Wangxiang Feng

List of Publications by Year
in descending order

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49 papers	9,274 citations	185998 28 h-index	197535 49 g-index
49 all docs	49 docs citations	49 times ranked	10318 citing authors

#	Article	IF	Citations
1	Coupled Spin and Valley Physics in Monolayers of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>MoS</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math>and Other Group-VI Dichalcogenides. Physical Review Letters, 2012, 108, 196802.	2.9	3,872
2	Quantum Spin Hall Effect in Silicene and Two-Dimensional Germanium. Physical Review Letters, 2011, 107, 076802.	2.9	1,972
3	Quantum anomalous Hall effect in graphene from Rashba and exchange effects. Physical Review B, 2010, 82, .	1.1	567
4	Half-Heusler Compounds as a New Class of Three-Dimensional Topological Insulators. Physical Review Letters, 2010, 105, 096404.	2.9	306
5	Large anomalous Hall effect in a half-Heusler antiferromagnet. Nature Physics, 2016, 12, 1119-1123.	6.5	232
6	Engineering quantum anomalous/valley Hall states in graphene via metal-atom adsorption: Anab-initiostudy. Physical Review B, 2011, 84, .	1.1	217
7	Intrinsic spin Hall effect in monolayers of group-VI dichalcogenides: A first-principles study. Physical Review B, 2012, 86, .	1.1	213
8	Topological Aspect and Quantum Magnetoresistance of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Î²</mml:mi><mml:mtext mathvariant="normal">â^'</mml:mtext><mml:msub><mml:mi>Ag</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi>Te</mml:mi> Physical Review Letters, 2011, 106, 156808.	2.9	183
9	Half-Heusler topological insulators: A first-principles study with the Tran-Blaha modified Becke-Johnson density functional. Physical Review B, 2010, 82, .	1.1	163
10	Large-Gap Quantum Spin Hall Insulator in Single Layer Bismuth Monobromide Bi₄Br₄. Nano Letters, 2014, 14, 4767-4771.	4.5	156
11	Three-Dimensional Topological Insulators in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi mathvariant="normal">I</mml:mi><mml:mtext mathvariant="normal">â^'</mml:mtext><mml:mi>III</mml:mi><mml:mtext mathvariant="normal">â^'</mml:mtext><mml:msub><mml:mi>VI</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math>and<mml	2.9	139
12	Valley-dependent properties of monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">MoSi</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">N</mml:mi><mml:mn>4</mml:mn></mml:msub><mml:mo>,</mml:mo><mml:mo>Â</mml:mo><mml:msub><m	1.1	124
13	Computational characterization of monolayer C3N: A two-dimensional nitrogen-graphene crystal. Journal of Materials Research, 2017, 32, 2993-3001.	1.2	110
14	Large magneto-optical Kerr effect in noncollinear antiferromagnets<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi mathvariant="normal">Mn</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:mi>X</mml:mi></mml:mrow><mml:mspace width="0.28em"		

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19	Spin-orbit dependent anomalous Hall effect and magneto-optical effect in the noncollinear antiferromagnets <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Mn</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:mi mathvariant="normal">N</mml:mi></mml:mrow></mml:math> with <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>X</mml:mi><mml:mo>=</mml:mo><mml:mi>Ga</mml:mi>, Zn, Ag, or Ni. Physical Review B, 2019, 99, .	1.1	55
20	Topological magneto-optical effects and their quantization in noncoplanar antiferromagnets. Nature Communications, 2020, 11, 118.	5.8	51
21	First-principles calculation of topological invariants within the FP-LAPW formalism. Computer Physics Communications, 2012, 183, 1849-1859.	3.0	47
22	Tunable magneto-optical effects in hole-doped group-IIIA metal-monochalcogenide monolayers. 2D Materials, 2017, 4, 015017.	2.0	47
23	Strain tuning of topological band order in cubic semiconductors. Physical Review B, 2012, 85, .	1.1	44
24	Effects of hole doping and strain on magnetism in buckled phosphorene and arsenene. 2D Materials, 2017, 4, 025107.	2.0	40
25	Two-dimensional spinâ€“valley-coupled Dirac semimetals in functionalized SbAs monolayers. Materials Horizons, 2019, 6, 781-787.	6.4	38
26	Topological edge states in single- and multi-layer Bi₄Br₄. New Journal of Physics, 2015, 17, 015004.	1.2	32
27	Engineering Topological Surface States and Giant Rashba Spin Splitting in BiTeI/Bi2Te3 Heterostructures. Scientific Reports, 2015, 4, 3841.	1.6	32
28	Fully Spin-Polarized Nodal Loop Semimetals in Alkaline Metal Monochalcogenide Monolayers. Journal of Physical Chemistry Letters, 2019, 10, 3101-3108.	2.1	29
29	Three-dimensional topological insulators: A review on host materials. Science China: Physics, Mechanics and Astronomy, 2012, 55, 2199-2212.	2.0	26
30	Strong magneto-optical effect and anomalous transport in the two-dimensional van der Waals magnets <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">Fe</mml:mi><mml:mi>n</mml:mi></mml:msub><mml:msub><mml:mi mathvariant="normal">GeTe</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math> (<mml:math) Tj ETQq0 0 0 rgBT /Overlock 10	1.1	26
31	Large magneto-optical effects in hole-doped blue phosphorene and gray arsenene. Nanoscale, 2017, 9, 17405-17414.	2.8	25
32	Giant anomalous Nernst effect in noncollinear antiferromagnetic Mn-based antiperovskite nitrides. Physical Review Materials, 2020, 4, .	0.9	24
33	Tunable magneto-optical effect, anomalous Hall effect, and anomalous Nernst effect in the two-dimensional room-temperature ferromagnet <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>1</mml:mn><mml:mi>T</mml:mi></mml:mrow><mml:mm Physical Review B, 2021, 103, .	1.1	22
34	Crystal chirality magneto-optical effects in collinear antiferromagnets. Physical Review B, 2021, 104, .	1.1	18
35	Order-disorder phase transition and dissociation of hydrogen sulfide under high pressure: Ab initio molecular dynamics study. Journal of Chemical Physics, 2010, 132, 164506.	1.2	17
36	First-principles investigations on the Berry phase effect in spinâ€“orbit coupling materials. Computational Materials Science, 2016, 112, 428-447.	1.4	16

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37	Weyl Monoloop Semi-Half-Metal and Tunable Anomalous Hall Effect. Nano Letters, 2021, 21, 8749-8755.	4.5	16
38	Thickness-dependent magneto-optical effects in hole-doped GaS and GaSe multilayers: a first-principles study. New Journal of Physics, 2018, 20, 043048.	1.2	14
39	Discovery of Realâ€Space Topological Ferroelectricity in Metallic Transition Metal Phosphides. Advanced Materials, 2020, 32, e2003479.	11.1	13
40	Multifield-tunable magneto-optical effects in electron- and hole-doped nitrogenâ€“graphene crystals. Journal of Materials Chemistry C, 2019, 7, 3360-3368.	2.7	10
41	Constructing van der Waals heterostructures by dry-transfer assembly for novel optoelectronic device. Nanotechnology, 2022, 33, 465601.	1.3	7
42	Memristive Crossbar Arrays for Storage and Computing Applications. Advanced Intelligent Systems, 2021, 3, 2170065.	3.3	6
43	Pressure induced Ag2Te polymorphs in conjunction with topological non trivial to metal transition. AIP Advances, 2016, 6, 085003.	0.6	4
44	Nonmetallization and band inversion in beryllium dicarbide at high pressure. Scientific Reports, 2016, 6, 26398.	1.6	2
45	Structural Investigation of Solid Methane at High Pressure. Chinese Physics Letters, 2010, 27, 066101.	1.3	1
46	DEFECT PHYSICS AND INTRINSIC p-TYPE CONDUCTIVITY IN TOPOLOGICAL INSULATOR AuTlS2. Modern Physics Letters B, 2014, 28, 1450008.	1.0	1
47	Core hole effect on topological band order in cubic semiconductors: A first-principles study. Europhysics Letters, 2014, 106, 27008.	0.7	1
48	Electron Transport Properties of Two-Dimensional Si ₁ P ₁ Molecular Junctions. Chinese Physics Letters, 2017, 34, 027201.	1.3	1
49	Electron Transport Properties of Two-Dimensional Monolayer Films from Au-P-Au to Au-Si-Au Molecular Junctions. Chinese Physics Letters, 2018, 35, 017201.	1.3	1