Jinming Cai

List of Publications by Year in descending order

73 papers	7,577 citations	471509 17 h-index	102487 66 g-index
73 all docs	73 docs citations	73 times ranked	8591 citing authors

#	Article	IF	Citations
1	Atomically precise bottom-up fabrication of graphene nanoribbons. Nature, 2010, 466, 470-473.	27.8	3,144
2	Electromagnetic interference shielding of graphene/epoxy composites. Carbon, 2009, 47, 922-925.	10.3	1,199
3	Porous graphenes: two-dimensional polymer synthesis with atomic precision. Chemical Communications, 2009, , 6919.	4.1	610
4	Graphene nanoribbon heterojunctions. Nature Nanotechnology, 2014, 9, 896-900.	31.5	528
5	Two-Dimensional Polymer Formation on Surfaces: Insight into the Roles of Precursor Mobility and Reactivity. Journal of the American Chemical Society, 2010, 132, 16669-16676.	13.7	449
6	Electronic Structure of Atomically Precise Graphene Nanoribbons. ACS Nano, 2012, 6, 6930-6935.	14.6	410
7	Termini of Bottom-Up Fabricated Graphene Nanoribbons. Journal of the American Chemical Society, 2013, 135, 2060-2063.	13.7	214
8	Intraribbon Heterojunction Formation in Ultranarrow Graphene Nanoribbons. ACS Nano, 2012, 6, 2020-2025.	14.6	169
9	Exciton-dominated optical response of ultra-narrow graphene nanoribbons. Nature Communications, 2014, 5, 4253.	12.8	155
10	Tunable interfacial properties of epitaxial graphene on metal substrates. Applied Physics Letters, 2010, 96, .	3.3	118
11	On-Surface Cyclization of ortho-Dihalotetracenes to Four- and Six-Membered Rings. Journal of the American Chemical Society, 2017, 139, 17617-17623.	13.7	68
12	Nonplanar Rhombus and Kagome 2D Covalent Organic Frameworks from Distorted Aromatics for Electrical Conduction. Journal of the American Chemical Society, 2022, 144, 5042-5050.	13.7	54
13	Role of Lateral Alkyl Chains in Modulation of Molecular Structures on Metal Surfaces. Physical Review Letters, 2006, 96, 226101.	7.8	51
14	Boron nanowires for flexible electronics. Applied Physics Letters, 2008, 93, .	3.3	33
15	Building Pentagons into Graphenic Structures by On-Surface Polymerization and Aromatic Cyclodehydrogenation of Phenyl-Substituted Polycyclic Aromatic Hydrocarbons. Journal of Physical Chemistry C, 2016, 120, 17588-17593.	3.1	24
16	Electronic, mechanical, optical and photocatalytic properties of two-dimensional Janus XGaInY (X, Y ;=) Tj ETQq0 0 0 rgBT /Overlock 10 T	3.6	23
17	Probing optical excitations in chevron-like armchair graphene nanoribbons. Nanoscale, 2017, 9, 18326-18333.	5.6	19
18	Modulation of charge transport properties of reduced graphene oxide by submonolayer physisorption of an organic dye. Organic Electronics, 2013, 14, 1787-1792.	2.6	17

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19	Energy band engineering via â€œBiteâ€•defect located on N = 8 armchair graphene nanoribbons. Nano Research, 2022, 15, 653-658.	10.4	16
20	Cathodoluminescent and electrical properties of an individual ZnO nanowire with oxygen vacancies. Chinese Physics B, 2008, 17, 3444-3447.	1.4	14
21	Study on the Mechanism of Selective Catalytic Reduction of NO_x by NH₃ over Mn-Doped CoCr₂O₄. Journal of Physical Chemistry C, 2021, 125, 14228-14238.	3.1	14
22	Graphene-like Be ₃ X ₂ (X = C, Si, Ge, Sn): A new family of two-dimensional topological insulators. Chinese Physics B, 2019, 28, 037101.	1.4	13
23	Recent Advances in Graphene Electronic Skin and its Future Prospects. ChemNanoMat, 2021, 7, 982-997.	2.8	13
24	Onâ€Surface Synthesis of a Nitrogenâ€Doped Graphene Nanoribbon with Multiple Substitutional Sites. Angewandte Chemie - International Edition, 2022, 61, .	13.8	13
25	Thermoelectric-transport in metal/graphene/metal hetero-structure. Chinese Physics B, 2010, 19, 037202.	1.4	10
26	Tuning the Electronic Properties of Atomically Precise Graphene Nanoribbons by Bottomâ€Up Fabrication. ChemNanoMat, 2020, 6, 493-515.	2.8	10
27	Identification and electronic characterization of four cyclodehydrogenation products of H₂TPP molecules on Au(111). Physical Chemistry Chemical Physics, 2021, 23, 11784-11788.	2.8	10
28	First-Principles Study of Hydrogen Storage of Sc-Modified Semiconductor Covalent Organic Framework-1. ACS Omega, 2021, 6, 21985-21993.	3.5	10
29	On-surface synthesis of one-type pore single-crystal porous covalent organic frameworks. Chemical Communications, 2019, 55, 10800-10803.	4.1	9
30	The van der Waals CdO/PtS2 heterostructures for photocatalytic water splitting with excellent carrier separation and light absorption. New Journal of Chemistry, 2021, 45, 17699-17708.	2.8	9
31	Controllable preparations and anti-corrosion properties of reduced graphene oxide films by binder-free electrophoretic deposition. Applied Surface Science, 2021, 563, 150295.	6.1	9
32	Efficient synthesis of graphene oxide by Hummers method assisted with an electric field. Materials Research Express, 2019, 6, 055602.	1.6	8
33	Half-metallicity in a honeycomb-kagome-lattice Mg₃Si₂ monolayer with carrier doping. Materials Research Express, 2019, 6, 075911.	1.6	7
34	Structural characterizations and electronic properties of CuSe monolayer endowed with triangular nanopores. Journal of Materials Science, 2021, 56, 10406-10413.	3.7	7
35	Two dimensional Janus SGaInSe(SeGaInS)/PtSe2 van der Waals heterostructures for optoelectronic and photocatalytic water splitting applications. International Journal of Hydrogen Energy, 2022, 47, 28833-28844.	7.1	7
36	Controllable Density of Atomic Bromine in a Two-Dimensional Hydrogen Bond Network. Journal of Physical Chemistry C, 2018, 122, 25681-25684.	3.1	6

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37	On-Surface Synthesis and Characterization of Polythiophene Chains. Journal of Physical Chemistry C, 2020, 124, 764-768.	3.1	6
38	Two-dimensional semiconductor materials with high stability and electron mobility in group-11 chalcogenide compounds: MNX (M = Cu, Ag, Au; N = Cu, Ag, Au; X = S, Se, Te; M â‰ N). Nanoscale, 2022, 14, 4271-4280.	5.6	6
39	Multiple functional base-induced highly ordered graphene aerogels. Journal of Materials Chemistry C, 0, , .	5.5	5
40	Fabrication and electrical engineering of graphene nanoribbons. Wuli Xuebao/Acta Physica Sinica, 2017, 66, 218103.	0.5	5
41	Research progress of monolayer two-dimensional atomic crystal materials grown by molecular beam epitaxy in ultra-high vacuum conditions. Wuli Xuebao/Acta Physica Sinica, 2020, 69, 118101.	0.5	5
42	Se-concentration dependent superstructure transformations of CuSe monolayer on Cu(111) substrate. 2D Materials, 2022, 9, 015017.	4.4	5
43	Chiral structures of 6,12-dibromochrysene on Au(111) and Cu(111) surfaces. Chinese Chemical Letters, 2022, 33, 5142-5146.	9.0	5
44	Short-Channel Double-Gate FETs with Atomically Precise Graphene Nanoribbons. , 2021, , .		5
45	Epitaxial Growth of Quinacridone Derivative on Ag(110) Studied by Scanning Tunneling Microscopy. Journal of Physical Chemistry C, 2008, 112, 7138-7144.	3.1	4
46	Local field emission of electrons from an individual boron nanowire at nanometer electrode separation. Applied Surface Science, 2012, 258, 2149-2152.	6.1	4
47	Significant improvement in the interface thermal conductivity of graphene-nanoplatelets/silicone composite. Materials Research Express, 2018, 5, 055606.	1.6	4
48	Topological-Defect-Induced Superstructures on Graphite Surface. Chinese Physics Letters, 2021, 38, 027201.	3.3	4
49	Ultrathin g-PAN/PANI-encapsulated Cu nanoparticles decorated on SrTiO₃ with high stability as an efficient photocatalyst for the H₂ evolution and degradation of 4-nitrophenol under visible-light irradiation. Catalysis Science and Technology, 2022, 12, 2482-2489.	4.1	4
50	Magnetism engineering of nanographene: An enrichment strategy by co-depositing diverse precursors on Au(111). Chinese Chemical Letters, 2023, 34, 107450.	9.0	4
51	On-surface synthesis and characterization of nitrogen-doped covalent-organic frameworks on Ag(111) substrate. Journal of Chemical Physics, 2022, 157, .	3.0	4
52	Low-Dimensional Forest-Like and Desert-Like Fractal Patterns Formed in a DDAN Molecular System. Chinese Physics Letters, 2007, 24, 2918-2921.	3.3	3
53	Enhancement of the low-temperature catalytic graphitization of polyacrylonitrile by incorporating Cu nanostructures as plasmonic photocatalyst. Journal of Materials Science, 2022, 57, 1703-1713.	3.7	3
54	Chemical vapor deposition growth behavior of graphene. International Journal of Minerals, Metallurgy and Materials, 2022, 29, 136-143.	4.9	3

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55	Boron Nanowires for Flexible Electronics and Field Emission. , 2009, , .		2
56	Electric dipolar interaction assisted growth of single crystalline organic thin films. Chinese Physics B, 2010, 19, 067101.	1.4	2
57	Synthesize monolayer graphene on SiO2/Si substrate with copper-vapor-assisted CVD method. Materials Research Express, 2018, 5, 125601.	1.6	2
58	The first principle study of the effect of Co dopant and C/Cu vacancy defect on the interfacial bonding of graphene-copper composites. Materials Research Express, 2019, 6, 095621.	1.6	2
59	Revealing the high-resolution structures and electronic properties of ZnTPP and its derivatives formed by thermally induced cyclodehydrogenation on Au(111). Physical Chemistry Chemical Physics, 2021, 23, 18930-18935.	2.8	2
60	Fabrication of diverse morphologies of MoS2 nanomaterials with a single-temperature-zone CVD system. MRS Communications, 2021, 11, 372-376.	1.8	2
61	Indirect-direct band gap transition driven by strain in semiconducting Cu2Se monolayer. Materials Research Express, 2021, 8, 045003.	1.6	2
62	Research Progress of On-surface Chemical Reaction for Organics in Ultra-High Vacuum. Acta Chimica Sinica, 2018, 76, 585.	1.4	2
63	Two-dimensional hexagonal Zn₃Si₂ monolayer: Dirac cone material and Dirac half-metallic manipulation*. Chinese Physics B, 2020, 29, 087103.	1.4	2
64	In-situ conversion of amorphous carbon to graphene enhances the oxidation resistance of dendritic copper powder. Diamond and Related Materials, 2021, 120, 108695.	3.9	2
65	Study on the mechanism of NOx reduction by NH3-SCR over Mn and M(M=V,Ti) co-doped CoCr2O4 catalyst. Molecular Catalysis, 2022, 524, 112283.	2.0	2
66	Measuring thermoelectric property of nano-heterostructure. Chinese Physics B, 2011, 20, 107301.	1.4	1
67	The effect of copper substrateâ€™s roughness on graphene growth process via PECVD. Materials Research Express, 2018, 5, 045604.	1.6	1
68	The improvement of thermal conductivity in silica gel composite employing graphene nano-particles. Modern Physics Letters B, 2019, 33, 1950147.	1.9	1
69	Structural stabilities, electronic structures, photocatalysis and optical properties of Î³-GeN and Î±-SnP monolayers: a first-principles study. Materials Research Express, 2021, 8, 125010.	1.6	1
70	Controllable synthesis of anatase titanium dioxide nanowires with high-temperature stability. Journal of Materials Science, 2022, 57, 9164-9171.	3.7	1
71	Probing the charged defects in single-layer WS2 at atomic level. Materials Today Physics, 2022, 27, 100773.	6.0	1
72	Toxicity of GO and rGO suspension against P. acnes: physical puncture and oxidative stress. Materials Research Express, 2021, 8, 045402.	1.6	0

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73	Onâ€surface Synthesis of Nitrogenâ€doped Graphene Nanoribbon with Multiple Substitutional Sites. Angewandte Chemie, 0, , .	2.0	0