Wei-Hua Wang

List of Publications by Year
in descending order

49	1,879	331642 21	254170 43
papers	citations	h-index	g-index

49	49	49	3369
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	High-Mobility InSe Transistors: The Role of Surface Oxides. ACS Nano, 2017, 11, 7362-7370.	14.6	177
2	Electrical detection of spin precession in single layer graphene spin valves with transparent contacts. Applied Physics Letters, 2009, 94, .	3.3	141
3	Electron-Hole Asymmetry of Spin Injection and Transport in Single-Layer Graphene. Physical Review Letters, 2009, 102, 137205.	7.8	130
4	Spin transport and relaxation in graphene. Journal of Magnetism and Magnetic Materials, 2012, 324, 369-381.	2.3	128
5	High-Quality Graphene pâ"n Junctions via Resist-free Fabrication and Solution-Based Noncovalent Functionalization. ACS Nano, 2011, 5, 2051-2059.	14.6	116
6	Extrinsic Origin of Persistent Photoconductivity in Monolayer MoS2 Field Effect Transistors. Scientific Reports, 2015, 5, 11472.	3.3	110
7	Magnetotransport properties of mesoscopic graphite spin valves. Physical Review B, 2008, 77, .	3.2	104
8	Biologically inspired graphene-chlorophyll phototransistors with high gain. Carbon, 2013, 63, 23-29.	10.3	100
9	Self-Encapsulated Doping of n-Type Graphene Transistors with Extended Air Stability. ACS Nano, 2012, 6, 6215-6221.	14.6	76
10	Enhancement of spin coherence using Q-factor engineering in semiconductor microdisc lasers. Nature Materials, 2006, 5, 261-264.	27.5	69
11	Transport/Magnetotransport of High-Performance Graphene Transistors on Organic Molecule-Functionalized Substrates. Nano Letters, 2012, 12, 964-969.	9.1	62
12	Highly Sensitive, Visible Blind, Wearable, and Omnidirectional Near-Infrared Photodetectors. ACS Nano, 2018, 12, 9596-9607.	14.6	62
13	Transparent, Wearable, Broadband, and Highly Sensitive Upconversion Nanoparticles and Graphene-Based Hybrid Photodetectors. ACS Photonics, 2018, 5, 2336-2347.	6.6	59
14	Surface Oxidation Doping to Enhance Photogenerated Carrier Separation Efficiency for Ultrahigh Gain Indium Selenide Photodetector. ACS Photonics, 2017, 4, 2930-2936.	6.6	44
15	Growth of atomically smooth MgO films on graphene by molecular beam epitaxy. Applied Physics Letters, 2008, 93, .	3.3	43
16	Precisely Controlled Ultrastrong Photoinduced Doping at Grapheneâ€"Heterostructures Assisted by Trapâ€Stateâ€Mediated Charge Transfer. Advanced Materials, 2015, 27, 7809-7815.	21.0	39
17	High-Performance InSe Transistors with Ohmic Contact Enabled by Nonrectifying Barrier-Type Indium Electrodes. ACS Applied Materials & Interfaces, 2018, 10, 33450-33456.	8.0	35
18	Efficient Numerical Schemes for Electronic States in Coupled Quantum Dots. Journal of Nanoscience and Nanotechnology, 2008, 8, 3695-3709.	0.9	31

#	Article	IF	Citations
19	Transport in disordered monolayer MoS₂nanoflakesâ€"evidence for inhomogeneous charge transport. Nanotechnology, 2014, 25, 375201.	2.6	29
20	Static and dynamic spectroscopy of(Al,Ga)Asâ•GaAsmicrodisk lasers with interface fluctuation quantum dots. Physical Review B, 2005, 71, .	3.2	24
21	Nonlinear bandgap opening behavior of BN co-doped graphene. Carbon, 2016, 107, 857-864.	10.3	23
22	Self-Sufficient and Highly Efficient Gold Sandwich Upconversion Nanocomposite Lasers for Stretchable and Bio-applications. ACS Applied Materials & Interfaces, 2020, 12, 19840-19854.	8.0	21
23	Oxidation-induced biquadratic coupling in Co/Fe/MgO/Fe(001). Physical Review B, 2009, 79, .	3.2	20
24	Tunable Photoinduced Carrier Transport of a Black Phosphorus Transistor with Extended Stability Using a Light-Sensitized Encapsulated Layer. ACS Photonics, 2016, 3, 1102-1108.	6.6	20
25	Revealing anisotropic strain in exfoliated graphene by polarized Raman spectroscopy. Nanoscale, 2013, 5, 9626.	5.6	19
26	Oxidized-monolayer tunneling barrier for strong Fermi-level depinning in layered InSe transistors. Npj 2D Materials and Applications, 2019, 3, .	7.9	19
27	Observation of strain effect on the suspended graphene by polarized Raman spectroscopy. Nanoscale Research Letters, 2012, 7, 533.	5.7	17
28	Inversion of Ferromagnetic Proximity Polarization by MgO Interlayers. Physical Review Letters, 2008, 100, 237205.	7.8	14
29	Influence of Oxygen Vacancies on the Frictional Properties of Nanocrystalline Zinc Oxide Thin Films in Ambient Conditions. Langmuir, 2017, 33, 8362-8371.	3.5	14
30	Layer-dependent morphologies of silver on n-layer graphene. Nanoscale Research Letters, 2012, 7, 618.	5.7	13
31	Understanding the Interplay between Molecule Orientation and Graphene Using Polarized Raman Spectroscopy. ACS Photonics, 2016, 3, 985-991.	6.6	12
32	Surface-enhanced Raman scattering of suspended monolayer graphene. Nanoscale Research Letters, 2013, 8, 480.	5.7	11
33	Residue-free fabrication of high-performance graphene devices by patterned PMMA stencil mask. AIP Advances, 2014, 4, .	1.3	11
34	Environment-insensitive and gate-controllable photocurrent enabled by bandgap engineering of MoS2 junctions. Scientific Reports, 2017, 7, 44768.	3.3	11
35	Ultrahighly Photosensitive and Highly Stretchable Rippled Structure Photodetectors Based on Perovskite Nanocrystals and Graphene. ACS Applied Electronic Materials, 2019, 1, 1517-1526.	4.3	11
36	Spin transport in graphite and graphene spin valves. Proceedings of SPIE, 2009, , .	0.8	8

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37	Optical properties of Zn0.5Cd0.5Se thin films grown on InP by molecular beam epitaxy. Solid State Communications, 2003, 128, 461-466.	1.9	7
38	Probing substrate influence on graphene by analyzing Raman lineshapes. Nanoscale Research Letters, 2014, 9, 64.	5.7	7
39	Demonstration of distinct semiconducting transport characteristics of monolayer graphene functionalized via plasma activation of substrate surfaces. Carbon, 2015, 93, 353-360.	10.3	7
40	Probing 2D sub-bands of bi-layer graphene. RSC Advances, 2014, 4, 51067-51071.	3.6	5
41	Observation of quantum Hall plateau-plateau transition and scaling behavior of the zeroth Landau level in graphene<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>p</mml:mi><mml:mtext>â”</mml:mtext><mml:mi>n< Physical Review B, 2016, 93, .	3.2	5
42	Probing the optical characteristics of MoS₂ under external electrical fields using polarized Raman spectroscopy. Journal Physics D: Applied Physics, 2018, 51, 385303.	2.8	5
43	Phase Modulation of Self-Gating in Ionic Liquid-Functionalized InSe Field-Effect Transistors. Nano Letters, 2022, 22, 2270-2276.	9.1	5
44	Exciton localization in MgxZnyCd1â”xâ”ySe alloy. Physica Status Solidi (B): Basic Research, 2004, 241, 495-498.	1.5	4
45	Fabrication and Characterization of Modulation-Doped ZnSe/(Zn,Cd)Se (110) Quantum Wells: A New System for Spin Coherence Studies. Journal of Superconductivity and Novel Magnetism, 2005, 18, 185-188.	0.5	4
46	Magnetotransport in hybrid InSe/monolayer graphene on SiC. Nanotechnology, 2021, 32, 155704.	2.6	3
47	Temperature dependence of the energy gap of MgxZnyCd1â”xâ”ySe alloy. Physica Status Solidi (B): Basic Research, 2004, 241, R5-R7.	1.5	2
48	Spatially and Precisely Controlled Large-Scale and Persistent Optical Gating in a TiOxâ€“MoS2 Heterostructure. ACS Applied Materials & Interfaces, 2018, 10, 38319-38325.	8.0	2
49	Visible Blind, Wearable, and Omnidirectional Near Infrared Photodetector: A Filterless Approach. , 2019, , .		0