Hua-Hua Fu

List of Publications by Year
in descending order

56 papers	1,557 citations	331538 21 h-index	315616 38 g-index
56 all docs	56 docs citations	56 times ranked	1392 citing authors

#	Article	IF	Citations
1	Spin-gapless semiconducting Cl-intercalated phosphorene bilayer: a perfect candidate material to identify its ferroelectric states by spin-Seebeck currents. Journal of Materials Chemistry C, 2022, 10, 3188-3195.	2.7	5
2	Enhanced thermoelectric performance by lone-pair electrons and bond anharmonicity in the two-dimensional <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi mathvariant="normal">Ge</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi>Y</mml:mi><mml:mn>2</mml:mn></ family of materials with <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Y</mml:mi><mml:mo>=</mml:mo><mml:mi	1.1	15
3	Topological phonons in allotropes of carbon. Materials Today Physics, 2022, 24, 100694.	2.9	15
4	Spin caloritronics in two-dimensional <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>CrI</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:mo></mml: van der Waals heterostructures. Physical Review B, 2021, 103, .	1.1	31
5	Spin-Seebeck effect and thermal colossal magnetoresistance in the narrowest zigzag graphene nanoribbons. Nanotechnology, 2021, 32, 245703.	1.3	7
6	Charge-four Weyl phonons. Physical Review B, 2021, 103, .	1.1	59
7	Ideal topological nodal-surface phonons in RbTeAu-family materials. Physical Review B, 2021, 104, .	1.1	40
8	Topological phononic nodal hexahedron net and nodal links in the high-pressure phase of the semiconductor CuCl. Physical Review B, 2021, 104, .	1.1	38
9	Vibration-enhanced spin-selective transport of electrons in the DNA double helix. Physical Review B, 2020, 102, .	1.1	49
10	Symmetry-enforced Weyl phonons. Npj Computational Materials, 2020, 6, .	3.5	69
11	Concepts of Spin Seebeck Effect in Ferromagnetic Metals. Advanced Functional Materials, 2020, 30, 2004024.	7.8	7
12	Thermal transport and spin-dependent Seebeck effect in parallel step-like zigzag graphene nanoribbon junctions. Physical Chemistry Chemical Physics, 2020, 22, 19100-19107.	1.3	5
13	One-dimensional transition metal dihalide nanowires as robust bipolar magnetic semiconductors. Nanoscale, 2020, 12, 8942-8948.	2.8	10
14	Spin-dependent Seebeck effect, and spin-filtering and diode effects in magnetic boronâ€“nitrogen nanotube heterojunctions. Journal of Materials Chemistry C, 2020, 8, 4486-4492.	2.7	10
15	Low energy dissipation readout of single-molecule ferroelectronic states by a spin-Seebeck signal. Physical Review Research, 2020, 2, .	1.3	5
16	Spin-orbit coupling induced robust spin-Seebeck effect and pure thermal spin currents in achiral molecule systems. Physical Review B, 2019, 100, .	1.1	16
17	Categories of Phononic Topological Weyl Open Nodal Lines and a Potential Material Candidate: Rb₂Sn₂O₃. Journal of Physical Chemistry Letters, 2019, 10, 4045-4050.	2.1	37
18	Sodium bismuth dichalcogenides: candidates for ferroelectric high-mobility semiconductors for multifunctional applications. Physical Chemistry Chemical Physics, 2019, 21, 8553-8558.	1.3	21

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19	Thermal spin transport properties in a hybrid structure of single-walled carbon nanotubes and zigzag-edge boron nitride nanoribbons. Wuli Xuebao/Acta Physica Sinica, 2019, 68, 057301.	0.2	1
20	Proton transfer ferroelectricity/multiferroicity in rutile oxyhydroxides. Nanoscale, 2018, 10, 9509-9515.	2.8	13
21	First-Principles Study on the Thermoelectric Properties of FeAsS. ACS Omega, 2018, 3, 13630-13635.	1.6	8
22	Magnetic nanotubes: A new material platform to realize a robust spin-Seebeck effect and a perfect thermal spin-filtering effect. Physical Review B, 2018, 98, .	1.1	21
23	How to realize the spin-Seebeck effect with a high spin figure of merit in magnetic boronâ€“nitrogen nanoribbon and nanotube structures?. Journal of Materials Chemistry C, 2018, 6, 10603-10610.	2.7	27
24	Spin caloritronics in armchair silicene nanoribbons with sp ³ and sp ²-type alternating hybridizations. Journal of Physics Condensed Matter, 2018, 30, 355303.	0.7	11
25	New topological states in HgTe quantum wells from defect patterning. Nanoscale, 2018, 10, 15462-15467.	2.8	1
26	FRACTAL ANALYSIS OF FLOW RESISTANCE IN TREE-LIKE BRANCHING NETWORKS WITH ROUGHENED MICROCHANNELS. Fractals, 2017, 25, 1750008.	1.8	88
27	How to realize a spin-dependent Seebeck diode effect in metallic zigzag Î³-graphyne nanoribbons?. Nanoscale, 2017, 9, 18334-18342.	2.8	42
28	Edge-defect induced spin-dependent Seebeck effect and spin figure of merit in graphene nanoribbons. Physical Chemistry Chemical Physics, 2017, 19, 27132-27139.	1.3	29
29	Multiple thermal spin transport performances of graphene nanoribbon heterojuction co-doped with Nitrogen and Boron. Scientific Reports, 2017, 7, 3955.	1.6	8
30	Conetronics in 2D metal-organic frameworks: double/half Dirac cones and quantum anomalous Hall effect. 2D Materials, 2017, 4, 015015.	2.0	41
31	A spin-Seebeck diode with a negative differential spin-Seebeck effect in a hydrogen-terminated zigzag silicene nanoribbon heterojunction. Physical Chemistry Chemical Physics, 2016, 18, 12742-12747.	1.3	21
32	Spin-dependent Seebeck effect in zigzag black phosphorene nanoribbons. RSC Advances, 2016, 6, 44019-44023.	1.7	19
33	How to control spin-Seebeck current in a metal-quantum dot-magnetic insulator junction. Physical Review B, 2016, 94, .	1.1	21
34	Design of spin-Seebeck diode with spin semiconductors. Nanotechnology, 2016, 27, 505201.	1.3	19
35	Design for a spin-Seebeck diode based on two-dimensional materials. Physical Review B, 2015, 92, .	1.1	59
36	Spin-dependent Seebeck Effect, Thermal Colossal Magnetoresistance and Negative Differential Thermoelectric Resistance in Zigzag Silicene Nanoribbon Heterojunciton. Scientific Reports, 2015, 5, 10547.	1.6	46

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37	Enhancement of the thermoelectric figure of merit in DNA-like systems induced by Fano and Dicke effects. Physical Chemistry Chemical Physics, 2015, 17, 11077-11087.	1.3	16
38	Nine New Phosphorene Polymorphs with Non-Honeycomb Structures: A Much Extended Family. Nano Letters, 2015, 15, 3557-3562.	4.5	275
39	Finite-size effects in the quantum anomalous Hall system. Physical Review B, 2014, 89, .	1.1	9
40	Thermal spin filtering, thermal spin switching and negative-differential-resistance in thermal spin currents in zigzag SiC nanoribbons. Physical Chemistry Chemical Physics, 2014, 16, 17493-17498.	1.3	21
41	Topological field-effect quantum transistors in HgTe nanoribbons. Nanotechnology, 2014, 25, 225201.	1.3	12
42	Perfect spin-filter, spin-valve, switching and negative differential resistance in an organic molecular device with graphene leads. RSC Advances, 2014, 4, 18522-18528.	1.7	24
43	Nearly Perfect Spin Filter, Spin Valve and Negative Differential Resistance Effects in a Fe4-based Single-molecule Junction. Scientific Reports, 2014, 4, 4838.	1.6	31
44	A theoretical model for anisotropic multiferroics. Applied Physics Letters, 2013, 103, 132911.	1.5	5
45	The transport properties and new device design: the case of 6,6,12-graphyne nanoribbons. Nanoscale, 2013, 5, 4468.	2.8	76
46	Perfect spin filtering and conditions for Fano antiresonance and Dicke resonance in a parallel coupled triple quantum-dot array. European Physical Journal B, 2013, 86, 1.	0.6	0
47	Perfect spin-filter and highly spin-polarized current in a quantum network device. Applied Physics Letters, 2012, 100, .	1.5	48
48	Perfect spin-filter and quantum-signal generator in a parallel coupled multiple triple-quantum-dots device. Journal of Applied Physics, 2012, 111, 124510.	1.1	12
49	Fano antiresonance and perfect spin-filtering in a diamondlike quantum network device: Nonequilibrium Greenâ€™s function approach. Journal of Applied Physics, 2012, 111, 094512.	1.1	8
50	Spin-filter and Fano antiresonant effect in conductance through a zigzaglike polymer device: Nonequilibrium Green's function approach. Journal of Chemical Physics, 2011, 134, 054903.	1.2	25
51	Ab initioinvestigation of the noncollinear magnetic structure of CeFeAsO. Physical Review B, 2011, 84, .	1.1	2
52	Spin-polarized transport through a parallel triple-quantum-dot device: Blockade effects of Rashba spin-orbit interaction and Coulomb interaction. Journal of Applied Physics, 2011, 110, 094502.	1.1	14
53	Influence of interdot hopping and intradot many-body interaction on conductance through parallel triple-quantum-dot device: Nonequilibrium Greenâ€™s function approach. Journal of Applied Physics, 2010, 108, 084510.	1.1	10
54	Magnetic properties of very-high-spin organic Ï€-conjugated polymers based on Greenâ€™s function theory. Journal of Chemical Physics, 2008, 129, 134706.	1.2	18

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55	Magnetic properties and quantum phase transitions of purely organic molecule-based ferrimagnets based on Greenâ€™s function theory. Journal of Chemical Physics, 2008, 128, 114705.	1.2	18
56	Nature of the Ferromagnetic Behavior and Possible Occurrence of the Ferrimagnetic Phase Transition in Genuinely Organic Molecule-Based Assemblages with an S = 1 and S = ¹/₂ Antiferromagnetic Alternating Spin Chain: A Greenâ€™s Function Approach. Journal of Physical Chemistry A, 2008, 112, 6205-6210.	1.1	19