Jing-Kai Huang

List of Publications by Citations

43 papers	5,381 citations	25 h-index	46 g-index
46 ext. papers	6,105 ext. citations	13.3 avg, IF	5.36 L-index

#	Paper	IF	Citations
43	High-gain phototransistors based on a CVD MoS monolayer. *Advanced Materials*, **2013**, 25, 3456-61	24	743
42	Large-area synthesis of highly crystalline WSe(2) monolayers and device applications. *ACS Nano*, **2014**, 8, 923-30	16.7	732
41	Ultrahigh-gain photodetectors based on atomically thin graphene-MoS2 heterostructures. *Scientific Reports*, **2014**, 4, 3826	4.9	678
40	Wafer-scale MoS2 thin layers prepared by MoO3 sulfurization. *Nanoscale*, **2012**, 4, 6637-41	7.7	538
39	Synthesis and transfer of single-layer transition metal disulfides on diverse surfaces. *Nano Letters*, **2013**, 13, 1852-7	11.5	524
38	Monolayer MoSe2 grown by chemical vapor deposition for fast photodetection. *ACS Nano*, **2014**, 8, 8582-90	16.7	413
37	Selective decoration of Au nanoparticles on monolayer MoS2 single crystals. *Scientific Reports*, **2013**, 3, 1839	4.9	342
36	Metal Organic Framework-Based Separators for Enhancing Li S Battery Stability: Mechanism of Mitigating Polysulfide Diffusion. *ACS Energy Letters*, **2017**, 2, 2362-2367	20.1	160
35	Photoluminescence Enhancement and Structure Repairing of Monolayer MoSe2 by Hydrohalic Acid Treatment. *ACS Nano*, **2016**, 10, 1454-61	16.7	137
34	Multidirection Piezoelectricity in Mono- and Multilayered Hexagonal InSe. *ACS Nano*, **2018**, 12, 4976-4983	16.7	133
33	Visualizing band offsets and edge states in bilayer-monolayer transition metal dichalcogenides lateral heterojunction. *Nature Communications*, **2016**, 6, 10349	17.4	99
32	Evidence of indirect gap in monolayer WSe. *Nature Communications*, **2017**, 8, 929	17.4	72
31	High quantity and quality few-layers transition metal disulfide nanosheets from wet-milling exfoliation. *RSC Advances*, **2013**, 3, 13193	3.7	69
30	Gate-Tunable and Multidirection-Switchable Memristive Phenomena in a Van Der Waals Ferroelectric. *Advanced Materials*, **2019**, 31, e1901300	24	67
29	Enhanced electrocatalytic activity of MoS(x) on TCNQ-treated electrode for hydrogen evolution reaction. *ACS Applied Materials & Interfaces*, **2014**, 6, 17679-85	9.5	65
28	Multilayer Graphene-WSe Heterostructures for WSe Transistors. *ACS Nano*, **2017**, 11, 12817-12823	16.7	65
27	Substrate Lattice-Guided Seed Formation Controls the Orientation of 2D Transition-Metal Dichalcogenides. *ACS Nano*, **2017**, 11, 9215-9222	16.7	64

26	Functional Two-Dimensional Coordination Polymeric Layer as a Charge Barrier in Li-S Batteries. *ACS Nano*, **2018**, 12, 836-843	16.7	63
25	Recent Progress in Short- to Long-Wave Infrared Photodetection Using 2D Materials and Heterostructures. *Advanced Optical Materials*, **2021**, 9, 2001708	8.1	59
24	Laterally Stitched Heterostructures of Transition Metal Dichalcogenide: Chemical Vapor Deposition Growth on Lithographically Patterned Area. *ACS Nano*, **2016**, 10, 10516-10523	16.7	41
23	Self-Aligned and Scalable Growth of Monolayer WSe2□MoS2 Lateral Heterojunctions. *Advanced Functional Materials*, **2018**, 28, 1706860	15.6	36
22	Graphite edge controlled registration of monolayer MoS2 crystal orientation. *Applied Physics Letters*, **2015**, 106, 181904	3.4	32
21	Engineering Point-Defect States in Monolayer WSe. *ACS Nano*, **2019**, 13, 1595-1602	16.7	28
20	Metal-Guided Selective Growth of 2D Materials: Demonstration of a Bottom-Up CMOS Inverter. *Advanced Materials*, **2019**, 31, e1900861	24	28
19	Efficient electrochemical transformation of CO to C/C chemicals on benzimidazole-functionalized copper surfaces. *Chemical Communications*, **2018**, 54, 11324-11327	5.8	27
18	Toward the Growth of High Mobility 2D Transition Metal Dichalcogenide Semiconductors. *Advanced Materials Interfaces*, **2019**, 6, 1900220	4.6	23
17	Scalable Patterning of MoS2 Nanoribbons by Micromolding in Capillaries. *ACS Applied Materials & Interfaces*, **2016**, 8, 20993-1001	9.5	21
16	High-□perovskite membranes as insulators for two-dimensional transistors.. *Nature*, **2022**, 605, 262-267	50.4	16
15	Steam-Assisted Chemical Vapor Deposition of Zeolitic Imidazolate Framework **2020**, 2, 485-491		14
14	Disorder-dependent valley properties in monolayer WSe2. *Physical Review B*, **2017**, 96,	3.3	14
13	Fluorescence Quenching: Seeing Two-Dimensional Sheets on Arbitrary Substrates by Fluorescence Quenching Microscopy (Small 19/2013). *Small*, **2013**, 9, 3252-3252	11	12
12	Electrode Engineering in Halide Perovskite Electronics: Plenty of Room at the Interfaces.. *Advanced Materials*, **2022**, e2108616	24	12
11	Growth of 2H stacked WSe2 bilayers on sapphire. *Nanoscale Horizons*, **2019**, 4, 1434-1442	10.8	11
10	One-step growth of reduced graphene oxide on arbitrary substrates. *Carbon*, **2019**, 144, 457-463	10.4	10
9	Moir□related in-gap states in a twisted MoS2/graphite heterojunction. *Npj 2D Materials and Applications*, **2017**, 1,	8.8	8

8	Seeing two-dimensional sheets on arbitrary substrates by fluorescence quenching microscopy. *Small*, **2013**, 9, 3253-8	11	5
7	A Solution-Processed All-Perovskite Memory with Dual-Band Light Response and Tri-Mode Operation. *Advanced Functional Materials*,2110975	15.6	5
6	Chemical Vapor Deposited MoS_2 Thin Layers and Their Applications. *ECS Transactions*, **2013**, 50, 61-63	1	3
5	Strain-Directed Layer-By-Layer Epitaxy Toward van der Waals Homo- and Heterostructures **2021**, 3, 442-453		3
4	Growth of High-Quality Monolayer Transition Metal Dichalcogenide Nanocrystals by Chemical Vapor Deposition and Their Photoluminescence and Electrocatalytic Properties. *ACS Applied Materials & Interfaces*, **2021**, 13, 47962-47971	9.5	3
3	Perovskite Quantum Dot Solar Cells Fabricated from Recycled Lead-Acid Battery Waste **2022**, 4, 120-127		2
2	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
1	Effect of the geometry of precursor crucibles on the growth of MoS_2 flakes by chemical vapor deposition. *New Journal of Chemistry*, **2020**, 44, 21076-21084	3.6	