

# Wei Han

## List of Publications by Year in descending order

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81  
papers

7,123  
citations

87886

38  
h-index

74160

75  
g-index

82  
all docs

82  
docs citations

82  
times ranked

8516  
citing authors

#	ARTICLE	IF	CITATIONS
1	Graphene spintronics. Nature Nanotechnology, 2014, 9, 794-807.	31.5	1,290
2	Role of transparency of platinum-ferromagnet interfaces in determining the intrinsic magnitude of the spin Hall effect. Nature Physics, 2015, 11, 496-502.	16.7	465
3	Tunneling Spin Injection into Single Layer Graphene. Physical Review Letters, 2010, 105, 167202.	7.8	422
4	Spin Relaxation in Single-Layer and Bilayer Graphene. Physical Review Letters, 2011, 107, 047207.	7.8	340
5	Enhanced spin-orbit torques by oxygen incorporation in tungsten films. Nature Communications, 2016, 7, 10644.	12.8	266
6	Magnetic Moment Formation in Graphene Detected by Scattering of Pure Spin Currents. Physical Review Letters, 2012, 109, 186604.	7.8	262
7	Electronic doping and scattering by transition metals on graphene. Physical Review B, 2009, 80, .	3.2	245
8	Giant facet-dependent spin-orbit torque and spin Hall conductivity in the triangular antiferromagnet IrMn <sub>3</sub> . Science Advances, 2016, 2, e1600759.	10.3	188
9	Electric field effect in multilayer Cr <sub>2</sub> Ge <sub>2</sub> Te <sub>6</sub> : a ferromagnetic 2D material. 2D Materials, 2017, 4, 024009.	4.4	173
10	Perspectives for spintronics in 2D materials. APL Materials, 2016, 4, .	5.1	171
11	Manipulation of Spin Transport in Graphene by Surface Chemical Doping. Physical Review Letters, 2010, 104, 187201.	7.8	168
12	Electrical spin injection and transport in germanium. Physical Review B, 2011, 84, .	3.2	158
13	Effect of cluster formation on graphene mobility. Physical Review B, 2010, 81, .	3.2	143
14	Electrical detection of spin precession in single layer graphene spin valves with transparent contacts. Applied Physics Letters, 2009, 94, .	3.3	141
15	Two-dimensional superconductivity and anisotropic transport at KTaO <sub>3</sub> (111) interfaces. Science, 2021, 371, 716-721.	12.6	136
16	Observation of inverse Edelstein effect in Rashba-split 2DEG between SrTiO <sub>3</sub> and LaAlO <sub>3</sub> at room temperature. Science Advances, 2017, 3, e1602312.	10.3	132
17	Quantum materials for spin and charge conversion. Npj Quantum Materials, 2018, 3, .	5.2	132
18	Electron-Hole Asymmetry of Spin Injection and Transport in Single-Layer Graphene. Physical Review Letters, 2009, 102, 137205.	7.8	130

#	ARTICLE	IF	CITATIONS
19	Spin transport and relaxation in graphene. Journal of Magnetism and Magnetic Materials, 2012, 324, 369-381.	2.3	128
20	Experimental signatures of spin superfluid ground state in canted antiferromagnet Cr <sub>2</sub> O <sub>3</sub> via nonlocal spin transport. Science Advances, 2018, 4, eaat1098.	10.3	127
21	Experimental Investigation of Temperature-Dependent Gilbert Damping in Permalloy Thin Films. Scientific Reports, 2016, 6, 22890.	3.3	120
22	Investigating the origin of Fermi level pinning in Ge Schottky junctions using epitaxially grown ultrathin MgO films. Applied Physics Letters, 2010, 96, .	3.3	111
23	All-conjugated poly(3-alkylthiophene) diblock copolymer-based bulk heterojunction solar cells with controlled molecular organization and nanoscale morphology. Energy and Environmental Science, 2011, 4, 2894.	30.8	100
24	Spin current as a probe of quantum materials. Nature Materials, 2020, 19, 139-152.	27.5	94
25	Magnetic anisotropy of the single-crystalline ferromagnetic insulator Cr <sub>2</sub> Ge <sub>2</sub> Te <sub>6</sub> . Japanese Journal of Applied Physics, 2016, 55, 033001.	1.5	90
26	Suppression of Ionic Liquid Gate-Induced Metallization of SrTiO <sub>3</sub> (001) by Oxygen. Nano Letters, 2013, 13, 4675-4678.	9.1	87
27	Thermal generation, manipulation and thermoelectric detection of skyrmions. Nature Electronics, 2020, 3, 672-679.	26.0	86
28	Magnon Transport in Quasi-Two-Dimensional van der Waals Antiferromagnets. Physical Review X, 2019, 9, .	8.9	82
29	Probing Magnetism in Insulating Cr <sub>2</sub> Ge <sub>2</sub> Te <sub>6</sub> by Induced Anomalous Hall Effect in Pt. Nano Letters, 2019, 19, 2397-2403.	9.1	81
30	High-Mobility Spin-Polarized Two-Dimensional Electron Gases at EuO/KTaO <sub>3</sub> Interfaces. Physical Review Letters, 2018, 121, 116803.	7.8	79
31	Pressure-induced spin reorientation transition in layered ferromagnetic insulator Cr <sub>2</sub> Ge <sub>2</sub> Te <sub>6</sub> . Physical Review Materials, 2018, 2, .	2.4	67
32	Spin Relaxation in Single-Layer Graphene with Tunable Mobility. Nano Letters, 2012, 12, 3443-3447.	9.1	53
33	Epitaxial EuO thin films on GaAs. Applied Physics Letters, 2010, 97, 112509.	3.3	49
34	Probe of spin dynamics in superconducting NbN thin films via spin pumping. Physical Review B, 2018, 97, .	3.2	49
35	Spin injection and detection in lanthanum- and niobium-doped SrTiO <sub>3</sub> using the Hanle technique. Nature Communications, 2013, 4, 2134.	12.8	46
36	Growth of atomically smooth MgO films on graphene by molecular beam epitaxy. Applied Physics Letters, 2008, 93, .	3.3	43

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37	Reversible Formation of 2D Electron Gas at the LaFeO <sub>3</sub> /SrTiO <sub>3</sub> Interface via Control of Oxygen Vacancies. <i>Advanced Materials</i> , 2017, 29, 1604447.	21.0	41
38	An Efficient Route to Graphitic Carbon-Layer-Coated Gallium Nitride Nanorods. <i>Advanced Materials</i> , 2002, 14, 1560-1562.	21.0	38
39	Spin injection and inverse Edelstein effect in the surface states of topological Kondo insulator SmB <sub>6</sub> . <i>Nature Communications</i> , 2016, 7, 13485.	12.8	37
40	Dirac surface state-modulated spin dynamics in a ferrimagnetic insulator at room temperature. <i>Science Advances</i> , 2018, 4, eaas8660.	10.3	35
41	Room-Temperature Electric-Field Controlled Ferromagnetism in Mn <sub>0.05</sub> Ge <sub>0.95</sub> Quantum Dots. <i>ACS Nano</i> , 2010, 4, 4948-4954.	14.6	34
42	Controlled evaporative self-assembly of hierarchically structured bottlebrush block copolymer with nanochannels. <i>Journal of Materials Chemistry</i> , 2011, 21, 14248.	6.7	30
43	Thermal Spin Injection and Inverse Edelstein Effect of the Two-Dimensional Electron Gas at EuO <sub>3</sub> /KTaO <sub>3</sub> Interfaces. <i>Nano Letters</i> , 2019, 19, 1605-1612.	9.1	30
44	Engineering of tunnel junctions for prospective spin injection in germanium. <i>Applied Physics Letters</i> , 2009, 94, 242104.	3.3	27
45	Growth of single-crystalline, atomically smooth MgO films on Ge(001) by molecular beam epitaxy. <i>Journal of Crystal Growth</i> , 2009, 312, 44-47.	1.5	26
46	Comparison of spin lifetimes in Ge characterized between three-terminal and four-terminal nonlocal Hanle measurements. <i>Semiconductor Science and Technology</i> , 2013, 28, 015018.	2.0	25
47	Electric field control of the Verwey transition and induced magnetoelectric effect in magnetite. <i>Physical Review B</i> , 2012, 86, .	3.2	23
48	Observation of Interfacial Antiferromagnetic Coupling between Magnetic Topological Insulator and Antiferromagnetic Insulator. <i>Nano Letters</i> , 2019, 19, 2945-2952.	9.1	23
49	Nanomechanical probing and strain tuning of the Curie temperature in suspended Cr <sub>2</sub> Ge <sub>2</sub> Te <sub>6</sub> -based heterostructures. <i>Npj 2D Materials and Applications</i> , 2022, 6, .	7.9	21
50	Oscillatory Spin Polarization and Magneto-Optical Kerr Effect in Fe <sub>3</sub> O <sub>4</sub> Thin Films on GaAs(001). <i>Physical Review Letters</i> , 2010, 105, 167203.	7.8	20
51	Effect of <i>in situ</i> deposition of Mg adatoms on spin relaxation in graphene. <i>Physical Review B</i> , 2013, 87, .	3.2	20
52	Role of Oxygen in Ionic Liquid Gating on Two-Dimensional Cr <sub>2</sub> Ge <sub>2</sub> Te <sub>6</sub> : A Non-oxide Material. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 1383-1388.	8.0	20
53	Room-temperature magnetically modulated electroluminescence from hybrid organic/inorganic spintronics devices. <i>Applied Physics Letters</i> , 2013, 103, .	3.3	18
54	Crystal Structure Manipulation of the Exchange Bias in an Antiferromagnetic Film. <i>Scientific Reports</i> , 2016, 6, 28397.	3.3	18

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55	Superconductor-Metal Quantum Transition at the EuO/KTaO <sub>3</sub> Interface*. Chinese Physics Letters, 2020, 37, 117401.	3.3	18
56	Tailoring interlayer exchange coupling of ferromagnetic films across MgO with Fe nanoclusters. Physical Review B, 2010, 81, .	3.2	16
57	Epitaxial growth and properties of La <sub>0.7</sub> Sr <sub>0.3</sub> MnO <sub>3</sub> thin films with micrometer wide atomic terraces. Applied Physics Letters, 2015, 107, .	3.3	15
58	Evidence for anisotropic spin-triplet Andreev reflection at the 2D van der Waals ferromagnet/superconductor interface. Nature Communications, 2021, 12, 6725.	12.8	15
59	Role of La doping for topological Hall effect in epitaxial EuO films. Physical Review Materials, 2018, 2, .	2.4	14
60	Integrating MBE materials with graphene to induce novel spin-based phenomena. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2013, 31, 04D105.	1.2	12
61	Anomalous Hall effect mechanisms in the quasi-two-dimensional van der Waals ferromagnet $F \propto e \langle S \rangle$ $S \propto T^{\frac{3}{2}}$ Physical Review B, 2019, 100, .	3.2	11
62	Magnon-mediated spin currents in Tm <sub>3</sub> Fe <sub>5</sub> O <sub>12</sub> /Pt with perpendicular magnetic anisotropy. Applied Physics Letters, 2020, 117, .	3.3	10
63	Spin Seebeck effect in quantum magnet Pb <sub>2</sub> V <sub>3</sub> O <sub>9</sub> . Applied Physics Letters, 2022, 120, .	3.3	10
64	Giant oscillatory Gilbert damping in superconductor/ferromagnet/superconductor junctions. Science Advances, 2021, 7, eabh3686.	10.3	9
65	Spin transport in graphite and graphene spin valves. Proceedings of SPIE, 2009, , .	0.8	8
66	Observation of long phase-coherence length in epitaxial La-doped CdO thin films. Physical Review B, 2017, 96, .	3.2	8
67	Facet-dependent magnon-polarons in epitaxial ferromagnetic $F \propto e \langle S \rangle$ $S \propto T^{\frac{3}{2}}$ Physical Review B, 2020, 102, .	3.2	7
68	Long-Range Magnetic Order in Oxide Quantum Wells Hosting Two-Dimensional Electron Gases. ACS Applied Materials & Interfaces, 2020, 12, 28775-28782.	8.0	7
69	Gate tunability of the superconducting state at the $EuO(111)$ interface. Physical Review B, 2021, 104, .	3.2	6
70	GIANT MAGNETO-ELECTROLUMINESCENCE FROM HYBRID SPIN-ORGANIC LIGHT EMITTING DIODES. Spin, 2014, 04, 1450002.	1.3	4
71	Positive exchange bias between permalloy and twined $T_j \propto T_d$ films. Journal of Magnetism and Magnetic Materials, 2017, 422, 397-401.	2.3	4
72	Half-integer Shapiro steps in strong ferromagnetic Josephson junctions. Physical Review B, 2021, 104, .	3.2	3

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73	Enhanced spin injection efficiency and extended spin lifetimes in graphene spin valves. Proceedings of SPIE, 2011, , .	0.8	2
74	A systematic approach to interpreting Hanle spin precession data in non-local spin valves. , 2013, , .		1
75	Interface ferromagnetism and anomalous Hall effect of CdO/ferromagnetic-insulator heterostructures. Physical Review Materials, 2019, 3, .	2.4	1
76	Magnetic Memory and Logic. , 2021, , 1553-1592.		1
77	Bias and gate control of graphene spin valves. , 2009, , .		0
78	Fermi level depinning of Ge Schottky contacts using single crystalline MgO. , 2009, , .		0
79	Self-assembly: Hierarchically Ordered Structures Enabled by Controlled Evaporative Self-Assembly (Small 20/2010). Small, 2010, 6, n/a-n/a.	10.0	0
80	Enhanced spin injection into single layer graphene with atomically smooth MgO barrier. , 2010, , .		0
81	Magnetic Memory and Logic. , 2021, , 1-40.		0