Peng Yu

List of Publications by Citations

52 papers	4,319 citations	29 h-index	58 g-index
58 ext. papers	5,437 ext. citations	16.8 avg, IF	5.28 L-index

#	Paper	IF	Citations
52	High-Electron-Mobility and Air-Stable 2D Layered PtSe FETs. *Advanced Materials*, **2017**, 29, 1604230	24	368
51	Room-temperature ferroelectricity in CuInP2S6 ultrathin flakes. *Nature Communications*, **2016**, 7, 12357	17.4	355
50	Extraordinarily Strong Interlayer Interaction in 2D Layered PtS2. *Advanced Materials*, **2016**, 28, 2399-407	24	322
49	PdSe: Pentagonal Two-Dimensional Layers with High Air Stability for Electronics. *Journal of the American Chemical Society*, **2017**, 139, 14090-14097	16.4	318
48	Atomically thin noble metal dichalcogenide: a broadband mid-infrared semiconductor. *Nature Communications*, **2018**, 9, 1545	17.4	267
47	High-quality monolayer superconductor NbSe grown by chemical vapour deposition. *Nature Communications*, **2017**, 8, 394	17.4	199
46	Two-dimensional non-volatile programmable p-n junctions. *Nature Nanotechnology*, **2017**, 12, 901-906	28.7	196
45	High-Yield Exfoliation of Ultrathin Two-Dimensional Ternary Chalcogenide Nanosheets for Highly Sensitive and Selective Fluorescence DNA Sensors. *Journal of the American Chemical Society*, **2015**, 137, 10430-6	16.4	187
44	High Mobility 2D Palladium Diselenide Field-Effect Transistors with Tunable Ambipolar Characteristics. *Advanced Materials*, **2017**, 29, 1602969	24	180
43	Lithiation-induced amorphization of Pd3P2S8 for highly efficient hydrogen evolution. *Nature Catalysis*, **2018**, 1, 460-468	36.5	153
42	Large-Area and High-Quality 2D Transition Metal Telluride. *Advanced Materials*, **2017**, 29, 1603471	24	140
41	Discovery of a new type of topological Weyl fermion semimetal state in MoWTe. *Nature Communications*, **2016**, 7, 13643	17.4	134
40	New Frontiers on van der Waals Layered Metal Phosphorous Trichalcogenides. *Advanced Functional Materials*, **2018**, 28, 1802151	15.6	125
39	Fast Photoresponse from 1T Tin Diselenide Atomic Layers. *Advanced Functional Materials*, **2016**, 26, 137-145	15.6	125
38	Nonlinear photoresponse of type-II Weyl semimetals. *Nature Materials*, **2019**, 18, 476-481	27	104
37	Controlled Synthesis of Organic/Inorganic van der Waals Solid for Tunable Light-Matter Interactions. *Advanced Materials*, **2015**, 27, 7800-8	24	94
36	Metal-Semiconductor Phase-Transition in WSe Te Monolayer. *Advanced Materials*, **2017**, 29, 1603991	24	88

35	Novel Pd_{2}Se_{3} Two-Dimensional Phase Driven by Interlayer Fusion in Layered PdSe_{2}. *Physical Review Letters*, **2017**, 119, 016101	7.4	86
34	Self-gating in semiconductor electrocatalysis. *Nature Materials*, **2019**, 18, 1098-1104	27	84
33	Controllable Synthesis of Atomically Thin Type-II Weyl Semimetal WTe Nanosheets: An Advanced Electrode Material for All-Solid-State Flexible Supercapacitors. *Advanced Materials*, **2017**, 29, 1701909	24	81
32	Van der Waals p□ Junction Based on an Organic□norganic Heterostructure. *Advanced Functional Materials*, **2015**, 25, 5865-5871	15.6	76
31	Van der Waals negative capacitance transistors. *Nature Communications*, **2019**, 10, 3037	17.4	71
30	Spatially dispersive circular photogalvanic effect in a Weyl semimetal. *Nature Materials*, **2019**, 18, 955-962	27	58
29	Signatures of a time-reversal symmetric Weyl semimetal with only four Weyl points. *Nature Communications*, **2017**, 8, 942	17.4	57
28	Preparation of Ultrathin Two-Dimensional Ti Ta S O Nanosheets as Highly Efficient Photothermal Agents. *Angewandte Chemie - International Edition*, **2017**, 56, 7842-7846	16.4	50
27	Band Structure Engineering of Interfacial Semiconductors Based on Atomically Thin Lead Iodide Crystals. *Advanced Materials*, **2019**, 31, e1806562	24	49
26	Anisotropic Ordering in 1TTMolybdenum and Tungsten Ditelluride Layers Alloyed with Sulfur and Selenium. *ACS Nano*, **2018**, 12, 894-901	16.7	35
25	In-Plane Anisotropic Thermal Conductivity of Few-Layered Transition Metal Dichalcogenide Td-WTe. *Advanced Materials*, **2019**, 31, e1804979	24	29
24	Van der Waals engineering of ferroelectric heterostructures for long-retention memory. *Nature Communications*, **2021**, 12, 1109	17.4	29
23	Optoelectronic properties of atomically thin ReSSe with weak interlayer coupling. *Nanoscale*, **2016**, 8, 5826-34	7.7	27
22	Penta-PdPSe: A New 2D Pentagonal Material with Highly In-Plane Optical, Electronic, and Optoelectronic Anisotropy. *Advanced Materials*, **2021**, 33, e2102541	24	27
21	Ternary Ta PdS Atomic Layers for an Ultrahigh Broadband Photoresponsive Phototransistor. *Advanced Materials*, **2021**, 33, e2005607	24	25
20	Single-Layer Ternary Chalcogenide Nanosheet as a Fluorescence-Based "Capture-Release" Biomolecular Nanosensor. *Small*, **2017**, 13, 1601925	11	24
19	Low-Symmetry PdSe2 for High Performance Thermoelectric Applications. *Advanced Functional Materials*, **2020**, 30, 2004896	15.6	23
18	Room-temperature nonlinear Hall effect and wireless radiofrequency rectification in Weyl semimetal TaIrTe. *Nature Nanotechnology*, **2021**, 16, 421-425	28.7	21

17	Pressure-Induced Phase Transition in Weyl Semimetallic WTe. *Small*, **2017**, 13, 1701887	11	20
16	Amorphizing noble metal chalcogenide catalysts at the single-layer limit towards hydrogen production. *Nature Catalysis*, **2022**, 5, 212-221	36.5	14
15	Ternary chalcogenide Ta2NiS5 nanosheets for broadband pulse generation in ultrafast fiber lasers. *Nanophotonics*, **2019**, 9, 2341-2349	6.3	12
14	Preparation of Ultrathin Two-Dimensional TixTa1□SyOz Nanosheets as Highly Efficient Photothermal Agents. *Angewandte Chemie*, **2017**, 129, 7950-7954	3.6	10
13	Few-layered CuInP2S6 nanosheet with sulfur vacancy boosting photocatalytic hydrogen evolution. *CrystEngComm*, **2021**, 23, 591-598	3.3	10
12	Mid-Infrared Photodetection of Type-II Dirac Semimetal 1T-PtTe Grown by Molecular Beam Epitaxy. *ACS Applied Materials & Interfaces*, **2021**, 13, 22757-22764	9.5	8
11	Dynamical evolution of anisotropic response of type-II Weyl semimetal TaIrTe under ultrafast photoexcitation. *Light: Science and Applications*, **2021**, 10, 101	16.7	8
10	Direct Laser Patterning of a 2D WSe2 Logic Circuit. *Advanced Functional Materials*, **2021**, 31, 2009549	15.6	6
9	Electrically switchable van der Waals magnon valves. *Nature Communications*, **2021**, 12, 6279	17.4	4
8	Exfoliated FePS3 nanosheets for T1-weighted magnetic resonance imaging-guided near-infrared photothermal therapy in vivo. *Science China Materials*, **2021**, 64, 2613-2623	7.1	4
7	Field-Effect Transistors: Low-Symmetry PdSe2 for High Performance Thermoelectric Applications (Adv. Funct. Mater. 52/2020). *Advanced Functional Materials*, **2020**, 30, 2070347	15.6	3
6	Discovery of Dome-Shaped Superconducting Phase and Anisotropic Transport in a van der Waals Layered Candidate NbIrTe under Pressure. *Advanced Science*, **2021**, e2103250	13.6	3
5	A novel Pd2Se3 two-dimensional phase driven by interlayer fusion in layered PdSe2. *Microscopy and Microanalysis*, **2017**, 23, 1700-1701	0.5	1
4	Atomically Thin 2D van der Waals Magnetic Materials: Fabrications, Structure, Magnetic Properties and Applications. *Coatings*, **2022**, 12, 122	2.9	1
3	Strong Piezoelectricity in 3R-MoS 2 Flakes. *Advanced Electronic Materials*,2101131	6.4	1
2	Direct Light Orbital Angular Momentum Detection in Mid-Infrared Based on Type-II Weyl Semimetal TaIrTe 4. *Advanced Materials*,2201229	24	1
1	Band Engineering: Band Structure Engineering of Interfacial Semiconductors Based on Atomically Thin Lead Iodide Crystals (Adv. Mater. 17/2019). *Advanced Materials*, **2019**, 31, 1970121	24	