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	Magnetism engineering of nanographene: An enrichment strategy by co-depositing diverse precursors on Au(111). Chinese Chemical Letters, 2023, 34, 107450.	9.0	4
2	Energy band engineering via â€œBiteâ€•defect located on N = 8 armchair graphene nanoribbons. Nano Research, 2022, 15, 653-658.	10.4	16
3	Se-concentration dependent superstructure transformations of CuSe monolayer on Cu(111) substrate. 2D Materials, 2022, 9, 015017.	4.4	5
4	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
5	Chemical vapor deposition growth behavior of graphene. International Journal of Minerals, Metallurgy and Materials, 2022, 29, 136-143.	4.9	3
6	Chiral structures of 6,12-dibromochrysene on Au(111) and Cu(111) surfaces. Chinese Chemical Letters, 2022, 33, 5142-5146.	9.0	5
7	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
8	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
9	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
10	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
11	Onâ€Surface Synthesis of a Nitrogenâ€Doped Graphene Nanoribbon with Multiple Substitutional Sites. Angewandte Chemie - International Edition, 2022, 61, .	13.8	13
12	Controllable synthesis of anatase titanium dioxide nanowires with high-temperature stability. Journal of Materials Science, 2022, 57, 9164-9171.	3.7	1
13	On-surface synthesis and characterization of nitrogen-doped covalent-organic frameworks on Ag(111) substrate. Journal of Chemical Physics, 2022, 157, .	3.0	4
14	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
15	Probing the charged defects in single-layer WS2 at atomic level. Materials Today Physics, 2022, 27, 100773.	6.0	1
16	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
17	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
18	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

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19	Electronic, mechanical, optical and photocatalytic properties of two-dimensional Janus XGaInY (X, Y ;=) Tj ETQq1 1 0.784314 rgBT /Over	3.6	28
20	Fabrication of diverse morphologies of MoS2 nanomaterials with a single-temperature-zone CVD system. MRS Communications, 2021, 11, 372-376.	1.8	2
21	Topological-Defect-Induced Superstructures on Graphite Surface. Chinese Physics Letters, 2021, 38, 027201.	3.3	4
22	Structural characterizations and electronic properties of CuSe monolayer endowed with triangular nanopores. Journal of Materials Science, 2021, 56, 10406-10413.	3.7	7
23	Toxicity of GO and rGO suspension against P. acnes: physical puncture and oxidative stress. Materials Research Express, 2021, 8, 045402.	1.6	0
24	Indirect-direct band gap transition driven by strain in semiconducting Cu2Se monolayer. Materials Research Express, 2021, 8, 045003.	1.6	2
25	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
26	Recent Advances in Graphene Electronic Skin and its Future Prospects. ChemNanoMat, 2021, 7, 982-997.	2.8	13
27	First-Principles Study of Hydrogen Storage of Sc-Modified Semiconductor Covalent Organic Framework-1. ACS Omega, 2021, 6, 21985-21993.	3.5	10
28	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
29	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
30	Short-Channel Double-Gate FETs with Atomically Precise Graphene Nanoribbons. , 2021, , .		5
31	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
32	Tuning the Electronic Properties of Atomically Precise Graphene Nanoribbons by Bottomâ€Up Fabrication. ChemNanoMat, 2020, 6, 493-515.	2.8	10
33	On-Surface Synthesis and Characterization of Polythiophene Chains. Journal of Physical Chemistry C, 2020, 124, 764-768.	3.1	6
34	Two-dimensional hexagonal Zn₃Si₂ monolayer: Dirac cone material and Dirac half-metallic manipulation*. Chinese Physics B, 2020, 29, 087103.	1.4	2
35	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
36	On-surface synthesis of one-type pore single-crystal porous covalent organic frameworks. Chemical Communications, 2019, 55, 10800-10803.	4.1	9

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37	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
38	Efficient synthesis of graphene oxide by Hummers method assisted with an electric field. Materials Research Express, 2019, 6, 055602.	1.6	8
39	The improvement of thermal conductivity in silica gel composite employing graphene nano-particles. Modern Physics Letters B, 2019, 33, 1950147.	1.9	1
40	Half-metallicity in a honeycomb-kagome-lattice Mg₃Si₂ monolayer with carrier doping. Materials Research Express, 2019, 6, 075911.	1.6	7
41	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
42	The effect of copper substrateâ€™s roughness on graphene growth process via PECVD. Materials Research Express, 2018, 5, 045604.	1.6	1
43	Controllable Density of Atomic Bromine in a Two-Dimensional Hydrogen Bond Network. Journal of Physical Chemistry C, 2018, 122, 25681-25684.	3.1	6
44	Synthesize monolayer graphene on SiO2/Si substrate with copper-vapor-assisted CVD method. Materials Research Express, 2018, 5, 125601.	1.6	2
45	Significant improvement in the interface thermal conductivity of graphene-nanoplatelets/silicone composite. Materials Research Express, 2018, 5, 055606.	1.6	4
46	Research Progress of On-surface Chemical Reaction for Organics in Ultra-High Vacuum. Acta Chimica Sinica, 2018, 76, 585.	1.4	2
47	Probing optical excitations in chevron-like armchair graphene nanoribbons. Nanoscale, 2017, 9, 18326-18333.	5.6	19
48	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
49	Fabrication and electrical engineering of graphene nanoribbons. Wuli Xuebao/Acta Physica Sinica, 2017, 66, 218103.	0.5	5
50	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
51	Graphene nanoribbon heterojunctions. Nature Nanotechnology, 2014, 9, 896-900.	31.5	528
52	Exciton-dominated optical response of ultra-narrow graphene nanoribbons. Nature Communications, 2014, 5, 4253.	12.8	155
53	Termini of Bottom-Up Fabricated Graphene Nanoribbons. Journal of the American Chemical Society, 2013, 135, 2060-2063.	13.7	214
54	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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55	Electronic Structure of Atomically Precise Graphene Nanoribbons. ACS Nano, 2012, 6, 6930-6935.	14.6	410
56	Local field emission of electrons from an individual boron nanowire at nanometer electrode separation. Applied Surface Science, 2012, 258, 2149-2152.	6.1	4
57	Intraribbon Heterojunction Formation in Ultranarrow Graphene Nanoribbons. ACS Nano, 2012, 6, 2020-2025.	14.6	169
58	Measuring thermoelectric property of nano-heterostructure. Chinese Physics B, 2011, 20, 107301.	1.4	1
59	Atomically precise bottom-up fabrication of graphene nanoribbons. Nature, 2010, 466, 470-473.	27.8	3,144
60	Electric dipolar interaction assisted growth of single crystalline organic thin films. Chinese Physics B, 2010, 19, 067101.	1.4	2
61	Thermoelectric-transport in metal/graphene/metal hetero-structure. Chinese Physics B, 2010, 19, 037202.	1.4	10
62	Tunable interfacial properties of epitaxial graphene on metal substrates. Applied Physics Letters, 2010, 96, .	3.3	118
63	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
64	Boron Nanowires for Flexible Electronics and Field Emission. , 2009, , .		2
65	Electromagnetic interference shielding of graphene/epoxy composites. Carbon, 2009, 47, 922-925.	10.3	1,199
66	Porous graphenes: two-dimensional polymer synthesis with atomic precision. Chemical Communications, 2009, , 6919.	4.1	610
67	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
68	Cathodoluminescent and electrical properties of an individual ZnO nanowire with oxygen vacancies. Chinese Physics B, 2008, 17, 3444-3447.	1.4	14
69	Boron nanowires for flexible electronics. Applied Physics Letters, 2008, 93, .	3.3	33
70	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
71	Role of Lateral Alkyl Chains in Modulation of Molecular Structures on Metal Surfaces. Physical Review Letters, 2006, 96, 226101.	7.8	51
72	Multiple functional base-induced highly ordered graphene aerogels. Journal of Materials Chemistry C, 0, , .	5.5	5

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