

Hung-Chieh Cheng

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/11618165/publications.pdf>

Version: 2024-02-01

27
papers

5,117
citations

279798

23
h-index

552781

26
g-index

27
all docs

27
docs citations

27
times ranked

9554
citing authors

#	ARTICLE	IF	CITATIONS
1	Van der Waals heterostructures and devices. Nature Reviews Materials, 2016, 1, .	48.7	1,897
2	Few-layer molybdenum disulfide transistors and circuits for high-speed flexible electronics. Nature Communications, 2014, 5, 5143.	12.8	408
3	Toward Barrier Free Contact to Molybdenum Disulfide Using Graphene Electrodes. Nano Letters, 2015, 15, 3030-3034.	9.1	362
4	Monolayer atomic crystal molecular superlattices. Nature, 2018, 555, 231-236.	27.8	323
5	Wafer-scale growth of large arrays of perovskite microplate crystals for functional electronics and optoelectronics. Science Advances, 2015, 1, e1500613.	10.3	265
6	Size-dependent phase transition in methylammonium lead iodide perovskite microplate crystals. Nature Communications, 2016, 7, 11330.	12.8	206
7	Layer-by-Layer Degradation of Methylammonium Lead Tri-iodide Perovskite Microplates. Joule, 2017, 1, 548-562.	24.0	199
8	van der Waals Heterojunction Devices Based on Organohalide Perovskites and Two-Dimensional Materials. Nano Letters, 2016, 16, 367-373.	9.1	185
9	Sensitive pressure sensors based on conductive microstructured air-gap gates and two-dimensional semiconductor transistors. Nature Electronics, 2020, 3, 59-69.	26.0	150
10	Pushing the Performance Limit of Sub-100 nm Molybdenum Disulfide Transistors. Nano Letters, 2016, 16, 6337-6342.	9.1	117
11	High-Quality Graphene π Junctions via Resist-free Fabrication and Solution-Based Noncovalent Functionalization. ACS Nano, 2011, 5, 2051-2059.	14.6	116
12	Electronic and Ionic Transport Dynamics in Organolead Halide Perovskites. ACS Nano, 2016, 10, 6933-6941.	14.6	115
13	Highly-anisotropic optical and electrical properties in layered SnSe. Nano Research, 2018, 11, 554-564.	10.4	114
14	Chemical vapor deposition growth of single-crystalline cesium lead halide microplatelets and heterostructures for optoelectronic applications. Nano Research, 2017, 10, 1223-1233.	10.4	96
15	The Effect of Thermal Annealing on Charge Transport in Organolead Halide Perovskite Microplate Field-Effect Transistors. Advanced Materials, 2017, 29, 1601959.	21.0	91
16	In Situ Probing Molecular Intercalation in Two-Dimensional Layered Semiconductors. Nano Letters, 2019, 19, 6819-6826.	9.1	72
17	An on-chip electrical transport spectroscopy approach for in situ monitoring electrochemical interfaces. Nature Communications, 2015, 6, 7867.	12.8	64
18	Cosolvent Approach for Solution-Processable Electronic Thin Films. ACS Nano, 2015, 9, 4398-4405.	14.6	63

#	ARTICLE	IF	CITATIONS
19	Synthesis of 2D Layered Bi ₂ S ₃ Nanoplates, Bi ₂ S ₃ /WSe ₂ van der Waals Heterostructures and Their Electronic, Optoelectronic Properties. <i>Small</i> , 2017, 13, 1701034.	10.0	59
20	Chemical Vapor Deposition Synthesis and Raman Spectroscopic Characterization of Large-Area Graphene Sheets. <i>Journal of Physical Chemistry A</i> , 2013, 117, 9454-9461.	2.5	57
21	Enhanced interlayer neutral excitons and trions in trilayer van der Waals heterostructures. <i>Npj 2D Materials and Applications</i> , 2018, 2, .	7.9	44
22	High-Current-Density Vertical Tunneling Transistors from Graphene/Highly Doped Silicon Heterostructures. <i>Advanced Materials</i> , 2016, 28, 4120-4125.	21.0	43
23	Vertical Charge Transport and Negative Transconductance in Multilayer Molybdenum Disulfides. <i>Nano Letters</i> , 2017, 17, 5495-5501.	9.1	42
24	Gate-Induced Insulator to Band-Like Transport Transition in Organolead Halide Perovskite. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 429-434.	4.6	20
25	A field-effect approach to directly profiling the localized states in monolayer MoS ₂ . <i>Science Bulletin</i> , 2019, 64, 1049-1055.	9.0	5
26	Nanoplates: Synthesis of 2D Layered Bi ₂ S ₃ Nanoplates, Bi ₂ S ₃ /WSe ₂ van der Waals Heterostructures and Their Electronic, Optoelectronic Properties (<i>Small</i> 38/2017). <i>Small</i> , 2017, 13, .	10.0	2
27	Vertically Stacked Heterostructures for Tunable Photonic Devices - from 2D Materials to Hybrid Perovskites. , 2016, , .		2