Min Sup Choi

List of Publications by Year
in descending order

22 papers	3,699 citations	471509 17 h-index	677142 22 g-index
23 all docs	23 docs citations	23 times ranked	6153 citing authors

#	Article	IF	Citations
1	Flexible and Transparent MoS₂ Field-Effect Transistors on Hexagonal Boron Nitride-Graphene Heterostructures. ACS Nano, 2013, 7, 7931-7936.	14.6	947
2	Fermi Level Pinning at Electrical Metal Contacts of Monolayer Molybdenum Dichalcogenides. ACS Nano, 2017, 11, 1588-1596.	14.6	618
3	Controlled charge trapping by molybdenum disulphide and graphene in ultrathin heterostructured memory devices. Nature Communications, 2013, 4, 1624.	12.8	595
4	Lateral MoS₂ pâ€“n Junction Formed by Chemical Doping for Use in High-Performance Optoelectronics. ACS Nano, 2014, 8, 9332-9340.	14.6	507
5	Transferred via contacts as a platform for ideal two-dimensional transistors. Nature Electronics, 2019, 2, 187-194.	26.0	172
6	Electrical characterization of 2D materials-based field-effect transistors. 2D Materials, 2021, 8, 012002.	4.4	111
7	Carrier transport at the metalâ€“MoS₂interface. Nanoscale, 2015, 7, 9222-9228.	5.6	99
8	Metal-Semiconductor Barrier Modulation for High Photoresponse in Transition Metal Dichalcogenide Field Effect Transistors. Scientific Reports, 2014, 4, 4041.	3.3	99
9	Fermi Level Pinning Dependent 2D Semiconductor Devices: Challenges and Prospects. Advanced Materials, 2022, 34, e2108425.	21.0	80
10	Passivated ambipolar black phosphorus transistors. Nanoscale, 2016, 8, 12773-12779.	5.6	77
11	Electrically Driven Reversible Phase Changes in Layered In₂Se₃ Crystalline Film. Advanced Materials, 2017, 29, 1703568.	21.0	77
12	Effects of plasma treatment on surface properties of ultrathin layered MoS ₂. 2D Materials, 2016, 3, 035002.	4.4	59
13	Plasma treatments to improve metal contacts in graphene field effect transistor. Journal of Applied Physics, 2011, 110, .	2.5	53
14	High Electric Field Carrier Transport and Power Dissipation in Multilayer Black Phosphorus Field Effect Transistor with Dielectric Engineering. Advanced Functional Materials, 2017, 27, 1604025.	14.9	47
15	High carrier mobility in graphene doped using a monolayer of tungsten oxyselenide. Nature Electronics, 2021, 4, 731-739.	26.0	41
16	High performance vertical tunneling diodes using graphene/hexagonal boron nitride/graphene hetero-structure. Applied Physics Letters, 2014, 104, 053103.	3.3	35
17	Damage-Free Atomic Layer Etch of WSe₂: A Platform for Fabricating Clean Two-Dimensional Devices. ACS Applied Materials & Interfaces, 2021, 13, 1930-1942.	8.0	24
18	Homogeneous molybdenum disulfide tunnel diode formed via chemical doping. Applied Physics Letters, 2018, 112, .	3.3	15

#	Article	IF	Citations
19	Low-Resistance p-Type Ohmic Contacts to Ultrathin WSe₂ by Using a Monolayer Dopant. ACS Applied Electronic Materials, 2021, 3, 2941-2947.	4.3	14
20	Chemical Dopantâ€Free Doping by Annealing and Electron Beam Irradiation on 2D Materials. Advanced Electronic Materials, 2021, 7, 2100449.	5.1	14
21	Analytical measurements of contact resistivity in two-dimensional WSe₂ field-effect transistors. 2D Materials, 2021, 8, 045019.	4.4	9
22	Anomalously persistent p-type behavior of WSe₂ field-effect transistors by oxidized edge-induced Fermi-level pinning. Journal of Materials Chemistry C, 2022, 10, 846-853.	5.5	5