

Xiangbin Cai

List of Publications by Year in descending order

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Version: 2024-02-01

52
papers

2,217
citations

279798

23
h-index

223800

46
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all docs

53
docs citations

53
times ranked

2924
citing authors

#	ARTICLE	IF	CITATIONS
1	Defect-rich graphene stabilized atomically dispersed Cu ₃ clusters with enhanced oxidase-like activity for antibacterial applications. <i>Applied Catalysis B: Environmental</i> , 2022, 301, 120826.	20.2	51
2	Boosting oxygen-reduction catalysis over mononuclear CuN ₂ +2 moiety for rechargeable Zn-air battery. <i>Chemical Engineering Journal</i> , 2022, 430, 133105.	12.7	12
3	Antisintering Pd ₁ Catalyst for Propane Direct Dehydrogenation with In Situ Active Sites Regeneration Ability. <i>ACS Catalysis</i> , 2022, 12, 2244-2252.	11.2	23
4	Few-Atom Pt Ensembles Enable Efficient Catalytic Cyclohexane Dehydrogenation for Hydrogen Production. <i>Journal of the American Chemical Society</i> , 2022, 144, 3535-3542.	13.7	72
5	A Magnetically Separable Pd Single-Atom Catalyst for Efficient Selective Hydrogenation of Phenylacetylene. <i>Advanced Materials</i> , 2022, 34, e2110455.	21.0	44
6	Bridging the gap between atomically thin semiconductors and metal leads. <i>Nature Communications</i> , 2022, 13, 1777.	12.8	17
7	Insight into the Activity of Atomically Dispersed Cu Catalysts for Semihydrogenation of Acetylene: Impact of Coordination Environments. <i>ACS Catalysis</i> , 2022, 12, 48-57.	11.2	23
8	Fully-exposed Pt clusters stabilized on Sn-decorated nanodiamond/graphene hybrid support for efficient ethylbenzene direct dehydrogenation. <i>Nano Research</i> , 2022, 15, 10029-10036.	10.4	7
9	Layer-dependent interface reconstruction and strain modulation in twisted WSe ₂ . <i>Nanoscale</i> , 2021, 13, 13624-13630.	5.6	8
10	Rewritable High-Mobility Electrons in Oxide Heterostructure of Layered Perovskite/Perovskite. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 7812-7821.	8.0	6
11	Strain engineering of epitaxial oxide heterostructures beyond substrate limitations. <i>Matter</i> , 2021, 4, 1323-1334.	10.0	21
12	Regulating coordination number in atomically dispersed Pt species on defect-rich graphene for n-butane dehydrogenation reaction. <i>Nature Communications</i> , 2021, 12, 2664.	12.8	111
13	Phase management in single-crystalline vanadium dioxide beams. <i>Nature Communications</i> , 2021, 12, 4214.	12.8	31
14	In-Situ Transmission Electron Microscopy: Electron Beam Effects in Carbon-based Nanomaterials. <i>Microscopy and Microanalysis</i> , 2021, 27, 2110-2113.	0.4	2
15	Cooperative Sites in Fully Exposed Pd Clusters for Low-Temperature Direct Dehydrogenation Reaction. <i>ACS Catalysis</i> , 2021, 11, 11469-11477.	11.2	51
16	In situ atomic-scale studies of thermal stability and surface reconstruction of ZnO nanowires based Pd nanocatalysts. <i>Materials and Design</i> , 2021, 209, 109947.	7.0	6
17	Towards a library of atomically dispersed catalysts. <i>Materials and Design</i> , 2021, 210, 110080.	7.0	6
18	Tuning the selectivity of catalytic nitriles hydrogenation by structure regulation in atomically dispersed Pd catalysts. <i>Nature Communications</i> , 2021, 12, 6194.	12.8	51

#	ARTICLE	IF	CITATIONS
37	Controllable defect driven symmetry change and domain structure evolution in BiFeO ₃ with enhanced tetragonality. <i>Nanoscale</i> , 2019, 11, 8110-8118.	5.6	22
38	Intrinsic valley Hall transport in atomically thin MoS ₂ . <i>Nature Communications</i> , 2019, 10, 611.	12.8	77
39	Atomic-scale identification of crystalline GaON nanophase for enhanced GaN MIS-FET channel. <i>Applied Physics Letters</i> , 2019, 114, .	3.3	16
40	Twin Defect Derived Growth of Atomically Thin MoS ₂ Dendrites. <i>ACS Nano</i> , 2018, 12, 635-643.	14.6	92
41	Nanodiamond@Core-Reinforced, Graphene@Shell-Immobilized Platinum Nanoparticles as a Highly Active Catalyst for the Low-Temperature Dehydrogenation of <i>n</i> -Butane. <i>ChemCatChem</i> , 2018, 10, 520-524.	3.7	15
42	Gate-tunable strong-weak localization transition in few-layer black phosphorus. <i>Nanotechnology</i> , 2018, 29, 035204.	2.6	10
43	Suppressed Hole-Induced Degradation in E-mode GaN MIS-FETs with Crystalline $\text{GaO}_{\text{x}}\text{N}_{1-\text{x}}$ Channel. , 2018, , .		4
44	Atomically Dispersed Pd on Nanodiamond/Graphene Hybrid for Selective Hydrogenation of Acetylene. <i>Journal of the American Chemical Society</i> , 2018, 140, 13142-13146.	13.7	342
45	Fluctuation-induced tunneling conduction in iodine-doped bilayer graphene. <i>Journal of Applied Physics</i> , 2018, 123, 244302.	2.5	2
46	Chemically specific termination control of oxide interfaces via layer-by-layer mean inner potential engineering. <i>Nature Communications</i> , 2018, 9, 2965.	12.8	34
47	Electron Energy-Loss Spectroscopy of Spatial Nonlocality and Quantum Tunneling Effects in the Bright and Dark Plasmon Modes of Gold Nanosphere Dimers. <i>Advanced Quantum Technologies</i> , 2018, 1, 1800016.	3.9	13
48	Normally-Off LPCVD-SiN _x /GaN MIS-FET With Crystalline Oxidation Interlayer. <i>IEEE Electron Device Letters</i> , 2017, 38, 929-932.	3.9	67
49	Reversible bidirectional bending of hydrogel-based bilayer actuators. <i>Journal of Materials Chemistry B</i> , 2017, 5, 2804-2812.	5.8	107
50	Isolation and Characterization of Few-Layer Manganese Thiophosphite. <i>ACS Nano</i> , 2017, 11, 11330-11336.	14.6	98
51	Axial Modulation of Metal-Insulator Phase Transition of VO ₂ Nanowires by Graded Doping Engineering for Optically Readable Thermometers. <i>Journal of Physical Chemistry C</i> , 2017, 121, 24877-24885.	3.1	31
52	Coherent Heterostructure Mesh Grown by Gap-Filling Epitaxial Chemical Vapor Deposition. <i>Chemistry of Materials</i> , 0, , .	6.7	2