Jian-Hao Chen

List of Publications by Year
in descending order

56 papers	8,989 citations	257450 24 h-index	175258 52 g-index
56 all docs	56 docs citations	56 times ranked	11670 citing authors

#	Article	IF	Citations
1	Intrinsic and extrinsic performance limits of graphene devices on SiO2. Nature Nanotechnology, 2008, 3, 206-209.	31.5	2,730
2	Atomic Structure of Graphene on SiO2. Nano Letters, 2007, 7, 1643-1648.	9.1	1,392
3	Charged-impurity scattering in graphene. Nature Physics, 2008, 4, 377-381.	16.7	1,318
4	Defect Scattering in Graphene. Physical Review Letters, 2009, 102, 236805.	7.8	566
5	Tunable Kondo effect in graphene with defects. Nature Physics, 2011, 7, 535-538.	16.7	353
6	Tuning the Effective Fine Structure Constant in Graphene: Opposing Effects of Dielectric Screening on Short- and Long-Range Potential Scattering. Physical Review Letters, 2008, 101, 146805.	7.8	321
7	Printed Graphene Circuits. Advanced Materials, 2007, 19, 3623-3627.	21.0	278
8	Atomic Resolution Imaging of Grain Boundary Defects in Monolayer Chemical Vapor Deposition-Grown Hexagonal Boron Nitride. Journal of the American Chemical Society, 2013, 135, 6758-6761.	13.7	225
9	Nonlinear photoresponse of type-II Weyl semimetals. Nature Materials, 2019, 18, 476-481.	27.5	185
10	On the Quantum Spin Hall Gap of Monolayer 1Tâ€²â€WTe₂. Advanced Materials, 2016, 28, 4845-4851.	21.0	141
11	Anisotropic Broadband Photoresponse of Layered Typeâ€II Weyl Semimetal MoTe₂. Advanced Materials, 2018, 30, e1707152.	21.0	139
12	High-Fidelity Conformation of Graphene to<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>SiO</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math>Topographic Features. Physical Review Letters, 2010, 105, 215504.	7.8	118
13	Controlled growth of a line defect in graphene and implications for gate-tunable valley filtering. Physical Review B, 2014, 89, .	3.2	117
14	Broadband Anisotropic Photoresponse of the â€œHydrogen Atomâ€•Version Type-II Weyl Semimetal Candidate TaIrTe₄. ACS Nano, 2018, 12, 4055-4061.	14.6	94
15	Diffusive charge transport in graphene on SiO2. Solid State Communications, 2009, 149, 1080-1086.	1.9	92
16	Wafer-scale production of patterned transition metal ditelluride layers for two-dimensional metalâ€“semiconductor contacts at the Schottkyâ€“Mott limit. Nature Electronics, 2020, 3, 207-215.	26.0	91
17	Hoogeâ€™s constant for carbon nanotube field effect transistors. Applied Physics Letters, 2006, 88, 203116.	3.3	89
18	Wafer-Scale Growth of Single-Crystal 2D Semiconductor on Perovskite Oxides for High-Performance Transistors. Nano Letters, 2019, 19, 2148-2153.	9.1	82

#	Article	IF	Citations
19	Charged impurity scattering in bilayer graphene. Physical Review B, 2010, 82, .	3.2	81
20	Gate tunable giant anisotropic resistance in ultra-thin GaTe. Nature Communications, 2019, 10, 2302.	12.8	72
21	Robust edge photocurrent response on layered type II Weyl semimetal WTe2. Nature Communications, 2019, 10, 5736.	12.8	69
22	Gate-controlled reversible rectifying behaviour in tunnel contacted atomically-thin MoS2 transistor. Nature Communications, 2017, 8, 970.	12.8	68
23	Raman Signatures of Broken Inversion Symmetry and Inâ€Plane Anisotropy in Typeâ€II Weyl Semimetal Candidate TaIrTe₄. Advanced Materials, 2018, 30, e1706402.	21.0	54
24	Uncovering the dominant scatterer in graphene sheets on<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>SiO</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:msu Physical Review B, 2010, 82, .	3.2	47
25	Electrically switchable van der Waals magnon valves. Nature Communications, 2021, 12, 6279.	12.8	26
26	Photocurrent response of type-II Dirac semimetal PtTe₂. 2D Materials, 2020, 7, 034003.	4.4	24
27	Thickness and growth-condition dependence of in-situ mobility and carrier density of epitaxial thin-film Bi2Se3. Applied Physics Letters, 2014, 105, 173506.	3.3	18
28	Solution-Based Property Tuning of Black Phosphorus. ACS Applied Materials & Interfaces, 2018, 10, 39890-39897.	8.0	16
29	Reply to "Origin of logarithmic resistance correction in graphene". Nature Physics, 2012, 8, 353-353.	16.7	15
30	Gate tunable magneto-resistance of ultra-thin Wâ€‰Te ₂ devices. 2D Materials, 2017, 4, 021018.	4.4	13
31	Electrically Tunable Energy Bandgap in Dual-Gated Ultra-Thin Black Phosphorus Field Effect Transistors. Chinese Physics Letters, 2017, 34, 047304.	3.3	13
32	Ultraviolet Light-Induced Persistent and Degenerated Doping in MoS₂ for Potential Photocontrollable Electronics Applications. ACS Applied Materials & Interfaces, 2018, 10, 27840-27849.	8.0	13
33	DyOCl: A rare-earth based two-dimensional van der Waals material with strong magnetic anisotropy. Physical Review B, 2021, 104, .	3.2	13
34	Barkhausen effect in the first order structural phase transition in type-II Weyl semimetal MoTe ₂. 2D Materials, 2018, 5, 044003.	4.4	12
35	Electron-electron interactions and weak antilocalization in few-layer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Zr</mml:mi><mml:msub><mml:mi>Te devices. Physical Review B, 2021, 103, .	3.2	11
36	A novel contact engineering method for transistors based on two-dimensional materials. Journal of Materials Science and Technology, 2021, 69, 15-19.	10.7	10

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37	Transfer printing as a method for fabricating hybrid devices on flexible substrates. , 2007, 6658, 141.		8
38	Electronic transport properties of Co cluster-decorated graphene. Chinese Physics B, 2018, 27, 067304.	1.4	8
39	Reliable Nonvolatile Memory Black Phosphorus Ferroelectric Field-Effect Transistors with van der Waals Buffer. ACS Applied Materials & Interfaces, 2019, 11, 42358-42364.	8.0	8
40	Circular photogalvanic effect from third-order nonlinear effect in 1Tâ€™-MoTe₂. 2D Materials, 2021, 8, 025016.	4.4	8
41	Quantum Spin Hall Materials. Advanced Quantum Technologies, 2019, 2, 1900026.	3.9	6
42	Gate-controlled magnetic transitions in Fe₃GeTe₂ with lithium ion conducting glass substrate*. Chinese Physics B, 2021, 30, 097504.	1.4	6
43	Nanostructures on graphene using supramolecule and supramolecular nanocomposites. Nanoscale, 2014, 6, 4503-4507.	5.6	5
44	Nonlinear transport of graphene in the quantum Hall regime. 2D Materials, 2017, 4, 015003.	4.4	4
45	Liquid phase mass production of air-stable black phosphorus/phospholipids nanocomposite with ultralow tunneling barrier. 2D Materials, 2018, 5, 025012.	4.4	4
46	Micro-MOKE with optical interference in the study of 2D Cr2Ge2Te6 nanoflake based magnetic heterostructures. AIP Advances, 2019, 9, .	1.3	4
47	Anisotropic Raman spectrum and transport properties of AuTe₂Br flakes. Journal of Physics Condensed Matter, 2020, 32, 12LT01.	1.8	4
48	Evidence of tunable magnetic coupling in hydrogenated graphene. Physical Review B, 2020, 102, .	3.2	4
49	Two superconductor-insulator phase transitions in the spinel oxide Li1Â±xTi2O4âˆ’Î´ induced by ionic liquid gating. Physical Review B, 2021, 103, .	3.2	3
50	Repairable Polymer Solid Electrolyte Gated MoS₂ Field Effect Devices with Large Radiation Tolerance. Advanced Electronic Materials, 2022, 8, 2100619.	5.1	3
51	Crossover behavior in the magnetoresistance of thin flakes of the topological material <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Zr</mml:mi><mml:msub><mml:mi>Te</mml:mi><mml:mi><mml:m Physical Review B, 2021, 104, .	3.2	3
52	Enhancement of spin-orbit coupling and magnetic scattering in hydrogenated graphene. Physical Review B, 2021, 104, .	3.2	3
53	In situ monitoring of resistivity and carrier concentration during molecular beam epitaxy of topological insulator Bi₂Se₃. Proceedings of SPIE, 2013, , .	0.8	2
54	Scattering mechanisms in graphene. , 2009, , .		0

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55	In Situ High Temperature Atomic Resolution Transmission Electron Microscopy of 2D Nanomaterials. Microscopy and Microanalysis, 2014, 20, 1770-1771.	0.4	0
56	Electrical Transport in Graphene: Carrier Scattering by Impurities and Phonons. , 0, , 25-37.		0