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	279701 23 h-index	552653 26 g-index
27 all docs	27 docs citations	27 times ranked	9554 citing authors

#	Article	IF	Citations
1	Sensitive pressure sensors based on conductive microstructured air-gap gates and two-dimensional semiconductor transistors. Nature Electronics, 2020, 3, 59-69.	13.1	150
2	In Situ Probing Molecular Intercalation in Two-Dimensional Layered Semiconductors. Nano Letters, 2019, 19, 6819-6826.	4.5	72
3	A field-effect approach to directly profiling the localized states in monolayer MoS2. Science Bulletin, 2019, 64, 1049-1055.	4.3	5
4	Monolayer atomic crystal molecular superlattices. Nature, 2018, 555, 231-236.	13.7	323
5	Highly-anisotropic optical and electrical properties in layered SnSe. Nano Research, 2018, 11, 554-564.	5.8	114
6	Enhanced interlayer neutral excitons and trions in trilayer van der Waals heterostructures. Npj 2D Materials and Applications, 2018, 2, .	3.9	44
7	Gate-Induced Insulator to Band-Like Transport Transition in Organolead Halide Perovskite. Journal of Physical Chemistry Letters, 2017, 8, 429-434.	2.1	20
8	Nanoplates: Synthesis of 2D Layered Bil₃ Nanoplates, Bil₃/WSe₂van der Waals Heterostructures and Their Electronic, Optoelectronic Properties (Small 38/2017). Small, 2017, 13, .	5.2	2
9	Vertical Charge Transport and Negative Transconductance in Multilayer Molybdenum Disulfides. Nano Letters, 2017, 17, 5495-5501.	4.5	42
10	Synthesis of 2D Layered Bil₃ Nanoplates, Bil₃/WSe₂van der Waals Heterostructures and Their Electronic, Optoelectronic Properties. Small, 2017, 13, 1701034.	5.2	59
11	Layer-by-Layer Degradation of Methylammonium Lead Tri-iodide Perovskite Microplates. Joule, 2017, 1, 548-562.	11.7	199
12	Chemical vapor deposition growth of single-crystalline cesium lead halide microplatelets and heterostructures for optoelectronic applications. Nano Research, 2017, 10, 1223-1233.	5.8	96
13	The Effect of Thermal Annealing on Charge Transport in Organolead Halide Perovskite Microplate Fieldâ€Effect Transistors. Advanced Materials, 2017, 29, 1601959.	11.1	91
14	Pushing the Performance Limit of Sub-100 nm Molybdenum Disulfide Transistors. Nano Letters, 2016, 16, 6337-6342.	4.5	117
15	Van der Waals heterostructures and devices. Nature Reviews Materials, 2016, 1, .	23.3	1,897
16	Size-dependent phase transition in methylammonium lead iodide perovskite microplate crystals. Nature Communications, 2016, 7, 11330.	5.8	206
17	Highâ€Currentâ€Density Verticalâ€Tunneling Transistors from Graphene/Highly Doped Silicon Heterostructures. Advanced Materials, 2016, 28, 4120-4125.	11.1	43
18	Electronic and Ionic Transport Dynamics in Organolead Halide Perovskites. ACS Nano, 2016, 10, 6933-6941.	7.3	115

#	Article	IF	Citations
19	van der Waals Heterojunction Devices Based on Organohalide Perovskites and Two-Dimensional Materials. Nano Letters, 2016, 16, 367-373.	4.5	185
20	Vertically Stacked Heterostructures for Tunable Photonic Devices - from 2D Materials to Hybrid Perovskites. , 2016, , .		2
21	Toward Barrier Free Contact to Molybdenum Disulfide Using Graphene Electrodes. Nano Letters, 2015, 15, 3030-3034.	4.5	362
22	Cosolvent Approach for Solution-Processable Electronic Thin Films. ACS Nano, 2015, 9, 4398-4405.	7.3	63
23	Wafer-scale growth of large arrays of perovskite microplate crystals for functional electronics and optoelectronics. Science Advances, 2015, 1, e1500613.	4.7	265
24	An on-chip electrical transport spectroscopy approach for in situ monitoring electrochemical interfaces. Nature Communications, 2015, 6, 7867.	5.8	64
25	Few-layer molybdenum disulfide transistors and circuits for high-speed flexible electronics. Nature Communications, 2014, 5, 5143.	5.8	408
26	Chemical Vapor Deposition Synthesis and Raman Spectroscopic Characterization of Large-Area Graphene Sheets. Journal of Physical Chemistry A, 2013, 117, 9454-9461.	1.1	57
27	High-Quality Graphene pâ”n Junctions via Resist-free Fabrication and Solution-Based Noncovalent Functionalization. ACS Nano, 2011, 5, 2051-2059.	7.3	116