

# Shiang Fang

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

46  
papers

7,247  
citations

25  
h-index

52  
g-index

52  
ext. papers

10,422  
ext. citations

13.6  
avg, IF

6.39  
L-index

#	Paper	IF	Citations
46	Signatures of bosonic Landau levels in a finite-momentum superconductor. <i>Nature</i> , <b>2021</b> , 599, 51-56	50.4	0
45	Moiré superlattice on the surface of a topological insulator. <i>Physical Review B</i> , <b>2021</b> , 103,	3.3	4
44	Spectroscopic Signatures of Interlayer Coupling in Janus MoSSe/MoS Heterostructures. <i>ACS Nano</i> , <b>2021</b> , 15, 14394-14403	16.7	6
43	Evidence of two-dimensional flat band at the surface of antiferromagnetic kagome metal FeSn. <i>Nature Communications</i> , <b>2021</b> , 12, 5345	17.4	5
42	Magnetic Weyl Semimetallic Phase in Thin Films of $\text{Eu}_2\text{Ir}_2\text{O}_7$ . <i>Physical Review Letters</i> , <b>2021</b> , 127, 277204	7.4	0
41	Dirac fermions and flat bands in the ideal kagome metal FeSn. <i>Nature Materials</i> , <b>2020</b> , 19, 163-169	27	121
40	Clean 2D superconductivity in a bulk van der Waals superlattice. <i>Science</i> , <b>2020</b> , 370, 231-236	33.3	21
39	Effects of structural distortions on the electronic structure of T-type transition metal dichalcogenides. <i>Physical Review B</i> , <b>2020</b> , 102,	3.3	1
38	Topological flat bands in frustrated kagome lattice $\text{CoSn}$ . <i>Nature Communications</i> , <b>2020</b> , 11, 4004	17.4	43
37	Electronic-structure methods for twisted moiré layers. <i>Nature Reviews Materials</i> , <b>2020</b> , 5, 748-763	73.3	51
36	Enhancement of van der Waals Interlayer Coupling through Polar Janus MoSSe. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 17499-17507	16.4	23
35	Enhancement of interlayer exchange in an ultrathin two-dimensional magnet. <i>Nature Physics</i> , <b>2019</b> , 15, 1255-1260	16.2	85
34	Atomic and electronic reconstruction at the van der Waals interface in twisted bilayer graphene. <i>Nature Materials</i> , <b>2019</b> , 18, 448-453	27	282
33	Atomic electrostatic maps of 1D channels in 2D semiconductors using 4D scanning transmission electron microscopy. <i>Nature Communications</i> , <b>2019</b> , 10, 1127	17.4	33
32	Simultaneous Identification of Low and High Atomic Number Atoms in Monolayer 2D Materials Using 4D Scanning Transmission Electron Microscopy. <i>Nano Letters</i> , <b>2019</b> , 19, 6482-6491	11.5	17
31	Exact continuum model for low-energy electronic states of twisted bilayer graphene. <i>Physical Review Research</i> , <b>2019</b> , 1,	3.9	105
30	Creating Weyl nodes and controlling their energy by magnetization rotation. <i>Physical Review Research</i> , <b>2019</b> , 1,	3.9	18

29	Derivation of Wannier orbitals and minimal-basis tight-binding Hamiltonians for twisted bilayer graphene: First-principles approach. <i>Physical Review Research</i> , <b>2019</b> , 1,	3.9	26
28	Observation of the nonlinear Hall effect under time-reversal-symmetric conditions. <i>Nature</i> , <b>2019</b> , 565, 337-342	50.4	159
27	High performance tunnel field effect transistors based on in-plane transition metal dichalcogenide heterojunctions. <i>Nanotechnology</i> , <b>2019</b> , 30, 025201	3.4	10
26	Correlated insulator behaviour at half-filling in magic-angle graphene superlattices. <i>Nature</i> , <b>2018</b> , 556, 80-84	50.4	1771
25	Unconventional superconductivity in magic-angle graphene superlattices. <i>Nature</i> , <b>2018</b> , 556, 43-50	50.4	2942
24	Electronic structure theory of strained two-dimensional materials with hexagonal symmetry. <i>Physical Review B</i> , <b>2018</b> , 98,	3.3	37
23	Enhanced superconductivity upon weakening of charge density wave transport in 2H-TaS <sub>2</sub> in the two-dimensional limit. <i>Physical Review B</i> , <b>2018</b> , 98,	3.3	46
22	Compression of Wannier functions into Gaussian-type orbitals. <i>Computer Physics Communications</i> , <b>2018</b> , 230, 27-37	4.2	2
21	Modeling Electronic Properties of Twisted 2D Atomic Heterostructures. <i>Springer Proceedings in Mathematics and Statistics</i> , <b>2018</b> , 245-265	0.2	
20	Dihedral-angle-corrected registry-dependent interlayer potential for multilayer graphene structures. <i>Physical Review B</i> , <b>2018</b> , 98,	3.3	23
19	Berry curvature dipole current in the transition metal dichalcogenides family. <i>Physical Review B</i> , <b>2018</b> , 98,	3.3	66
18	Pressure dependence of the magic twist angle in graphene superlattices. <i>Physical Review B</i> , <b>2018</b> , 98,	3.3	103
17	Magnetic resonance spectroscopy of an atomically thin material using a single-spin qubit. <i>Science</i> , <b>2017</b> , 355, 503-507	33.3	74
16	Twistronics: Manipulating the electronic properties of two-dimensional layered structures through their twist angle. <i>Physical Review B</i> , <b>2017</b> , 95,	3.3	171
15	Bounds on nanoscale nematicity in single-layer FeSe/SrTiO <sub>3</sub> . <i>Physical Review B</i> , <b>2016</b> , 93,	3.3	11
14	Electronic structure theory of weakly interacting bilayers. <i>Physical Review B</i> , <b>2016</b> , 93,	3.3	114
13	MoS Field-Effect Transistor with Sub-10 nm Channel Length. <i>Nano Letters</i> , <b>2016</b> , 16, 7798-7806	11.5	283
12	Strain dependence of band gaps and exciton energies in pure and mixed transition-metal dichalcogenides. <i>Physical Review B</i> , <b>2016</b> , 94,	3.3	72

11	Theory of Graphene Raman Scattering. <i>ACS Nano</i> , <b>2016</b> , 10, 2803-18	16.7	65
10	Superlattice-Induced Insulating States and Valley-Protected Orbits in Twisted Bilayer Graphene. <i>Physical Review Letters</i> , <b>2016</b> , 117, 116804	7.4	218
9	Ab initio tight-binding Hamiltonian for transition metal dichalcogenides. <i>Physical Review B</i> , <b>2015</b> , 92,	3.3	111
8	Revealing the Empty-State Electronic Structure of Single-Unit-Cell FeSe/SrTiO <sub>3</sub> . <i>Physical Review Letters</i> , <b>2015</b> , 115, 017002	7.4	48
7	Quantum and thermal transitions out of the pair-supersolid phase of two-species bosons on a square lattice. <i>Physical Review B</i> , <b>2012</b> , 85,	3.3	10
6	Tuning the Kosterlitz-Thouless transition to zero temperature in anisotropic boson systems. <i>Physical Review A</i> , <b>2012</b> , 86,	2.6	4
5	Quantum criticality from in situ density imaging. <i>Physical Review A</i> , <b>2011</b> , 83,	2.6	30
4	Quantum fluctuations and condensate fraction during time-of-flight expansion. <i>Physical Review A</i> , <b>2010</b> , 82,	2.6	3
3	A Michelson Interferometer for Relative Phase Locking of Optical Beams. <i>Journal of the Physical Society of Japan</i> , <b>2008</b> , 77, 024301	1.5	6
2	Twofold van Hove singularity and origin of charge order in topological kagome superconductor CsV <sub>3</sub> Sb <sub>5</sub> . <i>Nature Physics</i> ,	16.2	16
1	Observation of interband collective excitations in twisted bilayer graphene. <i>Nature Physics</i> ,	16.2	7