Peng Zhao

List of Publications by Year
in descending order

48 papers	547 citations	687363 13 h-index	677142 22 g-index
50 all docs	50 docs citations	50 times ranked	592 citing authors

#	Article	IF	Citations
1	All-carbon multifunctional molecular spintronic device: A first-principles study. Chemical Physics Letters, 2022, 790, 139356.	2.6	2
2	TPV radical-based multifunctional molecular spintronic device: A first-principles study. Physica E: Low-Dimensional Systems and Nanostructures, 2022, 143, 115345.	2.7	1
3	Multifunctional molecular spintronic device based on zigzag-edged trigonal graphene: A first-principles study. Physics Letters, Section A: General, Atomic and Solid State Physics, 2022, 445, 128244.	2.1	0
4	Spin-dependent seebeck effect and pure spin current in ferromagnetic fluorinated boron nitride nanotubes. Physica E: Low-Dimensional Systems and Nanostructures, 2021, 128, 114614.	2.7	1
5	Spin-polarized transport properties and spin molecular Boolean logic gates in planar four-coordinate Fe complex-based molecular devices with carbon nanotube bridges and electrodes. Journal of Magnetism and Magnetic Materials, 2020, 493, 165712.	2.3	6
6	Molecular logic gates based on spin caloritronic transport properties of Mn phthalocyanine nanoribbon. Physics Letters, Section A: General, Atomic and Solid State Physics, 2020, 384, 126256.	2.1	7
7	Magnetic field- and light-driven spin molecular logic gates: A first-principles study. Physica E: Low-Dimensional Systems and Nanostructures, 2020, 121, 114130.	2.7	4
8	Molecular Boolean logic gates based on spin caloritronic transport properties of planar four-coordinate Fe complex-based molecular devices. Chemical Physics Letters, 2019, 733, 136671.	2.6	4
9	Spin caloritronic transport properties and thermal spin logic gates in Mn-porphyrin trimer-based molecular junction. Journal of Magnetism and Magnetic Materials, 2019, 489, 165381.	2.3	6
10	Large dual spin-rectifying and high-efficiency dual spin-filtering in cyclooligomeric Mn-phthalocyanine dimer molecular junction. Chemical Physics Letters, 2019, 724, 73-79.	2.6	6
11	Spin-filtering, giant magnetoresistance, negative differential resistance effects and spin logic gate in P2TA-O2-based molecular junction with different transition metal atoms. Organic Electronics, 2018, 57, 104-109.	2.6	18
12	Azulene-like molecular devices with high spin filtering, strong spin rectifying, and giant magnetoresistance effects. Organic Electronics, 2018, 59, 113-120.	2.6	10
13	Spin Seebeck effect and thermal colossal magnetoresistance in Christmas-tree silicene nanoribbons. Chemical Physics Letters, 2018, 699, 250-254.	2.6	5
14	Spin-polarized and thermospin-polarized transport properties of phthalocyanine dimer based molecular junction with different transition metal atoms. Journal of Chemical Physics, 2018, 149, 134305.	3.0	7
15	Germanene Growth on Al(111): A Case Study of Interface Effect. Journal of Physical Chemistry C, 2018, 122, 18669-18681.	3.1	17
16	Thermal spin-filtering, magnetoresistance effects and thermal spin logic gate in Mn-oligoporphyrin-based molecular device. Organic Electronics, 2018, 62, 277-283.	2.6	8
17	Magnetic Transport Properties of Fe-Phthalocyanine Dimer with Carbon Nanotube Electrodes*. Chinese Physics Letters, 2017, 34, 047302.	3.3	1
18	Half-metallicity and ferromagnetism in penta-AlN2 nanostructure. Scientific Reports, 2016, 6, 33060.	3.3	33

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19	Spin Caloritronic Transport of 1,3,5-Triphenylverdazyl Radical. Chinese Physics Letters, 2016, 33, 037303.	3.3	1
20	Spin-polarized transport properties of Fe-oligoporphyrin dimer-based molecular device. Organic Electronics, 2016, 36, 160-165.	2.6	10
21	Spin-dependent transport properties in a pyreneâ€“graphene nanoribbon device. RSC Advances, 2016, 6, 16634-16639.	3.6	13
22	Magnetic transport properties of DBTAA-based nanodevices with graphene nanoribbon electrodes. Organic Electronics, 2015, 25, 308-316.	2.6	25
23	Thermal spin transport of a nitroxide radical-based molecule. RSC Advances, 2015, 5, 20699-20703.	3.6	5
24	Rational design of outerâ€expanded purine analogues as building blocks of DNAâ€based nanowires with enhanced electronic properties. International Journal of Quantum Chemistry, 2014, 114, 911-919.	2.0	0
25	Electronic Transport of a Molecular Photoswitch with Graphene Nanoribbon Electrodes. Chinese Physics Letters, 2014, 31, 057304.	3.3	4
26	Perfect Spin-Filtering in 4H-TAHDI-Based Molecular Devices: the Effect of N-Substitution. Chinese Physics Letters, 2014, 31, 107302.	3.3	2
27	Rectifying, giant magnetoresistance, spin-filtering, newgative differential resistance, and switching effects in single-molecule magnet Mn(dmit) 2 -based molecular device with graphene nanoribbon electrodes. Organic Electronics, 2014, 15, 3615-3623.	2.6	13
28	Oddâ€“even dependence of rectifying behavior in carbon chains modified diphenylâ€“dimethyl molecule. Chemical Physics Letters, 2014, 605-606, 62-66.	2.6	2
29	Low-bias negative differential resistance in combined nanostructure of two zigzag-edged trigonal graphenes. Physics Letters, Section A: General, Atomic and Solid State Physics, 2014, 378, 2191-2194.	2.1	3
30	Low bias negative differential resistance in C60 dimer modulated by gate voltage. Organic Electronics, 2013, 14, 1109-1115.	2.6	35
31	Modulation of rectification and negative differential resistance in graphene nanoribbon by nitrogen doping. Physics Letters, Section A: General, Atomic and Solid State Physics, 2013, 377, 1134-1138.	2.1	46
32	Low Bias Negative Differential Resistance Behavior in Carbon/Boron Nitride Nanotube Heterostructures. Chinese Physics Letters, 2013, 30, 107304.	3.3	3
33	Giant low bias negative differential resistance induced by nitrogen doping in graphene nanoribbon. Chemical Physics Letters, 2012, 554, 172-176.	2.6	33
34	Rectifying behavior in nitrogen-doped zigzag single-walled carbon nanotube junctions. Solid State Communications, 2012, 152, 2040-2044.	1.9	11
35	Electronic transport properties of capped-carbon-nanotube-based molecular junctions with multiple N and B dopants. Science Bulletin, 2012, 57, 2073-2077.	1.7	2
36	Effects of tip separation and orientation on negative differential resistance in boron-doped carbon-nanotube-based molecular junctions. Science Bulletin, 2012, 57, 966-969.	1.7	2

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37	First-principles study of the electronic transport properties of a C131 -based molecular junction. Solid State Communications, 2011, 151, 1424-1427.	1.9	7
38	CO catalytic oxidation on iron-embedded hexagonal boron nitride sheet. Chemical Physics Letters, 2011, 515, 159-162.	2.6	87
39	Negative differential resistance in a molecular junction of carbon nanotube and benzene. Science China: Physics, Mechanics and Astronomy, 2011, 54, 1433-1437.	5.1	5
40	Rectifying Properties of a Nitrogen/Boron-Doped Capped-Carbon-Nanotube-Based Molecular Junction. Chinese Physics Letters, 2011, 28, 047301.	3.3	4
41	EFFECT OF TORSION ANGLE IN 4,4â€²-BIPHENYLDITHIOL FUNCTIONALIZED MOLECULAR JUNCTION. International Journal of Modern Physics B, 2011, 25, 699-710.	2.0	1
42	Capped carbon nanotube-based molecular switch. Science Bulletin, 2010, 55, 1227-1230.	1.7	5
43	Electron transport properties of boron-doped capped-carbon-nanotube-based molecular junctions. Science Bulletin, 2010, 55, 4104-4107.	1.7	6
44	Electronic transport properties of a diarylethene-based molecular switch with single-walled carbon nanotube electrodes: The effect of chirality. Solid State Communications, 2009, 149, 928-931.	1.9	29
45	15,16-Dinitrile DDP/CPD as a possible solid-state optical molecular switch. Chemical Physics Letters, 2008, 453, 62-67.	2.6	27
46	Optical band gap of zinc nitride films prepared by reactive rf magnetron sputtering. Crystal Research and Technology, 2006, 41, 889-892.	1.3	14
47	Optical phonon modes and transmissivity in BaWO4 single crystal. Crystal Research and Technology, 2006, 41, 1189-1193.	1.3	13
48	Theoretical Design of thermal spin molecular logic gates by using a combinational molecular junction. Chinese Physics B, 0, , .	1.4	3