Sina Najmaei

List of Publications by Year in descending order

49 papers	12,655 citations	94433 37 h-index	214800 47 g-index
49 all docs	49 docs citations	49 times ranked	15799 citing authors

#	Article	IF	Citations
1	A reversible structural transition at 300 K to a low-symmetry polytype of hafnium disulfide atomic layers. Materials Today Communications, 2021, 26, 101722.	1.9	1
2	Dynamically reconfigurable electronic and phononic properties in intercalated HfS2. Materials Today, 2020, 39, 110-117.	14.2	4
3	Graphene/ZnO van der Waals Stacks for Thermal Management. ACS Applied Nano Materials, 2020, 3, 7136-7142.	5.0	4
4	Plasma-Enhanced Atomic Layer Deposition of HfO₂ on Monolayer, Bilayer, and Trilayer MoS₂ for the Integration of High-Îº Dielectrics in Two-Dimensional Devices. ACS Applied Nano Materials, 2019, 2, 4085-4094.	5.0	36
5	Dominant ZA phonons and thermal carriers in HfS2. Journal of Applied Physics, 2019, 126, .	2.5	9
6	Discrimination of 1â€•and 2â€Propanol by Using the Transient Current Change of a Semiconducting ZnFe₂O₄ Chemiresistor. ChemPlusChem, 2019, 84, 387-391.	2.8	1
7	Surface enhanced resonant Raman scattering in hybrid MoSe₂@Au nanostructures. Optics Express, 2018, 26, 29411.	3.4	20
8	Opto-valleytronic imaging of atomically thin semiconductors. Nature Nanotechnology, 2017, 12, 329-334.	31.5	55
9	Temperature-Dependent Plasmonâ€“Exciton Interactions in Hybrid Au/MoSe₂ Nanostructures. ACS Photonics, 2017, 4, 1653-1660.	6.6	51
10	High-response hybrid quantum dots- 2D conductor phototransistors: recent progress and perspectives. Nanophotonics, 2017, 6, 1263-1280.	6.0	23
11	Modifying the Ni-MoS₂Contact Interface Using a Broad-Beam Ion Source. IEEE Electron Device Letters, 2016, 37, 1234-1237.	3.9	12
12	Ultrafast Optical Microscopy of Single Monolayer Molybdenum Disulfide Flakes. Scientific Reports, 2016, 6, 21601.	3.3	35
13	Optoelectronic devices based on two-dimensional transition metal dichalcogenides. Nano Research, 2016, 9, 1543-1560.	10.4	186
14	Facile Synthesis of Single Crystal Vanadium Disulfide Nanosheets by Chemical Vapor Deposition for Efficient Hydrogen Evolution Reaction. Advanced Materials, 2015, 27, 5605-5609.	21.0	241
15	Controlled Synthesis of Organic/Inorganic van der Waals Solid for Tunable Lightâ€“Matter Interactions. Advanced Materials, 2015, 27, 7800-7808.	21.0	109
16	Spatially Resolved Photoexcited Charge-Carrier Dynamics in Phase-Engineered Monolayer MoS₂. ACS Nano, 2015, 9, 840-849.	14.6	58
17	Photoluminescence Quenching and Charge Transfer in Artificial Heterostacks of Monolayer Transition Metal Dichalcogenides and Few-Layer Black Phosphorus. ACS Nano, 2015, 9, 555-563.	14.6	183
18	Nanoantenna-Enhanced Lightâ€“Matter Interaction in Atomically Thin WS₂. ACS Photonics, 2015, 2, 1260-1265.	6.6	114

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19	Scalable Transfer of Suspended Two-Dimensional Single Crystals. Nano Letters, 2015, 15, 5089-5097.	9.1	38
20	An Atomically Layered InSe Avalanche Photodetector. Nano Letters, 2015, 15, 3048-3055.	9.1	253
21	Synthesis and Defect Investigation of Two-Dimensional Molybdenum Disulfide Atomic Layers. Accounts of Chemical Research, 2015, 48, 31-40.	15.6	140
22	Ternary CuIn₇Se₁₁: Towards Ultraâ€Thin Layered Photodetectors and Photovoltaic Devices. Advanced Materials, 2014, 26, 7666-7672.	21.0	43
23	Plasmonic Pumping of Excitonic Photoluminescence in Hybrid MoS₂â€“Au Nanostructures. ACS Nano, 2014, 8, 12682-12689.	14.6	198
24	Synthesis, characterization and engineering of two-dimensional transition metal dichalcogenides. , 2014, , .		0
25	Nanomechanical cleavage of molybdenum disulphide atomic layers. Nature Communications, 2014, 5, 3631.	12.8	144
26	Tailoring the Physical Properties of Molybdenum Disulfide Monolayers by Control of Interfacial Chemistry. Nano Letters, 2014, 14, 1354-1361.	9.1	129
27	MoS₂atomic layers with artificial active edge sites as transparent counter electrodes for improved performance of dye-sensitized solar cells. Nanoscale, 2014, 6, 5279-5283.	5.6	78
28	Band Gap Engineering and Layer-by-Layer Mapping of Selenium-Doped Molybdenum Disulfide. Nano Letters, 2014, 14, 442-449.	9.1	463
29	Enhancing the photocurrent and photoluminescence of single crystal monolayer MoS₂ with resonant plasmonic nanoshells. Applied Physics Letters, 2014, 104, 031112.	3.3	208
30	Evolution of the Electronic Band Structure and Efficient Photo-Detection in Atomic Layers of InSe. ACS Nano, 2014, 8, 1263-1272.	14.6	534
31	Metallic 1T phase source/drain electrodes for field effect transistors from chemical vapor deposited MoS2. APL Materials, 2014, 2, .	5.1	155
32	Strain and structure heterogeneity in MoS2 atomic layers grown by chemical vapour deposition. Nature Communications, 2014, 5, 5246.	12.8	453
33	Black Phosphorusâ€“Monolayer MoS₂ van der Waals Heterojunction pâ€“n Diode. ACS Nano, 2014, 8, 8292-8299.	14.6	1,125
34	Growth-substrate induced performance degradation in chemically synthesized monolayer MoS2 field effect transistors. Applied Physics Letters, 2014, 104, .	3.3	96
35	Switching Mechanism in Single-Layer Molybdenum Disulfide Transistors: An Insight into Current Flow across Schottky Barriers. ACS Nano, 2014, 8, 1031-1038.	14.6	224
36	Plasmonic Hot Electron Induced Structural Phase Transition in a MoS₂ Monolayer. Advanced Materials, 2014, 26, 6467-6471.	21.0	516

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37	Electrical Transport Properties of Polycrystalline Monolayer Molybdenum Disulfide. ACS Nano, 2014, 8, 7930-7937.	14.6	121
38	Electrical transport and low-frequency noise in chemical vapor deposited single-layer MoS₂ devices. Nanotechnology, 2014, 25, 155702.	2.6	43
39	Quantitative analysis of the temperature dependency in Raman active vibrational modes of molybdenum disulfide atomic layers. Nanoscale, 2013, 5, 9758.	5.6	80
40	Blueshift of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>A</mml:mi></mml:math>-exciton peak in folded monolayer<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>1</mml:mn><mml:mi>H</mml:mi></mml:mrow></mml:math>-MoS<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>. Physical Review B, 2013, 88, .	3.2	37
41	Statistical Study of Deep Submicron Dual-Gated Field-Effect Transistors on Monolayer Chemical Vapor Deposition Molybdenum Disulfide Films. Nano Letters, 2013, 13, 2640-2646.	9.1	197
42	Electrical performance of monolayer MoS2 field-effect transistors prepared by chemical vapor deposition. Applied Physics Letters, 2013, 102, .	3.3	201
43	Synthesis and Photoresponse of Large GaSe Atomic Layers. Nano Letters, 2013, 13, 2777-2781.	9.1	381
44	Intrinsic Structural Defects in Monolayer Molybdenum Disulfide. Nano Letters, 2013, 13, 2615-2622.	9.1	1,766
45	Vapour phase growth and grain boundary structure of molybdenum disulphide atomic layers. Nature Materials, 2013, 12, 754-759.	27.5	1,590
46	Second harmonic microscopy of monolayer MoS<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>. Physical Review B, 2013, 87, .	3.2	539
47	Temperature-dependent phonon shifts in monolayer MoS2. Applied Physics Letters, 2013, 103, .	3.3	199
48	Largeâ€Area Vaporâ€Phase Growth and Characterization of MoS₂ Atomic Layers on a SiO₂ Substrate. Small, 2012, 8, 966-971.	10.0	1,556
49	Correlation between Droplet-Induced Strain Actuation and Voltage Generation in Single-Wall Carbon Nanotube Films. Nano Letters, 2011, 11, 5117-5122.	9.1	6