

# Chuang-Han Hsu

## List of Publications by Year in descending order

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52  
papers

5,059  
citations

201674

27  
h-index

182427

51  
g-index

55  
all docs

55  
docs citations

55  
times ranked

7025  
citing authors

#	ARTICLE	IF	CITATIONS
1	Nonreciprocal Transport in a Bilayer of $\text{MnBi}_2\text{Te}_4$ and Pt. Nano Letters, 2022, 22, 1366-1373.	9.1	7
2	Reply to: Detectivities of $\text{WS}_2/\text{HfS}_2$ heterojunctions. Nature Nanotechnology, 2022, 17, 220-221.	31.5	5
3	Room-temperature nonlinear Hall effect and wireless radiofrequency rectification in Weyl semimetal $\text{TaIrTe}_4$ . Nature Nanotechnology, 2021, 16, 421-425.	31.5	91
4	Observation of the Out-of-Plane Polarized Spin Current from CVD Grown $\text{WTe}_2$ . Advanced Quantum Technologies, 2021, 4, 2100038.	3.9	23
5	Aspects of symmetry and topology in the charge density wave phase of $1\text{T}\bar{\text{a}}\text{-TiSe}_2$ . New Journal of Physics, 2021, 23, 083037.	2.9	7
6	Dimensionality-dependent type-II Weyl semimetal state in $\langle \text{math xmlns:mml="http://www.w3.org/1998/Math/MathML">\langle \text{mml:mrow}>\langle \text{mml:mi mathvariant="normal">Mo}</\text{mml:mi}>\langle \text{mml:mrow}>\langle \text{mml:mn}>0.25</\text{mml:mn}>\langle \text{mml:mrow}>\langle \text{mml:msub}>\langle \text{mml:mi mathvariant="normal">W}</\text{mml:mi}>\langle \text{mml:mrow}>\langle \text{mml:mn}>0.75</\text{mml:mn}>\langle \text{mml:mrow}>\langle \text{mml:msub}>\langle \text{mml:mi mathvariant="normal">Te}</\text{mml:mi}>\langle \text{mml:mn}>2</\text{mml:mn}>\langle \text{mml:msub}>\langle \text{mml:math}>$		
7	Novel family of topological semimetals with butterflylike nodal lines. Physical Review B, 2021, 104, .	3.2	4
8	Topological theory of inversion-breaking charge-density-wave monolayer $1\text{T-TiSe}_2$ . New Journal of Physics, 2021, 23, 093025.	2.9	3
9	Quantum frequency doubling in the topological insulator $\text{Bi}_2\text{Se}_3$ . Nature Communications, 2021, 12, 698.	12.8	48
10	Low-symmetry topological materials for large charge-to-spin interconversion: The case of transition metal dichalcogenide monolayers. Physical Review Research, 2021, 3, .	3.6	11
11	Glide symmetry protected higher-order topological insulators from semimetals with butterfly-like nodal lines. Npj Computational Materials, 2021, 7, .	8.7	3
12	Spin-Orbit Torque Magnetization Switching in $\text{MoTe}_2$ /Permalloy Heterostructures. Advanced Materials, 2020, 32, e2002799.	21.0	40
13	Canted Persistent Spin Texture and Quantum Spin Hall Effect in $\langle \text{math xmlns:mml="http://www.w3.org/1998/Math/MathML">\langle \text{mml:mrow}>\langle \text{mml:msub}>\langle \text{mml:mrow}>\langle \text{mml:mi}>W\text{Te}</\text{mml:mi}>\langle \text{mml:mrow}>\langle \text{mml:mrow}>\langle \text{mml:mn}>2</\text{mml:mn}>\langle \text{mml:msub}>\langle \text{mml:mi}>$	7.8	38
14	Bond-breaking induced Lifshitz transition in robust Dirac semimetal $\text{VAI}_3$ . Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 15517-15523.	7.1	8
15	High oscillator strength interlayer excitons in two-dimensional heterostructures for mid-infrared photodetection. Nature Nanotechnology, 2020, 15, 675-682.	31.5	129
16	Spontaneous gyrotropic electronic order in a transition-metal dichalcogenide. Nature, 2020, 578, 545-549.	27.8	80
17	Coexistence of large conventional and planar spin Hall effect with long spin diffusion length in a low-symmetry semimetal at room temperature. Nature Materials, 2020, 19, 292-298.	27.5	77
18	Topological Semimetals for Scaled Back-End-Of-Line Interconnect Beyond Cu. , 2020, , .		7

#	ARTICLE	IF	CITATIONS
19	Topology on a new facet of bismuth. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 13255-13259.	7.1	61
20	Nonlinear magnetotransport shaped by Fermi surface topology and convexity. Nature Communications, 2019, 10, 1290.	12.8	38
21	Purely rotational symmetry-protected topological crystalline insulator $\hat{\Gamma}_4$ - $\text{Bi}_4\text{Br}_4$ . 2D Materials, 2019, 6, 031004.	4.4	41
22	Observation of the nonlinear Hall effect under time-reversal-symmetric conditions. Nature, 2019, 565, 337-342.	27.8	372
23	Room-temperature Nanoseconds Spin Relaxation in $\text{WTe}_2$ and $\text{MoTe}_2$ Thin Films. Advanced Science, 2018, 5, 1700912.	11.2	34
24	A library of atomically thin metal chalcogenides. Nature, 2018, 556, 355-359.	27.8	1,225
25	Topological superconductor in quasi-one-dimensional $\text{Tl}_2\text{Te}$ . <a href="#">Magnetic and noncentrosymmetric Weyl fermion semimetals in the <math>\text{R}_2\text{Te}_2</math> family.</a>		
26	<a href="#">Magnetic and noncentrosymmetric Weyl fermion semimetals in the <math>\text{R}_2\text{Te}_2</math> family.</a>		

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37	Metal–Semiconductor Phase Transition in $\text{WSe}_2(1\bar{1}\bar{0})\text{Te}_2$ Monolayer. <i>Advanced Materials</i> , 2017, 29, 1603991.	21.0	123
38	Discovery of Lorentz-violating type II Weyl fermions in $\text{LaAlGe}$ . <i>Science Advances</i> , 2017, 3, e1603266.	10.3	176
39	Room-temperature magnetic topological Weyl fermion and nodal line semimetal states in half-metallic Heusler $\text{Co}_2\text{TiX}$ ( $X=\text{Si}$ , $\text{Ge}$ , or $\text{Sn}$ ). <i>Scientific Reports</i> , 2016, 6, 38839.	3.3	148
40	Two-dimensional Topological Crystalline Insulator Phase in $\text{Sb/Bi}$ Planar Honeycomb with Tunable Dirac Gap. <i>Scientific Reports</i> , 2016, 6, 18993.	3.3	21
41	Chiral-p-wave superconductivity in $\text{Sb}(111)$ thin films close to Van Hove singularities. <i>Physical Review B</i> , 2016, 93, .	3.2	9
42	Signatures of Fermi Arcs in the Quasiparticle Interferences of the Weyl Semimetals TaAs and NbP. <i>Physical Review Letters</i> , 2016, 116, 066601.	7.8	54
43	Spin Polarization and Texture of the Fermi Arcs in the Weyl Fermion Semimetal TaAs. <i>Physical Review Letters</i> , 2016, 116, 096801.	7.8	102
44	Signatures of the Adler–Bell–Jackiw chiral anomaly in a Weyl fermion semimetal. <i>Nature Communications</i> , 2016, 7, 10735.	12.8	603
45	The electronic structure of organic–inorganic hybrid perovskite solar cell: A first-principles analysis. <i>Computational Materials Science</i> , 2016, 117, 573-578.	3.0	22
46	Effects of interlayer interaction in van der Waals layered black phosphorus for sub-10 nm FET. , 2015, , .		5
47	Experimental discovery of a topological Weyl semimetal state in TaP. <i>Science Advances</i> , 2015, 1, e1501092.	10.3	337
48	Spin-Polarized Transport through Single Manganese Phthalocyanine Molecules on a Co Nanoisland. <i>Journal of Physical Chemistry C</i> , 2015, 119, 3374-3378.	3.1	20
49	Spin-Dependent Molecule Symmetry at a Pentacene–Co Spinterface. <i>ACS Nano</i> , 2015, 9, 7027-7032.	14.6	23
50	In situ magnetization switching of magnetic probes applied to spin-polarized scanning tunneling microscopy. <i>Applied Physics Letters</i> , 2010, 96, 142515.	3.3	10
51	Manipulated nucleation of Fe nanostructures on $\text{Au}(111)$ with combined growth methods. <i>Nanotechnology</i> , 2010, 21, 015606.	2.6	9
52	Nucleation of Fe nanoparticle chains and nanostripes on $\text{Au}(111)$ stepped surface. <i>Journal of Applied Physics</i> , 2010, 107, 014301.	2.5	5