Yimo Han

List of Publications by Citations

54	4,659	25	57
papers	citations	h-index	g-index
57	5,898	15.3	5.47
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
54	High-mobility three-atom-thick semiconducting films with wafer-scale homogeneity. *Nature*, **2015**, 520, 656-60	50.4	1224
53	Janus monolayers of transition metal dichalcogenides. *Nature Nanotechnology*, **2017**, 12, 744-749	28.7	828
52	Layer-by-layer assembly of two-dimensional materials into wafer-scale heterostructures. *Nature*, **2017**, 550, 229-233	50.4	305
51	Electron ptychography of 2D materials to deep sub-Ångström resolution. *Nature*, **2018**, 559, 343-349	50.4	269
50	Esaki Diodes in van der Waals Heterojunctions with Broken-Gap Energy Band Alignment. *Nano Letters*, **2015**, 15, 5791-8	11.5	237
49	Large-scale chemical assembly of atomically thin transistors and circuits. *Nature Nanotechnology*, **2016**, 11, 954-959	28.7	201
48	Coherent, atomically thin transition-metal dichalcogenide superlattices with engineered strain. *Science*, **2018**, 359, 1131-1136	33.3	170
47	Intrinsic Two-Dimensional Ferroelectricity with Dipole Locking. *Physical Review Letters*, **2018**, 120, 227601	7.4	170
46	Atomically Thin Ohmic Edge Contacts Between Two-Dimensional Materials. *ACS Nano*, **2016**, 10, 6392-9	16.7	144
45	Strain distributions and their influence on electronic structures of WSe-MoS laterally strained heterojunctions. *Nature Nanotechnology*, **2018**, 13, 152-158	28.7	135
44	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	11.5	113
43	Mechanism of Gold-Assisted Exfoliation of Centimeter-Sized Transition-Metal Dichalcogenide Monolayers. *ACS Nano*, **2018**, 12, 10463-10472	16.7	99
42	GaN/NbN epitaxial semiconductor/superconductor heterostructures. *Nature*, **2018**, 555, 183-189	50.4	83
41	Sub-nanometre channels embedded in two-dimensional materials. *Nature Materials*, **2018**, 17, 129-133	27	75
40	Synthetic Lateral Metal-Semiconductor Heterostructures of Transition Metal Disulfides. *Journal of the American Chemical Society*, **2018**, 140, 12354-12358	16.4	60
39	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	16.7	58
38	Strain Mapping of Two-Dimensional Heterostructures with Subpicometer Precision. *Nano Letters*, **2018**, 18, 3746-3751	11.5	50

37	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	11.5	37
36	Characterization of Sulfur and Nanostructured Sulfur Battery Cathodes in Electron Microscopy Without Sublimation Artifacts. *Microscopy and Microanalysis*, **2017**, 23, 155-162	0.5	32
35	Graphene-assisted spontaneous relaxation towards dislocation-free heteroepitaxy. *Nature Nanotechnology*, **2020**, 15, 272-276	28.7	32
34	Metal-Guided Selective Growth of 2D Materials: Demonstration of a Bottom-Up CMOS Inverter. *Advanced Materials*, **2019**, 31, e1900861	24	28
33	Structure and mechanism of human diacylglycerol O-acyltransferase 1. *Nature*, **2020**, 581, 329-332	50.4	28
32	Scaling-up Atomically Thin Coplanar Semiconductor-Metal Circuitry via Phase Engineered Chemical Assembly. *Nano Letters*, **2019**, 19, 6845-6852	11.5	26
31	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	11.5	25
30	Mixed-state electron ptychography enables sub-angstrom resolution imaging with picometer precision at low dose. *Nature Communications*, **2020**, 11, 2994	17.4	22
29	Graphene Oxide Nanosheets Stimulate Ruffling and Shedding of Mammalian Cell Plasma Membranes. *CheM*, **2016**, 1, 273-286	16.2	22
28	Theory and practice of electron diffraction from single atoms and extended objects using an EMPAD. *Microscopy (Oxford, England)*, **2018**, 67, i150-i161	1.3	18
27	Tailoring Semiconductor Lateral Multijunctions for Giant Photoconductivity Enhancement. *Advanced Materials*, **2017**, 29, 1703680	24	17
26	Realization of Quantum Hall Effect in Chemically Synthesized InSe. *Advanced Functional Materials*, **2019**, 29, 1904032	15.6	16
25	Large Single Crystals of Two-Dimensional Conjugated Metal-Organic Frameworks via Biphasic Solution-Solid Growth. *ACS Central Science*, **2021**, 7, 104-109	16.8	16
24	Atomic Layer Deposition for Membranes, Metamaterials, and Mechanisms. *Advanced Materials*, **2019**, 31, e1901944	24	15
23	In Situ-Generated Volatile Precursor for CVD Growth of a Semimetallic 2D Dichalcogenide. *ACS Applied Materials & Interfaces*, **2018**, 10, 34401-34408	9.5	15
22	Atomically Thin Graphene Windows That Enable High Contrast Electron Microscopy without a Specimen Vacuum Chamber. *Nano Letters*, **2016**, 16, 7427-7432	11.5	13
21	Imaging Polarity in Two Dimensional Materials by Breaking Friedel's Law. *Ultramicroscopy*, **2020**, 215, 113019	3.1	8
20	Aberration-corrected STEM imaging of 2D materials: Artifacts and practical applications of threefold astigmatism. *Science Advances*, **2020**, 6,	14.3	7

19	Electron Microscopy in Air: Transparent Atomic Membranes and Imaging Modes. *Microscopy and Microanalysis*, **2015**, 21, 1111-1112	0.5	5
18	Strain Accommodation and Coherency in Laterally-Stitched WSe 2 /WS 2 Junctions. *Microscopy and Microanalysis*, **2016**, 22, 870-871	0.5	5
17	Electron Diffraction from a Single Atom and Optimal Signal Detection. *Microscopy and Microanalysis* , **2016**, 22, 846-847	0.5	3
16	Synthesis of High-Performance Monolayer Molybdenum Disulfide at Low Temperature.. *Small Methods*, **2021**, 5, e2000720	12.8	3
15	Direct Visualization of Floppy Two-Dimensional DNA Origami using Cryogenic Electron Microscopy. *IScience*, **2022**, 104373	6.1	2
14	Phase Imaging beyond the Diffraction Limit with Electron Ptychography. *Microscopy and Microanalysis*, **2019**, 25, 6-7	0.5	1
13	Theory and Practice of Diffractometry on Single Tungsten Atoms using Electron Microscope Pixel Array Detectors. *Microscopy and Microanalysis*, **2017**, 23, 444-445	0.5	1
12	Breaking Friedel Law in Polar Two Dimensional Materials. *Microscopy and Microanalysis*, **2017**, 23, 1738-1739	0.5	1
11	High Yield Monolayer Graphene Grids for Near-Atomic Resolution Cryo-Electron Microscopy		1
10	Rapid and Semi-Automated Analysis of 4D-STEM data via Unsupervised Learning. *Microscopy and Microanalysis*, **2021**, 27, 58-59	0.5	1
9	Ultrafast Pump Probe Microscopy on 2D Transition Metal Dichalcogenides. *Advanced Photonics Research*,2200046	1.9	1
8	2D Materials: Metal-Guided Selective Growth of 2D Materials: Demonstration of a Bottom-Up CMOS Inverter (Adv. Mater. 18/2019). *Advanced Materials*, **2019**, 31, 1970132	24	0
7	Enhanced Resolution from Full-Field Ptychography with an Electron Microscope Pixel Array Detector. *Microscopy and Microanalysis*, **2017**, 23, 438-439	0.5	
6	Micromechanical Systems: Atomic Layer Deposition for Membranes, Metamaterials, and Mechanisms (Adv. Mater. 29/2019). *Advanced Materials*, **2019**, 31, 1970212	24	
5	Picometer-Precision Strain Mapping of Two-Dimensional Heterostructures using an Electron Microscope Pixel Array Detector (EMPAD). *Microscopy and Microanalysis*, **2017**, 23, 1712-1713	0.5	
4	Uncovering Atomic and Nano-scale Deformations in Two-dimensional Lateral Heterojunctions. *Microscopy and Microanalysis*, **2020**, 26, 1630-1631	0.5	
3	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	0.5	
2	AirSEM: Electron Microscopy in Air, without a Specimen Chamber. *Microscopy and Microanalysis*, **2018**, 24, 342-343	0.5	

List of Publications

1	Mapping Strain and Relaxation in 2D Heterojunctions with Sub-picometer Precision. *Microscopy and Microanalysis*, **2018**, 24, 1588-1589	0.5