Hui Zeng

List of Publications by Year
in descending order

65 papers	917 citations	471061 17 h-index	500791 28 g-index
65 all docs	65 docs citations	65 times ranked	1159 citing authors

#	Article	IF	Citations
1	First principles calculation of metal (Ni and Cu) contact on the electronic transport properties of 2D GeP semiconductor. Applied Surface Science, 2021, 542, 148596.	3.1	12
2	Computational design of a polymorph for 2D IIIâ€“V orthorhombic monolayers by first principles calculations: excellent anisotropic, electronic and optical properties. Physical Chemistry Chemical Physics, 2021, 23, 3771-3778.	1.3	20
3	Typeâ€II AsP/As van der Waals Heterostructures: Tunable Anisotropic Electronic Structures and Optical Properties. Advanced Materials Interfaces, 2021, 8, 2001555.	1.9	11
4	Spin-valley coupling and valley splitting in the MoSi2N4/CrCl3 van der Waals heterostructure. Applied Physics Letters, 2021, 119, .	1.5	24
5	Simulation of Radio Communication Blackout Mitigation with DGTD Method. , 2021, , .		1
6	Liquid-phase growth and optoelectronic properties of two-dimensional hybrid perovskites CH₃NH₃PbX₃ (X = Cl, Br, I). Nanoscale, 2020, 12, 1100-1108.	2.8	20
7	Tunable Electronic Properties and Potential Applications of 2D GeP/Graphene van der Waals Heterostructure. Advanced Electronic Materials, 2020, 6, 1901024.	2.6	42
8	Electron transport properties of 2D IV-V semiconductors and their improvement by graphene contact. Applied Surface Science, 2020, 519, 146203.	3.1	11
9	Simulation of Quantum Radar Cross Section for Electrically Large Targets With GPU. IEEE Access, 2019, 7, 154260-154267.	2.6	11
10	A Numerical Simulation of C3N Nanoribbon-Based Field-Effect Transistors. IEEE Transactions on Electron Devices, 2019, 66, 1087-1091.	1.6	11
11	X3N (X=C and Si) monolayers and their van der Waals Heterostructures with graphene and h-BN: Emerging tunable electronic structures by strain engineering. Carbon, 2019, 145, 1-9.	5.4	36
12	dâ€™Alembertâ€“SchrÃ¶dinger hybrid simulation for laser-induced multiquantum state transitions in a three-dimensional artificial atom. Optics Letters, 2019, 44, 4399.	1.7	2
13	Monolayered Silicon and Germanium Monopnictide Semiconductors: Excellent Stability, High Absorbance, and Strain Engineering of Electronic Properties. ACS Applied Materials & Interfaces, 2018, 10, 5133-5139.	4.0	89
14	Tuning electronic and optical properties of arsenene/C₃N van der Waals heterostructure by vertical strain and external electric field. Nanotechnology, 2018, 29, 075201.	1.3	89
15	Time-dependent QM/EM Simulation Method Applied to Carbon Nanotube. , 2018, , .		0
16	Transport Properties of C3N Nanoribbon-Based Nanoscale Transistors. , 2018, , .		0
17	Full-Quantum Numerical Scheme of Finite Difference Time Domain Method for High-Order Harmonic Generation. IEEE Journal on Multiscale and Multiphysics Computational Techniques, 2018, 3, 74-79.	1.4	2
18	Transient Analysis for Electrothermal Properties in Nanoscale Transistors. IEEE Transactions on Electron Devices, 2018, 65, 3930-3935.	1.6	26

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19	Chemical Functionalization of Pentagermanene Leads to Stabilization and Tunable Electronic Properties by External Tensile Strain. ACS Omega, 2017, 2, 171-180.	1.6	15
20	Chemically functionalized germanene for spintronic devices: a first-principles study. Physical Chemistry Chemical Physics, 2016, 18, 9809-9815.	1.3	20
21	Atomic and electronic structures of carbon nanotube covalent connecting with graphene by oxygen molecular. EPJ Applied Physics, 2016, 73, 20401.	0.3	0
22	Two-dimensional germanane and germanane ribbons: density functional calculation of structural, electronic, optical and transport properties and the role of defects. RSC Advances, 2016, 6, 28298-28307.	1.7	18
23	Computational Modeling of Physical and Chemical Properties of Nanomaterials. Journal of Nanomaterials, 2015, 2015, 1-2.	1.5	2
24	First Principles Study of Electronic and Magnetic Properties of Co-Doped Armchair Graphene Nanoribbons. Journal of Nanomaterials, 2015, 2015, 1-9.	1.5	3
25	Bulk Synthesis of Fe₃Al Intermetallic Compound Nanoparticles by Flow-Levitation Method. Nano, 2015, 10, 1550002.	0.5	3
26	Quantum chemical study on the structure and the analytic potential energy function of PS2 (X2A1). Russian Journal of Physical Chemistry A, 2015, 89, 668-673.	0.1	1
27	Effects of Stone-Wales Defect Symmetry on the Electronic Structure and Transport Properties of Narrow Armchair Graphene Nanoribbon. Journal of Physics and Chemistry of Solids, 2015, 77, 8-13.	1.9	17
28	Bond Dissociation Energies and Electronic Structures in a Series of Peroxy Radicals: A Theoretical Study. Journal of the Chinese Chemical Society, 2014, 61, 556-562.	0.8	2
29	Vacancy-Induced Intramolecular Junctions and Quantum Transport in Metallic Carbon Nanotubes. Journal of Physical Chemistry C, 2014, 118, 22984-22990.	1.5	1
30	Theoretical studies on a series of nitroaliphatic energetic compounds. Chinese Physics B, 2014, 23, 063103.	0.7	0
31	Atomistic simulations of divacancy defects in armchair graphene nanoribbons: Stability, electronic structure, and electron transport properties. Physics Letters, Section A: General, Atomic and Solid State Physics, 2014, 378, 416-420.	0.9	23
32	Influence of edge reconstruction on the electron transport in zigzag graphene nanoribbon. Wuli Xuebao/Acta Physica Sinica, 2014, 63, 117102.	0.2	3
33	Coupled-cluster single-double theory study on the analytic potential energy function of the SeN2 radicals. Wuli Xuebao/Acta Physica Sinica, 2014, 63, 063101.	0.2	1
34	Edge reconstruction limited electron transport of zigzag graphene nanoribbon. European Physical Journal B, 2013, 86, 1.	0.6	7
35	Quantum chemical calculations of bond dissociation energies for COOH scission and electronic structure in some acids. Chinese Physics B, 2013, 22, 023301.	0.7	7
36	Critical behavior of nonlocal fundamental defect mode. Journal of the Optical Society of America B: Optical Physics, 2013, 30, 319.	0.9	3

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37	Structural Defects on the Electronic Transport Properties of Carbon-Based Nanostructures. Carbon Materials, 2013, , 77-103.	0.2	0
38	Theoretical study of the structure and analytic potential energy function for the ground state of the PO₂molecule. Chinese Physics B, 2012, 21, 078202.	0.7	5
39	Controllable tuning of the electronic transport in pre-designed graphene nanoribbon. Current Applied Physics, 2012, 12, 1611-1614.	1.1	10
40	Modulation of electric behavior by position-dependent substitutional impurity in zigzag-edged graphene nanoribbon. Computational Materials Science, 2012, 60, 234-238.	1.4	11
41	Tailoring atomic structure to control the electronic transport in zigzag graphene nanoribbon. Physics Letters, Section A: General, Atomic and Solid State Physics, 2012, 376, 3277-3280.	0.9	3
42	Electronic and optical properties of vacancy-doped WS2 monolayers. AIP Advances, 2012, 2, .	0.6	41
43	Bond dissociation energies for removal of the hydroxyl group in some alcohols from quantum chemical calculations. International Journal of Quantum Chemistry, 2012, 112, 665-671.	1.0	8
44	Firstâ€principles investigation of H₂O adsorption on a BN coâ€doped nanotube. Physica Status Solidi (B): Basic Research, 2012, 249, 69-73.	0.7	2
45	Role of nitrogen distribution in asymmetric Stoneâ€“Wales defects on electronic transport of graphene nanoribbons. Physica Status Solidi (B): Basic Research, 2012, 249, 128-133.	0.7	4
46	Atomic and electronic structures of divacancy in graphene nanoribbons. Physica B: Condensed Matter, 2012, 407, 204-208.	1.3	7
47	Atomic vacancy defects in the electronic properties of semi-metallic carbon nanotubes. Journal of Applied Physics, 2011, 109, 083716.	1.1	14
48	Electronic transport properties of graphene nanoribbons with anomalous edges. EPJ Applied Physics, 2011, 53, 20602.	0.3	10
49	Effect of N doping and Stone-Wales defects on the electronic properties of graphene nanoribbons. European Physical Journal B, 2011, 79, 335-340.	0.6	42
50	Electronic and optical properties of the H2O adsorbed the B-N-C nanotubes. European Physical Journal B, 2011, 81, 133-136.	0.6	4
51	Defect symmetry influence on electronic transport of zigzag nanoribbons. Nanoscale Research Letters, 2011, 6, 254.	3.1	31
52	A theoretical study of the accurate analytic potential energy curve and spectroscopic properties for AlF (X1Î£+). Computational and Theoretical Chemistry, 2011, 963, 130-134.	1.1	4
53	Soliton control in inhomogeneous nonlocal media. Optics Communications, 2011, 284, 1370-1378.	1.0	6
54	Vacancy cluster-limited electronic transport in metallic carbon nanotube. Solid State Communications, 2011, 151, 9-12.	0.9	9

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55	THE EFFECTS OF CO-DOPING OF B AND N ON THE ELECTRONIC TRANSPORT OF SINGLE-WALLED CARBON NANOTUBES. Modern Physics Letters B, 2011, 25, 1211-1218.	1.0	2
56	TRANSPORT PROPERTIES OF SINGLE-WALLED CARBON NANOTUBE WITH INTRAMOLECULAR JUNCTIONS. Modern Physics Letters B, 2010, 24, 2445-2455.	1.0	6
57	Chirality Effects in Atomic Vacancy-Limited Transport in Metallic Carbon Nanotubes. ACS Nano, 2010, 4, 292-296.	7.3	25
58	The electronic properties of graphene nanoribbons with boron/nitrogen codoping. Applied Physics Letters, 2010, 96, 243110.	1.5	47
59	Effect of nitrogen-vacancy complex defects on the electronic transport of carbon nanotube. Applied Physics Letters, 2009, 94, .	1.5	7
60	Effects of nitrogen substitutional doping on the electronic transport of carbon nanotube. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 462-466.	1.3	40
61	Quantum transport properties of carbon nanotube with topologic defects. EPJ Applied Physics, 2008, 43, 19-22.	0.3	4
62	Effects of nitrogen in Stone-Wales defect on the electronic transport of carbon nanotube. Applied Physics Letters, 2007, 91, .	1.5	20
63	Curvature effects on electronic properties of small radius nanotube. Applied Physics Letters, 2007, 91, .	1.5	13
64	Influence of boron distribution on the transport of single-walled carbon nanotube. Applied Physics A: Materials Science and Processing, 2007, 89, 789-792.	1.1	8
65	Adosorption of H2O on the Inside Surface of B-N Co-Doped Carbon Nanotube. Key Engineering Materials, 0, 480-481, 132-136.	0.4	1