Yimo Han

List of Publications by Year
in descending order

56 papers	7,338 citations	186254 28 h-index	206102 48 g-index
57 all docs	57 docs citations	57 times ranked	10113 citing authors

#	Article	IF	Citations
1	Ultrafast Pumpâ€“Probe Microscopy on 2D Transition Metal Dichalcogenides. Advanced Photonics Research, 2022, 3, .	3.6	3
2	Efficient conversion of low-concentration nitrate sources into ammonia on a Ru-dispersed Cu nanowire electrocatalyst. Nature Nanotechnology, 2022, 17, 759-767.	31.5	318
3	Direct visualization of floppy two-dimensional DNA origami using cryogenic electron microscopy. IScience, 2022, 25, 104373.	4.1	5
4	Uncovering material deformations via machine learning combined with four-dimensional scanning transmission electron microscopy. Npj Computational Materials, 2022, 8, .	8.7	15
5	Large Single Crystals of Two-Dimensional Ï€-Conjugated Metalâ€“Organic Frameworks via Biphasic Solution-Solid Growth. ACS Central Science, 2021, 7, 104-109.	11.3	40
6	Synthesis of Highâ€Performance Monolayer Molybdenum Disulfide at Low Temperature. Small Methods, 2021, 5, e2000720.	8.6	27
7	Rapid and Semi-Automated Analysis of 4D-STEM data via Unsupervised Learning. Microscopy and Microanalysis, 2021, 27, 58-59.	0.4	3
8	High-yield monolayer graphene grids for near-atomic resolution cryoelectron microscopy. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 1009-1014.	7.1	84
9	Uncovering Atomic and Nano-scale Deformations in Two-dimensional Lateral Heterojunctions. Microscopy and Microanalysis, 2020, 26, 1630-1631.	0.4	0
10	Aberration-corrected STEM imaging of 2D materials: Artifacts and practical applications of threefold astigmatism. Science Advances, 2020, 6, .	10.3	13
11	Structure and mechanism of human diacylglycerol O-acyltransferaseÂ1. Nature, 2020, 581, 329-332.	27.8	72
12	Mixed-state electron ptychography enables sub-angstrom resolution imaging with picometer precision at low dose. Nature Communications, 2020, 11, 2994.	12.8	63
13	Imaging Polarity in Two Dimensional Materials by Breaking Friedel's Law. Ultramicroscopy, 2020, 215, 113019.	1.9	20
14	Graphene-assisted spontaneous relaxation towards dislocation-free heteroepitaxy. Nature Nanotechnology, 2020, 15, 272-276.	31.5	71
15	Realization of Quantum Hall Effect in Chemically Synthesized InSe. Advanced Functional Materials, 2019, 29, 1904032.	14.9	23
16	Phase Imaging beyond the Diffraction Limit with Electron Ptychography. Microscopy and Microanalysis, 2019, 25, 6-7.	0.4	1
17	Micromechanical Systems: Atomic Layer Deposition for Membranes, Metamaterials, and Mechanisms (Adv. Mater. 29/2019). Advanced Materials, 2019, 31, 1970212.	21.0	0
18	Scaling-up Atomically Thin Coplanar Semiconductorâ€“Metal Circuitry via Phase Engineered Chemical Assembly. Nano Letters, 2019, 19, 6845-6852.	9.1	46

#	Article	IF	Citations
19	Atomic Layer Deposition for Membranes, Metamaterials, and Mechanisms. Advanced Materials, 2019, 31, e1901944.	21.0	24
20	2D Materials: Metalâ€Guided Selective Growth of 2D Materials: Demonstration of a Bottomâ€Up CMOS Inverter (Adv. Mater. 18/2019). Advanced Materials, 2019, 31, 1970132.	21.0	1
21	Metalâ€Guided Selective Growth of 2D Materials: Demonstration of a Bottomâ€Up CMOS Inverter. Advanced Materials, 2019, 31, e1900861.	21.0	36
22	Additive manufacturing of patterned 2D semiconductor through recyclable masked growth. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 3437-3442.	7.1	46
23	GaN/NbN epitaxial semiconductor/superconductor heterostructures. Nature, 2018, 555, 183-189.	27.8	116
24	Coherent, atomically thin transition-metal dichalcogenide superlattices with engineered strain. Science, 2018, 359, 1131-1136.	12.6	247
25	Strain distributions and their influence on electronic structures of WSe2â€“MoS2 laterally strained heterojunctions. Nature Nanotechnology, 2018, 13, 152-158.	31.5	206
26	Graphene-based bimorphs for micron-sized, autonomous origami machines. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 466-470.	7.1	144
27	Sub-nanometre channels embedded in two-dimensional materials. Nature Materials, 2018, 17, 129-133.	27.5	97
28	Real-space Demonstration of 0.4 Angstrom Resolution at 80 keV via Electron Ptychography with a High Dynamic Range Pixel Array Detector. Microscopy and Microanalysis, 2018, 24, 194-195.	0.4	0
29	AirSEM: Electron Microscopy in Air, without a Specimen Chamber. Microscopy and Microanalysis, 2018, 24, 342-343.	0.4	0
30	Mapping Strain and Relaxation in 2D Heterojunctions with Sub-picometer Precision. Microscopy and Microanalysis, 2018, 24, 1588-1589.	0.4	0
31	Mechanism of Gold-Assisted Exfoliation of Centimeter-Sized Transition-Metal Dichalcogenide Monolayers. ACS Nano, 2018, 12, 10463-10472.	14.6	203
32	In Situ-Generated Volatile Precursor for CVD Growth of a Semimetallic 2D Dichalcogenide. ACS Applied Materials & Interfaces, 2018, 10, 34401-34408.	8.0	23
33	Synthetic Lateral Metal-Semiconductor Heterostructures of Transition Metal Disulfides. Journal of the American Chemical Society, 2018, 140, 12354-12358.	13.7	85
34	Strain Mapping of Two-Dimensional Heterostructures with Subpicometer Precision. Nano Letters, 2018, 18, 3746-3751.	9.1	82
35	Intrinsic Two-Dimensional Ferroelectricity with Dipole Locking. Physical Review Letters, 2018, 120, 227601.	7.8	322
36	Theory and practice of electron diffraction from single atoms and extended objects using an EMPAD. Microscopy (Oxford, England), 2018, 67, i150-i161.	1.5	29

#	Article	IF	Citations
37	Electron ptychography of 2D materials to deep sub-Ã¥ngstrÃ¶m resolution. Nature, 2018, 559, 343-349.	27.8	431
38	Characterization of Sulfur and Nanostructured Sulfur Battery Cathodes in Electron Microscopy Without Sublimation Artifacts. Microscopy and Microanalysis, 2017, 23, 155-162.	0.4	40
39	Janus monolayers of transition metal dichalcogenides. Nature Nanotechnology, 2017, 12, 744-749.	31.5	1,459
40	Photoconductivity: Tailoring Semiconductor Lateral Multijunctions for Giant Photoconductivity Enhancement (Adv. Mater. 41/2017). Advanced Materials, 2017, 29, .	21.0	0
41	Theory and Practice of Diffractometry on Single Tungsten Atoms using Electron Microscope Pixel Array Detectors. Microscopy and Microanalysis, 2017, 23, 444-445.	0.4	2
42	Layer-by-layer assembly of two-dimensional materials into wafer-scale heterostructures. Nature, 2017, 550, 229-233.	27.8	442
43	Tailoring Semiconductor Lateral Multijunctions for Giant Photoconductivity Enhancement. Advanced Materials, 2017, 29, 1703680.	21.0	21
44	Chemical Vapor Deposition Growth of Large Single-Crystal Mono-, Bi-, Tri-Layer Hexagonal Boron Nitride and Their Interlayer Stacking. ACS Nano, 2017, 11, 12057-12066.	14.6	85
45	Picometer-Precision Strain Mapping of Two-Dimensional Heterostructures using an Electron Microscope Pixel Array Detector (EMPAD). Microscopy and Microanalysis, 2017, 23, 1712-1713.	0.4	1
46	Breaking Friedelâ€™s Law in Polar Two Dimensional Materials. Microscopy and Microanalysis, 2017, 23, 1738-1739.	0.4	1
47	Enhanced Resolution from Full-Field Ptychography with an Electron Microscope Pixel Array Detector. Microscopy and Microanalysis, 2017, 23, 438-439.	0.4	0
48	Strain Accommodation and Coherency in Laterally-Stitched WSe 2 /WS 2 Junctions. Microscopy and Microanalysis, 2016, 22, 870-871.	0.4	5
49	Large-scale chemical assembly of atomically thin transistors and circuits. Nature Nanotechnology, 2016, 11, 954-959.	31.5	251
50	Graphene Oxide Nanosheets Stimulate Ruffling and Shedding of Mammalian Cell Plasma Membranes. CheM, 2016, 1, 273-286.	11.7	30
51	Atomically Thin Graphene Windows That Enable High Contrast Electron Microscopy without a Specimen Vacuum Chamber. Nano Letters, 2016, 16, 7427-7432.	9.1	13
52	Electron Diffraction from a Single Atom and Optimal Signal Detection. Microscopy and Microanalysis, 2016, 22, 846-847.	0.4	3
53	Atomically Thin Ohmic Edge Contacts Between Two-Dimensional Materials. ACS Nano, 2016, 10, 6392-6399.	14.6	202
54	Electron Microscopy in Air: Transparent Atomic Membranes and Imaging Modes. Microscopy and Microanalysis, 2015, 21, 1111-1112.	0.4	5

#	Article	IF	Citations
55	High-mobility three-atom-thick semiconducting films with wafer-scale homogeneity. Nature, 2015, 520, 656-660.	27.8	1,562
56	Esaki Diodes in van der Waals Heterojunctions with Broken-Gap Energy Band Alignment. Nano Letters, 2015, 15, 5791-5798.	9.1	319