Ting Cao

List of Publications by Year in Descending Order

48 papers	8,134 citations	30 h-index	54 g-index
54 ext. papers	10,313 ext. citations	18.9 avg, IF	6.01 L-index

#	Paper	IF	Citations
48	Reversible strain-induced magnetic phase transition in a van der Waals magnet.. *Nature Nanotechnology*, **2022**,	28.7	9
47	Long-range transport of 2D excitons with acoustic waves.. *Nature Communications*, **2022**, 13, 1334	17.4	3
46	Spin photovoltaic effect in magnetic van der Waals heterostructures. *Science Advances*, **2021**, 7, eabg8094	14.3	0
45	Direct visualization of magnetic domains and moir magnetism in twisted 2D magnets. *Science*, **2021**, 374, 1140-1144	33.3	21
44	Topological Phases in Graphene Nanoribbons Tuned by Electric Fields. *Physical Review Letters*, **2021**, 127, 166401	7.4	3
43	Imaging Graphene Moir Superlattices via Scanning Kelvin Probe Microscopy. *Nano Letters*, **2021**, 21, 3280-3286	11.5	3
42	Experimental measurement of the intrinsic excitonic wave function. *Science Advances*, **2021**, 7,	14.3	14
41	Interlayer electronic coupling on demand in a 2D magnetic semiconductor. *Nature Materials*, **2021**, 20, 1657-1662	27	12
40	Theory and Ab Initio Calculation of Optically Excited States-Recent Advances in 2D Materials. *Advanced Materials*, **2021**, 33, e1904306	24	7
39	Designing artificial two-dimensional landscapes via atomic-layer substitution. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	9
38	Twist-Angle-Dependent Ultrafast Charge Transfer in MoS-Graphene van der Waals Heterostructures. *Nano Letters*, **2021**, 21, 8051-8057	11.5	8
37	Optical Imaging and Spectroscopy of Atomically Precise Armchair Graphene Nanoribbons. *Nano Letters*, **2020**, 20, 1124-1130	11.5	11
36	Directly visualizing the momentum-forbidden dark excitons and their dynamics in atomically thin semiconductors. *Science*, **2020**, 370, 1199-1204	33.3	55
35	Inducing metallicity in graphene nanoribbons via zero-mode superlattices. *Science*, **2020**, 369, 1597-1603	33.3	46
34	Emerging photoluminescence from the dark-exciton phonon replica in monolayer WSe. *Nature Communications*, **2019**, 10, 2469	17.4	57
33	Physical origin of giant excitonic and magneto-optical responses in two-dimensional ferromagnetic insulators. *Nature Communications*, **2019**, 10, 2371	17.4	42
32	Valley-dependent exciton fine structure and Autler-Townes doublets from Berry phases in monolayer MoSe. *Nature Materials*, **2019**, 18, 1065-1070	27	18

31	Giant nonreciprocal second-harmonic generation from antiferromagnetic bilayer CrI. *Nature*, **2019**, 572, 497-501	50.4	172
30	Switching 2D magnetic states via pressure tuning of layer stacking. *Nature Materials*, **2019**, 18, 1298-1302	27	194
29	Momentum-Dark Intervalley Exciton in Monolayer Tungsten Diselenide Brightened Chiral Phonon. *ACS Nano*, **2019**, 13, 14107-14113	16.7	25
28	Exchange-driven intravalley mixing of excitons in monolayer transition metal dichalcogenides. *Nature Physics*, **2019**, 15, 228-232	16.2	43
27	Interfacial engineering in graphene bandgap. *Chemical Society Reviews*, **2018**, 47, 3059-3099	58.5	94
26	Unifying Optical Selection Rules for Excitons in Two Dimensions: Band Topology and Winding Numbers. *Physical Review Letters*, **2018**, 120, 087402	7.4	34
25	Ultrasensitive tunability of the direct bandgap of 2D InSe flakes via strain engineering. *2D Materials* , **2018**, 5, 021002	5.9	53
24	Topological band engineering of graphene nanoribbons. *Nature*, **2018**, 560, 204-208	50.4	287
23	Topological Phases in Cove-Edged and Chevron Graphene Nanoribbons: Geometric Structures, [Formula: see text] Invariants, and Junction States. *Nano Letters*, **2018**, 18, 7247-7253	11.5	30
22	Two-dimensional ferromagnetism in few-layer van der Waals crystals: Renormalized spin-wave theory and calculations. *Journal of Magnetism and Magnetic Materials*, **2018**, 463, 28-35	2.8	21
21	Concentration Dependence of Dopant Electronic Structure in Bottom-up Graphene Nanoribbons. *Nano Letters*, **2018**, 18, 3550-3556	11.5	19
20	Generation of Anisotropic Massless Dirac Fermions and Asymmetric Klein Tunneling in Few-Layer Black Phosphorus Superlattices. *Nano Letters*, **2017**, 17, 2280-2286	11.5	33
19	Interfacial Engineering of Van der Waals Coupled 2D Layered Materials. *Advanced Materials Interfaces*, **2017**, 4, 1601054	4.6	18
18	Discovery of intrinsic ferromagnetism in two-dimensional van der Waals crystals. *Nature*, **2017**, 546, 265-269	50.4	1890
17	Topological Phases in Graphene Nanoribbons: Junction States, Spin Centers, and Quantum Spin Chains. *Physical Review Letters*, **2017**, 119, 076401	7.4	151
16	Tunable excitons in bilayer graphene. *Science*, **2017**, 358, 907-910	33.3	89
15	Robust Stacking-Independent Ultrafast Charge Transfer in MoS/WS Bilayers. *ACS Nano*, **2017**, 11, 12020-12026	12.9	89
14	Magnetic brightening and control of dark excitons in monolayer WSe. *Nature Nanotechnology*, **2017** , 12, 883-888	28.7	213

13	Gate Switchable Transport and Optical Anisotropy in 90° Twisted Bilayer Black Phosphorus. *Nano Letters*, **2016**, 16, 5542-6	11.5	56
12	Bottom-Up Synthesis of N = 13 Sulfur-Doped Graphene Nanoribbons. *Journal of Physical Chemistry C*, **2016**, 120, 2684-2687	3.8	95
11	Molecular bandgap engineering of bottom-up synthesized graphene nanoribbon heterojunctions. *Nature Nanotechnology*, **2015**, 10, 156-60	28.7	340
10	Tunable Magnetism and Half-Metallicity in Hole-Doped Monolayer GaSe. *Physical Review Letters*, **2015**, 114, 236602	7.4	257
9	Site-Specific Substitutional Boron Doping of Semiconducting Armchair Graphene Nanoribbons. *Journal of the American Chemical Society*, **2015**, 137, 8872-5	16.4	177
8	Strong Second-Harmonic Generation in Atomic Layered GaSe. *Journal of the American Chemical Society*, **2015**, 137, 7994-7	16.4	206
7	Nonanalyticity, Valley Quantum Phases, and Lightlike Exciton Dispersion in Monolayer Transition Metal Dichalcogenides: Theory and First-Principles Calculations. *Physical Review Letters*, **2015**, 115, 176801	7.4	130
6	Three-dimensional spirals of atomic layered MoS2. *Nano Letters*, **2014**, 14, 6418-23	11.5	136
5	Probing excitonic dark states in single-layer tungsten disulphide. *Nature*, **2014**, 513, 214-8	50.4	672
4	Evolution of interlayer coupling in twisted molybdenum disulfide bilayers. *Nature Communications*, **2014**, 5, 4966	17.4	410
3	Coupling the valley degree of freedom to antiferromagnetic order. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 3738-42	11.5	167
2	Valley-selective circular dichroism of monolayer molybdenum disulphide. *Nature Communications*, **2012**, 3, 887	17.4	1702
1	Adsorption of hydrogen on the interface of a graphene/boron nitride hybrid atomic membrane. *Physical Review B*, **2011**, 84,	3.3	7