Gui-Chao Hu

List of Publications by Year
in descending order

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74	877	471509 17	580821 25
papers	citations	h-index	g-index

74	74	74	627
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Optical Properties of Graphene/MoS2 Heterostructure: First Principles Calculations. Nanomaterials, 2018, 8, 962.	4.1	64
2	Spin filtering through a metal/organic-ferromagnet/metal structure. Physical Review B, 2007, 75, .	3.2	41
3	Modulation of Rectification in Diblock Co-oligomer Diodes by Adjusting Anchoring Groups for Both Symmetric and Asymmetric Electrodes. Journal of Physical Chemistry C, 2012, 116, 22009-22014.	3.1	40
4	Spin-current rectification in an organic magnetic/nonmagnetic device. Journal of Chemical Physics, 2008, 129, 234708.	3.0	38
5	Theoretical Studies on Protonation-Induced Inversion of the Rectifying Direction in Dipyrimidinylâ€“Diphenyl Diblock Molecular Junctions. Journal of Physical Chemistry C, 2012, 116, 3773-3778.	3.1	36
6	Designing molecular rectifiers and spin valves using metallocene-functionalized undecanethiolates: one transition metal atom matters. Journal of Materials Chemistry C, 2018, 6, 2105-2112.	5.5	36
7	Bias-induced orbital hybridization in diblock co-oligomer diodes. Applied Physics Letters, 2007, 91, .	3.3	32
8	Tuning the Direction of Rectification by Adjusting the Location of the Bipyridyl Group in Alkanethiolate Molecular Diodes. Journal of Physical Chemistry C, 2017, 121, 7643-7648.	3.1	30
9	Mechanisms of the odd-even effect and its reversal in rectifying performance of ferrocenyl-n-alkanethiolate molecular diodes. Organic Electronics, 2017, 49, 76-84.	2.6	24
10	Stretch or contraction induced inversion of rectification in diblock molecular junctions. Journal of Chemical Physics, 2013, 139, 094702.	3.0	23
11	Reversible switching of anomalous valley Hall effect in ferrovalley Janus <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>1</mml:mn><mml:mi>T</mml:mi><mml:mo>â^'	3.2	23
12	Optimizing the conductance switching performance in photoswitchable dimethyldihydropyrene/cyclophanediene single-molecule junctions. Physica E: Low-Dimensional Systems and Nanostructures, 2019, 109, 1-5.	2.7	21
13	Theoretical understanding of the inversion of rectification direction in ferrocenyl-embedded tridecanethiolate single-molecule rectifiers. Physica E: Low-Dimensional Systems and Nanostructures, 2018, 103, 397-402.	2.7	20
14	Enhancement of magnetoresistance and current spin polarization in single-molecule junctions by manipulating the hybrid interface states via anchoring groups. Journal of Magnetism and Magnetic Materials, 2019, 479, 247-253.	2.3	20
15	Enhancement of ferroelectric performance in PVDF:Fe3O4 nanocomposite based organic multiferroic tunnel junctions. Applied Physics Letters, 2020, 116, .	3.3	19
16	The effects of contact configurations on the rectification of dipyrimidinylâ€”diphenyl diblock molecular junctions. Chinese Physics B, 2011, 20, 127304.	1.4	18
17	Manipulating Current Spin Polarization in Magnetic Single-Molecule Junctions via Destructive Quantum Interference. Journal of Physical Chemistry C, 2020, 124, 12144-12152.	3.1	18
18	Robust valley polarization induced by super-exchange effects in HfNX (Xâ€‰=â€‰Cl, Br, I)/FeCl2 two-dimensional ferrovalley heterostructures. Applied Physics Letters, 2022, 120, .	3.3	18

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19	Length-dependent inversion of rectification in diblock co-oligomer diodes. Applied Physics Letters, 2011, 99, 082105.	3.3	17
20	Ground-state properties of metal/organic-ferromagnet heterojunctions. Physical Review B, 2018, 98, .	3.2	16
21	Modulating spin-dependent electron transport in benzene-dithiolate magnetic junctions by hybrid interface states. Journal Physics D: Applied Physics, 2018, 51, 345302.	2.8	16
22	Tuning electronic and optical properties of monolayer PdSe2 by introducing defects: first-principles calculations. Scientific Reports, 2020, 10, 4028.	3.3	16
23	Multi-state magnetoresistance in ferromagnet/organic-ferromagnet/ferromagnet junctions. Applied Physics Letters, 2014, 104, 033302.	3.3	15
24	Length dependence of rectification in organic co-oligomer spin rectifiers. Chinese Physics B, 2016, 25, 057308.	1.4	15
25	Is there a specific correlation between conductance and molecular aromaticity in single-molecule junctions?. Organic Electronics, 2017, 48, 29-34.	2.6	14
26	Polarons in organic ferromagnets. Organic Electronics, 2018, 55, 133-139.	2.6	14
27	Spin-dependent transport and functional design in organic ferromagnetic devices. Beilstein Journal of Nanotechnology, 2017, 8, 1919-1931.	2.8	13
28	Electronic structures of spinterface for thiophene molecule adsorbed at Co, Fe, and Ni electrode: First principles calculations. Applied Surface Science, 2016, 389, 916-920.	6.1	12
29	Spin Polarization Properties of Pentagonal PdSe2 Induced by 3D Transition-Metal Doping: First-Principles Calculations. Materials, 2018, 11, 2339.	2.9	12
30	Molecular-length induced inversion of rectification in diblock pyrimidinylâ€“phenyl molecular junctions. Chemical Physics Letters, 2014, 591, 296-300.	2.6	11
31	Spin Polarization at Organic-Ferromagnetic Interface: Effect of Contact Configuration. Chinese Journal of Chemical Physics, 2016, 29, 344-348.	1.3	11
32	Spin selection at organic spinterface by anchoring group. Applied Surface Science, 2017, 409, 60-64.	6.1	10
33	Towards Rectifying Performance at the Molecular Scale. Topics in Current Chemistry, 2017, 375, 85.	5.8	9
34	Modulation of spatial spin polarization at organic spinterface by side groups. Applied Surface Science, 2018, 427, 416-420.	6.1	8
35	Manipulable Electronic and Optical Properties of Two-Dimensional MoSTe/MoGe2N4 van der Waals Heterostructures. Nanomaterials, 2021, 11, 3338.	4.1	8
36	Modulating hybrid interface states in magnetic molecular junctions by molecular geometrical torsion. Journal of Magnetism and Magnetic Materials, 2019, 489, 165465.	2.3	7

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37	Bias and molecular-length dependent oddâ€“even effect of rectification in 4â€²-methyl-2,2â€²-bipyridyl-terminated n-alkanethiolate single-molecule diodes. Journal of Materials Chemistry C, 2019, 7, 9000-9007.	5.5	7
38	Spin polarization properties of two-dimensional MoSeTe induced by transition-metal doping: first-principles calculations. European Physical Journal B, 2019, 92, 1.	1.5	7
39	Tunneling magnetoresistance in ferromagnet/organic-ferromagnet/metal junctions. Chinese Physics B, 2020, 29, 017303.	1.4	7
40	Protonation control of spin transport properties in magnetic single-molecule junctions. Journal of Materials Science, 2020, 55, 16311-16322.	3.7	7
41	Adsorption of methanol molecule on graphene: Experimental results and first-principles calculations. International Journal of Modern Physics B, 2018, 32, 1850102.	2.0	6
42	Large valley polarization in a novel two-dimensional semiconductor H-ZrX₂ (X = Cl, Br, I). Journal of Physics Condensed Matter, 2022, 34, 075701.	1.8	6
43	Spin-Dependent Polaron Dynamics in Organic Ferromagnets. Journal of Physical Chemistry Letters, 2022, 13, 614-621.	4.6	6
44	Effect of electron delocalization in quasi-one-dimensional organic ferromagnet. Physica B: Condensed Matter, 2010, 405, S299-S302.	2.7	5
45	Multistate magnetoresistance in zigzag-edge trigonal graphene magnetic junctions. Journal of Materials Science, 2019, 54, 5551-5560.	3.7	5
46	Magnetic manipulation of orbital hybridization and magnetoresistance in organic ferromagnetic co-oligomers. Physica E: Low-Dimensional Systems and Nanostructures, 2020, 124, 114327.	2.7	5
47	Strain forces tuned the electronic and optical properties in GaTe/MoS₂ van der Waals heterostructures. RSC Advances, 2020, 10, 25136-25142.	3.6	5
48	Effect of proportion on rectification in organic co-oligomer spin rectifiers. Chinese Physics B, 2011, 20, 077306.	1.4	4
49	Modulation of organic interfacial spin polarization by interfacial angle. Chemical Physics Letters, 2017, 667, 15-19.	2.6	4
50	Adsorption properties of chloroform molecule on graphene: Experimental and first-principles calculations. Modern Physics Letters B, 2017, 31, 1750335.	1.9	4
51	Weak-field polaron dynamics in organic ferromagnets. Physical Chemistry Chemical Physics, 2020, 22, 15707-15715.	2.8	4
52	Length-induced large magnetoresistance in polyacene molecular spin valves. Results in Physics, 2021, 27, 104510.	4.1	4
53	Large Rectification Ratio of up to 106 for Conjugation-Group-Terminated Undecanethiolate Single-Molecule Diodes on Pt Electrodes. Journal of Physical Chemistry C, 2021, 125, 20783-20790.	3.1	4
54	Modulation of hybrid interface states and magnetoresistance in quantum interference systems via functional groups. Journal of Magnetism and Magnetic Materials, 2021, 537, 168138.	2.3	4

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55	Mechanism of length-induced magnetism in polyacene molecules. Physical Review B, 2022, 105, .	3.2	4
56	Spin precession of polarons in organic ferromagnets. Physics Letters, Section A: General, Atomic and Solid State Physics, 2022, 433, 128024.	2.1	4
57	Structural and electronic properties of SiC/AlN core/shell nanowires: a first-principles study. Modern Physics Letters B, 2014, 28, 1450195.	1.9	3
58	Spin polarization of polaron in quasi-one dimensional organic system. Modern Physics Letters B, 2015, 29, 1450266.	1.9	3
59	Effect of interfacial coupling on rectification in organic spin rectifiers. Chinese Physics B, 2015, 24, 077308.	1.4	3
60	Spontaneous spin polarization of methanol molecule adsorbed on B- or N-doped graphene: first-principles calculations. European Physical Journal B, 2019, 92, 1.	1.5	3
61	Electric field induced magnetism decline in organic ferromagnets. Physica E: Low-Dimensional Systems and Nanostructures, 2021, 131, 114729.	2.7	3
62	Ground state and polaron and bipolaron excited states in polydiacetylene. Science in China Series G: Physics, Mechanics and Astronomy, 2006, 49, 430-439.	0.2	2
63	Spin-excited states and rectification in an organic spin rectifier. Chinese Physics B, 2014, 23, 087306.	1.4	2
64	Electronic Structure and Optical Properties of a Mn-Doped InSe/WSe2 van der Walls Heterostructure: First Principles Calculations. Journal of the Korean Physical Society, 2020, 77, 587-591.	0.7	2
65	Electronic structure and enhanced photocatalytic properties in $$hbox {Ca(OH)}_{2}$$/GeC van der Waals heterostructure. European Physical Journal B, 2021, 94, 1.	1.5	2
66	Type-II Band Alignment and Tunable Optical Absorption in MoSSe/InS van der Waals Heterostructure. Frontiers in Chemistry, 2022, 10, 861838.	3.6	2
67	Density Functional Theory Calculations of Charge-Induced Spin Polarization in Pentacene. Chinese Journal of Chemical Physics, 2014, 27, 519-522.	1.3	1
68	Spin polarized current injection and transportation in a double T-shaped organic spintronic device. Science China: Physics, Mechanics and Astronomy, 2015, 58, 1-5.	5.1	1
69	Spin polarization properties at the spinterface of thiophene/Fe(100): First principles calculations. International Journal of Modern Physics B, 2017, 31, 1750072.	2.0	1
70	Bias-induced reconstruction of hybrid interface states in magnetic molecular junctions. Chinese Physics B, 0, , .	1.4	1
71	Molecular rectification assisted by spin-polarized hybrid interfacial states. Physics Letters, Section A: General, Atomic and Solid State Physics, 2022, , 128200.	2.1	1
72	AMPLIFICATION OF CURRENT SPIN POLARIZATION IN FERROMAGNETIC/ORGANIC SYSTEM WITH SPIN-RELATED INTERFACIAL RESISTANCES. International Journal of Modern Physics B, 2011, 25, 4339-4345.	2.0	0

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73	Site-dependent spin-polarized tunneling via hybrid interface states on molecule/ferromagnet surface. Physica E: Low-Dimensional Systems and Nanostructures, 2021, , 115071.	2.7	0
74	Length dependence of magnetoresistance in organic spin valves. Journal of Applied Physics, 2022, 131, 055501.	2.5	0