Mengning Ding

List of Publications by Year
in descending order

54 papers	6,313 citations	172207 29 h-index	174990 52 g-index
56 all docs	56 docs citations	56 times ranked	10671 citing authors

#	Article	IF	Citations
1	MoS₂-Templated Porous Hollow MoO₃ Microspheres for Highly Selective Ammonia Sensing via a Lewis Acid-Base Interaction. IEEE Transactions on Industrial Electronics, 2022, 69, 960-970.	5.2	85
2	Single-Atom Tailoring of Two-Dimensional Atomic Crystals Enables Highly Efficient Detection and Pattern Recognition of Chemical Vapors. ACS Sensors, 2022, 7, 1533-1543.	4.0	16
3	Boosting the performance of single-atom catalysts via external electric field polarization. Nature Communications, 2022, 13, .	5.8	52
4	Rational Synthesis of 1D Hyperbranched Heterostructures with Enhanced Optoelectronic Performance. Angewandte Chemie - International Edition, 2021, 60, 3475-3480.	7.2	12
5	Electroâ€Descriptors for the Performance Prediction of Electroâ€Organic Synthesis. Angewandte Chemie, 2021, 133, 4245-4253.	1.6	13
6	Electroâ€Descriptors for the Performance Prediction of Electroâ€Organic Synthesis. Angewandte Chemie - International Edition, 2021, 60, 4199-4207.	7.2	35
7	Rational Synthesis of 1D Hyperbranched Heterostructures with Enhanced Optoelectronic Performance. Angewandte Chemie, 2021, 133, 3517-3522.	1.6	1
8	Nitrogen reduction through confined electro-catalysis with carbon nanotube inserted metalâ€“organic frameworks. Journal of Materials Chemistry A, 2021, 9, 1480-1486.	5.2	27
9	Deactivation/Activation of Quenching Defects in CH3NH3PbI3 Perovskite by Direct Electron Injection/Extraction. Journal of Physical Chemistry Letters, 2021, 12, 773-780.	2.1	2
10	Missing-Linker 2D Conductive Metal Organic Frameworks for Rapid Gas Detection. ACS Sensors, 2021, 6, 429-438.	4.0	34
11	Electrochemically Exfoliated Platinum Dichalcogenide Atomic Layers for High-Performance Air-Stable Infrared Photodetectors. ACS Applied Materials & Interfaces, 2021, 13, 8518-8527.	4.0	23
12	Doubleâ€Exchangeâ€Induced in situ Conductivity in Nickelâ€Based Oxyhydroxides: An Effective Descriptor for Electrocatalytic Oxygen Evolution. Angewandte Chemie - International Edition, 2021, 60, 16448-16456.	7.2	63
13	Doubleâ€Exchangeâ€Induced in situ Conductivity in Nickelâ€Based Oxyhydroxides: An Effective Descriptor for Electrocatalytic Oxygen Evolution. Angewandte Chemie, 2021, 133, 16584-16592.	1.6	3
14	Spontaneous Polarity Flipping in a 2D Heterobilayer Induced by Fluctuating Interfacial Carrier Flows. Nano Letters, 2021, 21, 6773-6780.	4.5	7
15	In(III) Metalâ€“Organic Framework Incorporated with Enzyme-Mimicking Nickel Bis(dithiolene) Ligand for Highly Selective CO₂ Electroreduction. Journal of the American Chemical Society, 2021, 143, 14071-14076.	6.6	54
16	Silver nanoparticles boost charge-extraction efficiency in Shewanella microbial fuel cells. Science, 2021, 373, 1336-1340.	6.0	171
17	Efficient CO₂ Electroreduction with a Monolayer Bi₂WO₆ through a Metallic Intermediate Surface State. ACS Catalysis, 2021, 11, 12476-12484.	5.5	35
18	Electrochemical Crossâ€Dehydrogenative Coupling between Phenols and Î²â€Dicarbonyl Compounds: Facile Construction of Benzofurans. Chemistry - A European Journal, 2020, 26, 4297-4303.	1.7	18

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19	Highly selective electrocatalytic oxidation of benzyl Câ€“H using water as safe and sustainable oxygen source. Green Chemistry, 2020, 22, 7543-7551.	4.6	31
20	Intercalation and hybrid heterostructure integration of two-dimensional atomic crystals with functional organic semiconductor molecules. Nano Research, 2020, 13, 2917-2924.	5.8	11
21	On-Chip Electrical Transport Investigation of Metal Nanoparticles: Characteristic Acidic and Alkaline Adsorptions Revealed on Pt and Au Surface. Journal of Physical Chemistry Letters, 2020, 11, 5798-5806.	2.1	9
22	Superlattice Structure from Re-stacked NiFe Layer Double Hydroxides for Oxygen Evolution Reaction. Chemical Research in Chinese Universities, 2020, 36, 680-684.	1.3	0
23	Nanocomposite materials for nano-electronic-based Internet of things sensors and energy device signaling. , 2020, , 243-290.		2
24	Promoting Z-to-E Thermal Isomerization of Azobenzene Derivatives by Noncovalent Interaction with Phosphorene: Theoretical Prediction and Experimental Study. Journal of Physical Chemistry C, 2020, 124, 15961-15968.	1.5	3
25	High Electrical Conductivity in a 2D MOF with Intrinsic Superprotonic Conduction and Interfacial Pseudo-capacitance. Matter, 2020, 2, 711-722.	5.0	115
26	Self-gating in semiconductor electrocatalysis. Nature Materials, 2019, 18, 1098-1104.	13.3	167
27	In Situ Probing Molecular Intercalation in Two-Dimensional Layered Semiconductors. Nano Letters, 2019, 19, 6819-6826.	4.5	72
28	Electrochemical Approach for Direct Câ€“H Phosphonylation of Unprotected Secondary Amine. Organic Letters, 2019, 21, 7759-7762.	2.4	36
29	A field-effect approach to directly profiling the localized states in monolayer MoS2. Science Bulletin, 2019, 64, 1049-1055.	4.3	5
30	Single-atom tailoring of platinum nanocatalysts for high-performance multifunctional electrocatalysis. Nature Catalysis, 2019, 2, 495-503.	16.1	464
31	Quantitative Surface Plasmon Interferometry via Upconversion Photoluminescence Mapping. Research, 2019, 2019, 8304824.	2.8	2
32	On-Chip in Situ Monitoring of Competitive Interfacial Anionic Chemisorption as a Descriptor for Oxygen Reduction Kinetics. ACS Central Science, 2018, 4, 590-599.	5.3	29
33	Solution-processable 2D semiconductors for high-performance large-area electronics. Nature, 2018, 562, 254-258.	13.7	644
34	Quantum interference mediated vertical molecular tunneling transistors. Science Advances, 2018, 4, eaat8237.	4.7	64
35	Approaching the Schottkyâ€“Mott limit in van der Waals metalâ€“semiconductor junctions. Nature, 2018, 557, 696-700.	13.7	1,279
36	Three-dimensional holey-graphene/niobia composite architectures for ultrahigh-rate energy storage. Science, 2017, 356, 599-604.	6.0	1,229

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37	Vertical Charge Transport and Negative Transconductance in Multilayer Molybdenum Disulfides. Nano Letters, 2017, 17, 5495-5501.	4.5	42
38	Highly Sensitive Chemical Detection with Tunable Sensitivity and Selectivity from Ultrathin Platinum Nanowires. Small, 2017, 13, 1602969.	5.2	19
39	Nanoelectronic Investigation Reveals the Electrochemical Basis of Electrical Conductivity in Shewanella and Geobacter. ACS Nano, 2016, 10, 9919-9926.	7.3	46
40	Plasmonic/Nonlinear Optical Material Core/Shell Nanorods as Nanoscale Plasmon Modulators and Optical Voltage Sensors. Angewandte Chemie - International Edition, 2016, 55, 583-587.	7.2	21
41	van der Waals Heterojunction Devices Based on Organohalide Perovskites and Two-Dimensional Materials. Nano Letters, 2016, 16, 367-373.	4.5	185
42	Metal-Organic Framework Templated Synthesis of Ultrathin, Well-Aligned Metallic Nanowires. ACS Nano, 2015, 9, 3044-3049.	7.3	59
43	Toward Barrier Free Contact to Molybdenum Disulfide Using Graphene Electrodes. Nano Letters, 2015, 15, 3030-3034.	4.5	362
44	Cosolvent Approach for Solution-Processable Electronic Thin Films. ACS Nano, 2015, 9, 4398-4405.	7.3	63
45	Wafer-scale growth of large arrays of perovskite microplate crystals for functional electronics and optoelectronics. Science Advances, 2015, 1, e1500613.	4.7	265
46	An on-chip electrical transport spectroscopy approach for in situ monitoring electrochemical interfaces. Nature Communications, 2015, 6, 7867.	5.8	64
47	Efficient separation of nitrogen-doped carbon nanotube cups. Carbon, 2014, 80, 583-590.	5.4	8
48	Understanding Interfaces in Metalâ€“Graphitic Hybrid Nanostructures. Journal of Physical Chemistry Letters, 2013, 4, 147-160.	2.1	79
49	Photoinduced Charge Transfer and Acetone Sensitivity of Single-Walled Carbon Nanotubeâ€“Titanium Dioxide Hybrids. Journal of the American Chemical Society, 2013, 135, 9015-9022.	6.6	77
50	Synthesis of One-Dimensional SiC Nanostructures from a Glassy Buckypaper. ACS Applied Materials & Interfaces, 2013, 5, 1928-1936.	4.0	16
51	Synthesis and Morphology Control of Carbon Nanotube/Polyaniline Composite for Chemical Sensing. Materials Research Society Symposia Proceedings, 2012, 1408, 119.	0.1	0
52	Welding of Gold Nanoparticles on Graphitic Templates for Chemical Sensing. Journal of the American Chemical Society, 2012, 134, 3472-3479.	6.6	73
53	Selecting Fruits with Carbon Nanotube Sensors. Angewandte Chemie - International Edition, 2012, 51, 7637-7638.	7.2	19
54	Chemical Sensing with Polyaniline Coated Singleâ€Walled Carbon Nanotubes. Advanced Materials, 2011, 23, 536-540.	11.1	101