Ming-Hui Chiu

List of Publications by Year in Descending Order

32 papers	5,245 citations	22 h-index	35 g-index
35 ext. papers	6,393 ext. citations	16.3 avg, IF	5.37 L-index

#	Paper	IF	Citations
32	Ultralow contact resistance between semimetal and monolayer semiconductors. *Nature*, **2021**, 593, 211-217	50.4	154
31	Strain-Directed Layer-By-Layer Epitaxy Toward van der Waals Homo- and Heterostructures **2021**, 3, 442-453		3
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	Strain engineering and epitaxial stabilization of halide perovskites. *Nature*, **2020**, 577, 209-215	50.4	213
28	Additive manufacturing assisted van der Waals integration of 3D/3D hierarchically functional nanostructures. *Communications Materials*, **2020**, 1,	6	4
27	Epitaxial Growth and Determination of Band Alignment of Bi2Te3/WSe2 Vertical van der Waals Heterojunctions **2020**, 2, 1351-1359		5
26	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
25	One-Step Vapor-Phase Synthesis and Quantum-Confined Exciton in Single-Crystal Platelets of Hybrid Halide Perovskites. *Journal of Physical Chemistry Letters*, **2019**, 10, 2363-2371	6.4	20
24	Metal-Guided Selective Growth of 2D Materials: Demonstration of a Bottom-Up CMOS Inverter. *Advanced Materials*, **2019**, 31, e1900861	24	28
23	Selectively Plasmon-Enhanced Second-Harmonic Generation from Monolayer Tungsten Diselenide on Flexible Substrates. *ACS Nano*, **2018**, 12, 1859-1867	16.7	58
22	Janus monolayers of transition metal dichalcogenides. *Nature Nanotechnology*, **2017**, 12, 744-749	28.7	828
21	Multilayer Graphene-WSe Heterostructures for WSe Transistors. *ACS Nano*, **2017**, 11, 12817-12823	16.7	65
20	Band Alignment of 2D Transition Metal Dichalcogenide Heterojunctions. *Advanced Functional Materials*, **2017**, 27, 1603756	15.6	55
19	Anomalous photoluminescence thermal quenching of sandwiched single layer MoS_2. *Optical Materials Express*, **2017**, 7, 3697	2.6	8
18	Heterostructured WS2 /CH3 NH3 PbI3 Photoconductors with Suppressed Dark Current and Enhanced Photodetectivity. *Advanced Materials*, **2016**, 28, 3683-9	24	319
17	Photoluminescence Enhancement and Structure Repairing of Monolayer MoSe2 by Hydrohalic Acid Treatment. *ACS Nano*, **2016**, 10, 1454-61	16.7	137
16	Photodetection in p□ junctions formed by electrolyte-gated transistors of two-dimensional crystals. *Applied Physics Letters*, **2016**, 109, 201107	3.4	12

15	Determination of band alignment in the single-layer MoS2/WSe2 heterojunction. *Nature Communications*, **2015**, 6, 7666	17.4	421
14	Emerging energy applications of two-dimensional layered transition metal dichalcogenides. *Nano Energy*, **2015**, 18, 293-305	17.1	181
13	Band gap-tunable molybdenum sulfide selenide monolayer alloy. *Small*, **2014**, 10, 2589-94	11	92
12	Second harmonic generation from artificially stacked transition metal dichalcogenide twisted bilayers. *ACS Nano*, **2014**, 8, 2951-8	16.7	294
11	Large-area synthesis of highly crystalline WSe(2) monolayers and device applications. *ACS Nano*, **2014**, 8, 923-30	16.7	732
10	Observing grain boundaries in CVD-grown monolayer transition metal dichalcogenides. *ACS Nano*, **2014**, 8, 11401-8	16.7	97
9	Monolayer MoSe2 grown by chemical vapor deposition for fast photodetection. *ACS Nano*, **2014**, 8, 8582-90	16.7	413
8	Spectroscopic signatures for interlayer coupling in MoS2-WSe2 van der Waals stacking. *ACS Nano*, **2014**, 8, 9649-56	16.7	233
7	Role of metal contacts in high-performance phototransistors based on WSe2 monolayers. *ACS Nano* , **2014**, 8, 8653-61	16.7	317
6	Controllable Synthesis of Band-Gap-Tunable and Monolayer Transition-Metal Dichalcogenide Alloys. *Frontiers in Energy Research*, **2014**, 2,	3.8	70
5	Hole mobility enhancement and p -doping in monolayer WSe 2 by gold decoration. *2D Materials*, **2014**, 1, 034001	5.9	104
4	Ultrafast generation of pseudo-magnetic field for valley excitons in WSe monolayers. *Science*, **2014**, 346, 1205-8	33.3	192
3	Ultrafast transient terahertz conductivity of monolayer MoS and WSe grown by chemical vapor deposition. *ACS Nano*, **2014**, 8, 11147-53	16.7	161
2	Efficiency Improvement of Silicon Solar Cells by Nitric Acid Oxidization. *Japanese Journal of Applied Physics*, **2010**, 49, 022301	1.4	6
1	Performance Limits and Potential of Multilayer Graphene Tungsten Diselenide Heterostructures. *Advanced Electronic Materials*,2100355	6.4	0