Tianyi Han

List of Publications by Year in descending order

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25 papers	1,542 citations	516710 16 h-index	580821 25 g-index
25 all docs	25 docs citations	25 times ranked	3352 citing authors

#	Article	IF	Citations
1	High-quality sandwiched black phosphorus heterostructure and its quantum oscillations. Nature Communications, 2015, 6, 7315.	12.8	423
2	Achieving Ultrahigh Carrier Mobility in Two-Dimensional Hole Gas of Black Phosphorus. Nano Letters, 2016, 16, 7768-7773.	9.1	242
3	Probing the electron states and metal-insulator transition mechanisms in molybdenum disulphide vertical heterostructures. Nature Communications, 2015, 6, 6088.	12.8	181
4	Universal low-temperature Ohmic contacts for quantum transport in transition metal dichalcogenides. 2D Materials, 2016, 3, 021007.	4.4	102
5	Isolation and Characterization of Few-Layer Manganese Thiophosphite. ACS Nano, 2017, 11, 11330-11336.	14.6	98
6	Evenâ€“odd layer-dependent magnetotransport of high-mobility Q-valley electrons in transition metal disulfides. Nature Communications, 2016, 7, 12955.	12.8	82
7	Intrinsic valley Hall transport in atomically thin MoS2. Nature Communications, 2019, 10, 611.	12.8	77
8	van der Waals Epitaxial Growth of Atomically Thin Bi₂Se₃ and Thickness-Dependent Topological Phase Transition. Nano Letters, 2015, 15, 2645-2651.	9.1	54
9	Odd-Integer Quantum Hall States and Giant Spin Susceptibility in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>p</mml:mi></mml:math>-Type Few-Layer<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>WSe</mml:mi></mml:mrow><mml:mn>2</mml:mn></mml:msub></ Physical Review Letters, 2017, 118, 067702.	7.8	37
10	Determining Interaction Enhanced Valley Susceptibility in Spin-Valley-Locked MoS₂. Nano Letters, 2019, 19, 1736-1742.	9.1	35
11	Spectroscopy signatures of electron correlations in a trilayer graphene/hBN moirÃ© superlattice. Science, 2022, 375, 1295-1299.	12.6	30
12	Ambipolar quantum transport in few-layer black phosphorus. Physical Review B, 2017, 96, .	3.2	26
13	Detection of interlayer interaction in few-layer graphene. Physical Review B, 2015, 92, .	3.2	22
14	A fast transfer-free synthesis of high-quality monolayer graphene on insulating substrates by a simple rapid thermal treatment. Nanoscale, 2016, 8, 2594-2600.	5.6	20
15	Type-controlled nanodevices based on encapsulated few-layer black phosphorus for quantum transport. 2D Materials, 2016, 3, 031001.	4.4	19
16	Probing Defectâ€Induced Midgap States in MoS₂ Through Grapheneâ€“MoS₂ Heterostructures. Advanced Materials Interfaces, 2015, 2, 1500064.	3.7	17
17	Bridging the gap between atomically thin semiconductors and metal leads. Nature Communications, 2022, 13, 1777.	12.8	17
18	Probing the electronic states and impurity effects in black phosphorus vertical heterostructures. 2D Materials, 2016, 3, 015012.	4.4	16

#	Article	IF	Citations
19	Negative compressibility in graphene-terminated black phosphorus heterostructures. Physical Review B, 2016, 93, .	3.2	10
20	Gate-tunable strong-weak localization transition in few-layer black phosphorus. Nanotechnology, 2018, 29, 035204.	2.6	10
21	Accurate Measurement of the Gap of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mrow><mml:mi>Graphene</mml:mi><mml:mo>/</mml:mo><mml:mi>h</mml:mi></mml:mrow> MoirÃ© Superlattice through Photocurrent Spectroscopy. Physical Review Letters, 2021, 126, 146402.	7.8	10
22	Side-gate modulation effects on high-quality BN-Graphene-BN nanoribbon capacitors. Applied Physics Letters, 2014, 105, .	3.3	7
23	Charge density wave phase transition on the surface of electrostatically doped multilayer graphene. Applied Physics Letters, 2016, 109, .	3.3	4
24	Fluctuation-induced tunneling conduction in iodine-doped bilayer graphene. Journal of Applied Physics, 2018, 123, 244302.	2.5	2
25	A Tunable Resonant Circuit Based on Graphene Quantum Capacitor. Advanced Electronic Materials, 2021, 7, 2001009.	5.1	1