small, 2016, 12, 32-50.	5.2	136
8	All Chemical Vapor Deposition Synthesis and Intrinsic Bandgap Observation of MoS <sub>2</sub> /Graphene Heterostructures. Advanced Materials, 2015, 27, 7086-7092.	11.1	132
9	Grain Boundary Structures and Electronic Properties of Hexagonal Boron Nitride on Cu(111). Nano Letters, 2015, 15, 5804-5810.	4.5	117
10	Quasi-Freestanding Monolayer Heterostructure of Graphene and Hexagonal Boron Nitride on Ir(111) with a Zigzag Boundary. Nano Letters, 2014, 14, 6342-6347.	4.5	116
11	A universal etching-free transfer of MoS <sub>2</sub> films for applications in photodetectors. Nano Research, 2015, 8, 3662-3672.	5.8	94
12	Growth and Atomic-Scale Characterizations of Graphene on Multifaceted Textured Pt Foils Prepared by Chemical Vapor Deposition. ACS Nano, 2011, 5, 9194-9201.	7.3	84
13	Strain-induced one-dimensional Landau level quantization in corrugated graphene. Physical Review B, 2013, 87, .	1.1	80
14	Temperature "Triggered Sulfur Vacancy Evolution in Monolayer MoS <sub>2</sub> /Graphene Heterostructures. Small, 2017, 13, 1602967.	5.2	77
15	A lactam building block for efficient polymer solar cells. Chemical Communications, 2015, 51, 11830-11833.	2.2	69
16	Thinning Segregated Graphene Layers on High Carbon Solubility Substrates of Rhodium Foils by Tuning the Quenching Process. ACS Nano, 2012, 6, 10581-10589.	7.3	61
17	Superlattice Dirac points and space-dependent Fermi velocity in a corrugated graphene monolayer. Physical Review B, 2013, 87, .	1.1	60
18	Different growth behaviors of ambient pressure chemical vapor deposition graphene on Ni(111) and Ni films: A scanning tunneling microscopy study. Nano Research, 2012, 5, 402-411.	5.8	59

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19	Direct Formation of C-C Triple-Bonded Structural Motifs by On-Surface Dehalogenative Homocouplings of Tribromomethyl-Substituted Arenes. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 4035-4038.	7.2	50
20	Angle-dependent van Hove singularities and their breakdown in twisted graphene bilayers. <i>Physical Review B</i> , 2014, 90, .	1.1	47
21	Unique Transformation from Graphene to Carbide on Re(0001) Induced by Strong Carbon-Metal Interaction. <i>Journal of the American Chemical Society</i> , 2017, 139, 17574-17581.	6.6	38
22	Periodic Modulation of the Doping Level in Striped MoS <sub>2</sub> Superstructures. <i>ACS Nano</i> , 2016, 10, 3461-3468.	7.3	37
23	Clean transfer of graphene on Pt foils mediated by a carbon monoxide intercalation process. <i>Nano Research</i> , 2013, 6, 671-678.	5.8	35
24	High-Yield Formation of Graphdiyne Macrocycles through On-Surface Assembling and Coupling Reaction. <i>ACS Nano</i> , 2018, 12, 12612-12618.	7.3	35
25	Electronic structures of graphene layers on a metal foil: The effect of atomic-scale defects. <i>Applied Physics Letters</i> , 2013, 103, .	1.5	34
26	Hexacyclic lactam building blocks for highly efficient polymer solar cells. <i>Chemical Communications</i> , 2015, 51, 12122-12125.	2.2	34
27	Ladder Phenylenes Synthesized on Au(111) Surface via Selective [2+2] Cycloaddition. <i>Journal of the American Chemical Society</i> , 2021, 143, 12955-12960.	6.6	32
28	Narrow-Gap Quantum Wires Arising from the Edges of Monolayer MoS <sub>2</sub> Synthesized on Graphene. <i>Advanced Materials Interfaces</i> , 2016, 3, 1600332.	1.9	30
29	Strong Adlayer-Substrate Interactions Break-the Patching Growth of h-BN onto Graphene on Re(0001). <i>ACS Nano</i> , 2017, 11, 1807-1815.	7.3	27
30	Direct Formation of C-C Double-Bonded Structural Motifs by On-Surface Dehalogenative Homocoupling of gem-Dibromomethyl Molecules. <i>ACS Nano</i> , 2018, 12, 7959-7966.	7.3	24
31	Mn atomic layers under inert covers of graphene and hexagonal boron nitride prepared on Rh(111). <i>Nano Research</i> , 2013, 6, 887-896.	5.8	22
32	Single and Polycrystalline Graphene on Rh(111) Following Different Growth Mechanisms. <i>Small</i> , 2013, 9, 1360-1366.	5.2	21
33	Charge Transfer and Current Fluctuations in Single Layer Graphene Transistors Modified by Self-Assembled C <sub>60</sub> Adlayers. <i>Small</i> , 2013, 9, 2420-2426.	5.2	20
34	Water-Induced Chiral Separation on a Au(111) Surface. <i>ACS Nano</i> , 2021, 15, 16896-16903.	7.3	20
35	Illuminating interlayer interactions. <i>Nature Materials</i> , 2018, 17, 211-213.	13.3	17
36	High-Quality Monolayer Graphene Synthesis on Pd Foils via the Suppression of Multilayer Growth at Grain Boundaries. <i>Small</i> , 2014, 10, 4003-4011.	5.2	16

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37	Scanning Probe Microscopy of Topological Structure Induced Electronic States of Graphene. <i>Small Methods</i> , 2020, 4, 1900683.	4.6	16
38	Single-molecule insights into surface-mediated homochirality in hierarchical peptide assembly. <i>Nature Communications</i> , 2018, 9, 2711.	5.8	14
39	Bond-Scission-Induced Structural Transformation from Cumulene to Diyne Moiety and Formation of Semiconducting Organometallic Polyyne. <i>Journal of the American Chemical Society</i> , 2020, 142, 8085-8089.	6.6	14
40	On-Surface Debromination of C <sub>6</sub> Br <sub>6</sub> : C <sub>6</sub> Ring versus C <sub>6</sub> Chain. <i>ACS Nano</i> , 2022, 16, 6578-6584.	7.3	14
41	Local Chiral Inversion of Thymine Dimers by Manipulating Single Water Molecules. <i>Journal of the American Chemical Society</i> , 2022, 144, 5023-5028.	6.6	13
42	Lattice-Directed Selective Synthesis of Acetylenic and Diacetylenic Organometallic Polyynes. <i>Chemistry of Materials</i> , 2022, 34, 1770-1777.	3.2	11
43	Orientation of molecular interface dipole on metal surface investigated by noncontact atomic force microscopy. <i>Science Bulletin</i> , 2013, 58, 3630-3635.	1.7	10
44	Direct Formation of C≡C Triple-Bonded Structural Motifs by On-Surface Dehalogenative Homocouplings of Tribromomethyl-Substituted Arenes. <i>Angewandte Chemie</i> , 2018, 130, 4099-4102.	1.6	10
45	Selectively Scissoring Hydrogen-Bonded Cytosine Dimer Structures Catalyzed by Water Molecules. <i>ACS Nano</i> , 2020, 14, 10680-10687.	7.3	10
46	Multiphonon Raman Scattering and Strong Electron-Phonon Coupling in 2D Ternary Cu <sub>2</sub> MoS <sub>4</sub> Nanoflakes. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 8483-8489.	2.1	10
47	On-Surface Synthesis of [3]Radialenes via [1+1+1] Cycloaddition. <i>Angewandte Chemie - International Edition</i> , 2022, 61, e202117714.	7.2	10
48	Structural Phase Transitions of Molecular Self-Assembly Driven by Nonbonded Metal Adatoms. <i>ACS Nano</i> , 2020, 14, 6331-6338.	7.3	9
49	Controllable synthesis of graphene using novel aromatic 1,3,5-triethynylbenzene molecules on Rh(111). <i>RSC Advances</i> , 2015, 5, 76620-76625.	1.7	6
50	Step-Mediated Anisotropic Adsorption and Condensation of <i>tert</i> -Butylamine on Cu(111). <i>ChemPhysChem</i> , 2010, 11, 379-383.	1.0	4
51	Graphene: Single and Polycrystalline Graphene on Rh(111) Following Different Growth Mechanisms (Small 8/2013). <i>Small</i> , 2013, 9, 1359-1359.	5.2	3
52	Layer-dependent charge density wave phase transition stiffness in 1T-TaS <sub>2</sub> nanoflakes evidenced by ultrafast carrier dynamics. <i>Nano Research</i> , 2021, 14, 1162-1166.	5.8	3
53	Semiconductors: Temperature-Triggered Sulfur Vacancy Evolution in Monolayer MoS <sub>2</sub> /Graphene Heterostructures (Small 40/2017). <i>Small</i> , 2017, 13, .	5.2	2
54	Electrical Characteristics of a Carbon Nanotube-Functionalized Probe for Kelvin Probe Force Microscopy. <i>Journal of Physical Chemistry C</i> , 2020, 124, 28261-28266.	1.5	2

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55	Formation of Unconventional Stoichiometric Na <sup>+</sup> Cl <sup>-</sup> Magic-Number Nanoclusters and 2D Assembly on Ir(111). <i>Small Methods</i> , 2022, 6, e2101252.	4.6	1
56	Friction of MoO <sub>3</sub> Nanoflakes on Graphite Surface with an Ace-like Intercalation Layer. <i>Chemical Research in Chinese Universities</i> , 0, , 1.	1.3	1
57	Controlled Synthesis of in-Plane h-BN-G Heterostructures. <i>Springer Theses</i> , 2018, , 55-76.	0.0	0
58	Particle-Catalyst-Free Vapor-Liquid-Solid Growth of Millimeter-Scale Crystalline Compound Semiconductors on Nonepitaxial Substrates. <i>ACS Omega</i> , 2020, 5, 9550-9557.	1.6	0
59	STM Study of Twisted Bilayer Graphene. <i>Springer Theses</i> , 2018, , 37-54.	0.0	0
60	Facet-Selective Dissociation and Radical-Mediated Reaction of Dibenzotetrathiafulvalene Molecules on Low-Index Copper Surfaces. <i>Journal of Physical Chemistry C</i> , 2022, 126, 1281-1288.	1.5	0
61	On-Surface Synthesis of [3]Radialenes via [1+1+1] Cycloaddition. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	0