Chengwang Niu

List of Publications by Year in Descending Order

48 papers	2,326 citations	21 h-index	48 g-index
57 ext. papers	2,717 ext. citations	5.7 avg, IF	4.81 L-index

#	Paper	IF	Citations
48	Engineering antiferromagnetic topological insulator by strain in two-dimensional rare-earth pnictide EuCd2Sb2. *Applied Physics Letters*, **2021**, 119, 173105	3.4	1
47	A magnetic topological insulator in two-dimensional EuCdBi: giant gap with robust topology against magnetic transitions. *Materials Horizons*, **2021**, 8, 956-961	14.4	5
46	Quantum spin Hall effect in antiferromagnetic topological heterobilayers. *Physical Review B*, **2021**, 103,	3.3	2
45	Ferromagnetic dual topological insulator in a two-dimensional honeycomb lattice. *Materials Horizons*, **2020**, 7, 2431-2438	14.4	3
44	Antiferromagnetic Topological Insulator with Nonsymmorphic Protection in Two Dimensions. *Physical Review Letters*, **2020**, 124, 066401	7.4	21
43	Antiferromagnetic topological insulator in stable exfoliated two-dimensional materials. *Physical Review B*, **2020**, 102,	3.3	5
42	Quantum anomalous Hall effect and gate-controllable topological phase transition in layered EuCd2As2. *Physical Review B*, **2019**, 99,	3.3	8
41	Mixed topological semimetals driven by orbital complexity in two-dimensional ferromagnets. *Nature Communications*, **2019**, 10, 3179	17.4	17
40	Two-dimensional ferroelastic topological insulator with tunable topological edge states in single-layer ZrAsX (X = Br and Cl). *Journal of Materials Chemistry C*, **2019**, 7, 9743-9747	7.1	6
39	Enhanced stability and stacking dependent magnetic/electronic properties of 2D monolayer FeTiO3 on a Ti2CO2 substrate. *Journal of Materials Chemistry C*, **2019**, 7, 15308-15314	7.1	2
38	Dual topological insulator and insulator-semimetal transition in mirror-symmetric honeycomb materials. *Physical Review B*, **2019**, 100,	3.3	1
37	Tunable quantum order in bilayer Bi2Te3: Stacking dependent quantum spin Hall states. *Applied Physics Letters*, **2018**, 112, 243103	3.4	4
36	Hybrid quantum anomalous Hall effect at graphene-oxide interfaces. *Physical Review B*, **2018**, 98,	3.3	7
35	Lateral topological crystalline insulator heterostructure. *2D Materials*, **2017**, 4, 025038	5.9	9
34	Robust dual topological character with spin-valley polarization in a monolayer of the Dirac semimetal Na3Bi. *Physical Review B*, **2017**, 95,	3.3	27
33	BiTe is a dual topological insulator. *Nature Communications*, **2017**, 8, 14976	17.4	46
32	MoTe2 is a good match for GeI by preserving quantum spin Hall phase. *Nano Research*, **2017**, 10, 2823-2832	8.2	6

31	Mixed Weyl semimetals and low-dissipation magnetization control in insulators by spin-orbit torques. *Nature Communications*, **2017**, 8, 1479	17.4	25
30	Two-dimensional topological nodal line semimetal in layered X2Y (X=Ca, Sr, and Ba; Y=As, Sb, and Bi). *Physical Review B*, **2017**, 95,	3.3	28
29	Large gap Quantum Spin Hall Insulators of Hexagonal III-Bi monolayer. *Scientific Reports*, **2016**, 6, 34861	4.9	5
28	Two-dimensional topological crystalline insulator phase in quantum wells of trivial insulators. *2D Materials*, **2016**, 3, 025037	5.9	5
27	Two-Dimensional Topological Crystalline Insulator and Topological Phase Transition in TlSe and TlS Monolayers. *Nano Letters*, **2015**, 15, 6071-5	11.5	32
26	Topological crystalline insulator and quantum anomalous Hall states in IV-VI-based monolayers and their quantum wells. *Physical Review B*, **2015**, 91,	3.3	28
25	Electronic properties of two-dimensional van der Waals GaS/GaSe heterostructures. *Journal of Materials Chemistry C*, **2015**, 3, 11548-11554	7.1	50
24	Two-dimensional inversion-asymmetric topological insulators in functionalized III-Bi bilayers. *Physical Review B*, **2015**, 91,	3.3	51
23	Controlling the Electronic Structures and Properties of in-Plane Transition-Metal Dichalcogenides Quantum Wells. *Scientific Reports*, **2015**, 5, 17578	4.9	21
22	Functionalized bismuth films: Giant gap quantum spin Hall and valley-polarized quantum anomalous Hall states. *Physical Review B*, **2015**, 91,	3.3	56
21	Tunable topological surface and realization of insulating massive Dirac fermion state in Bi2Te2Se with co-substitution. *Journal of Materials Chemistry C*, **2013**, 1, 114-120	7.1	3
20	Realization of insulating massive Dirac fermion state in Bi2Te3 by co-substitution of magnetic and non-magnetic elements. *Applied Physics Letters*, **2013**, 102, 092402	3.4	3
19	Engineering a topological phase transition in InSe via strain. *New Journal of Physics*, **2013**, 15, 073008	2.9	23
18	Material realization of topological crystalline insulators: Role of strain and spin-orbit coupling. *Materials Express*, **2013**, 3, 159-165	1.3	10
17	Realization of tunable Dirac cone and insulating bulk states in topological insulators (Bi(1-x)Sb(x))(2)Te(3). *Scientific Reports*, **2012**, 2, 976	4.9	20
16	Electronic and magnetic properties of the two-dimensional C4H-type polymer with strain effects, intrinsic defects and foreign atom substitutions. *Physical Chemistry Chemical Physics*, **2012**, 14, 3651-8	3.6	20
15	Ferromagnetism and manipulation of topological surface states in Bi2Se3 family by 2p light elements. *Applied Physics Letters*, **2012**, 100, 252410	3.4	8
14	. *Journal of Physical Chemistry C*, **2012**, 116, 12977-12981	3.8	47

13	Evidence of the existence of magnetism in pristine VX monolayers (X = S, Se) and their strain-induced tunable magnetic properties. *ACS Nano*, **2012**, 6, 1695-701	16.7	590
12	Halogenated two-dimensional germanium: candidate materials for being of Quantum Spin Hall state. *Journal of Materials Chemistry*, **2012**, 22, 12587		74
11	Topological phase transition and unexpected mass acquisition of Dirac fermion in TlBi(S1 Sex)2. *Applied Physics Letters*, **2012**, 101, 182101	3.4	5
10	Graphene adhesion on MoS monolayer: an ab initio study. *Nanoscale*, **2011**, 3, 3883-7	7.7	315
9	First-Principles Study of the 2 Heterobilayers. *Journal of Physical Chemistry C*, **2011**, 115, 20237-20241	3.8	112
8	Strain-induced magnetic transitions in half-fluorinated single layers of BN, GaN and graphene. *Nanoscale*, **2011**, 3, 2301-6	7.7	107
7	Quantum anomalous Hall effect in doped ternary chalcogenide topological insulators TlBiTe2 and TlBiSe2. *Applied Physics Letters*, **2011**, 99, 142502	3.4	21
6	Mn induced ferromagnetism and modulated topological surface states in Bi2Te3. *Applied Physics Letters*, **2011**, 98, 252502	3.4	66
5	Electronic and magnetic properties of perfect, vacancy-doped, and nonmetal adsorbed MoSe2, MoTe2 and WS2 monolayers. *Physical Chemistry Chemical Physics*, **2011**, 13, 15546-53	3.6	349
4	Magnetic properties of the semifluorinated and semihydrogenated 2D sheets of group-IV and III-V binary compounds. *Applied Surface Science*, **2011**, 257, 7845-7850	6.7	59
3	Ag-mediated charge transfer from electron-doped SrTiO3 to CO and NO: A first-principles study. *Surface Science*, **2011**, 605, 1331-1335	1.8	6
2	Separable states and geometric phases of an interacting two-spin system. *Physical Review A*, **2010**, 81,	2.6	8
1	Electronic and magnetic properties of C-doped Mg3N2: A density functional theory study. *Solid State Communications*, **2010**, 150, 2223-2226	1.6	5