

# Hidekazu Kurebayashi

## List of Publications by Year in descending order

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Version: 2024-02-01

62  
papers

2,647  
citations

201385

27  
h-index

182168

51  
g-index

64  
all docs

64  
docs citations

64  
times ranked

3082  
citing authors

#	ARTICLE	IF	CITATIONS
1	Electrically tunable spin injector free from the impedance mismatch problem. Nature Materials, 2011, 10, 655-659.	13.3	324
2	An antidamping spin-orbit torque originating from the Berry curvature. Nature Nanotechnology, 2014, 9, 211-217.	15.6	273
3	Spin-orbit-driven ferromagnetic resonance. Nature Nanotechnology, 2011, 6, 413-417.	15.6	182
4	Controlled enhancement of spin-current emission by three-magnon splitting. Nature Materials, 2011, 10, 660-664.	13.3	170
5	Polaron spin current transport in organic semiconductors. Nature Physics, 2014, 10, 308-313.	6.5	170
6	Controlling the magnetic anisotropy in Cr <sub>2</sub> Ge <sub>2</sub> Te <sub>6</sub> by electrostatic gating. Nature Electronics, 2020, 3, 460-465.	13.1	145
7	Enhanced spin pumping into superconductors provides evidence for superconducting pure spin currents. Nature Materials, 2018, 17, 499-503.	13.3	107
8	Magnetism, symmetry and spin transport in van der Waals layered systems. Nature Reviews Physics, 2022, 4, 150-166.	11.9	72
9	Quantum Engineering With Hybrid Magnonic Systems and Materials (Invited Paper). IEEE Transactions on Quantum Engineering, 2021, 2, 1-36.	2.9	69
10	Magnonic charge pumping via spin-orbit coupling. Nature Nanotechnology, 2015, 10, 50-54.	15.6	64
11	Structural and magnetic properties of epitaxial L21-structured Co <sub>2</sub> (Cr,Fe)Al films grown on GaAs(001) substrates. Journal of Applied Physics, 2005, 97, 103714.	1.1	62
12	Reconfigurable training and reservoir computing in an artificial spin-vortex ice via spin-wave fingerprinting. Nature Nanotechnology, 2022, 17, 460-469.	15.6	60
13	Spin-orbit torque opposing the Oersted torque in ultrathin Co/Pt bilayers. Applied Physics Letters, 2014, 104, .	1.5	55
14	Magnetoresistance in tunnel junctions using Co <sub>2</sub> (Cr,Fe)Al full Heusler alloys. Journal of Applied Physics, 2004, 95, 7234-7236.	1.1	49
15	Spin pumping by parametrically excited short-wavelength spin waves. Applied Physics Letters, 2011, 99, .	1.5	49
16	Electric control of the spin Hall effect by intervalley transitions. Nature Materials, 2014, 13, 932-937.	13.3	49
17	Tunable magnetization dynamics in artificial spin ice via shape anisotropy modification. Physical Review B, 2019, 100, .	1.1	47
18	Tunable magnon-magnon coupling in synthetic antiferromagnets. Physical Review B, 2020, 102, .	1.1	46

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19	Effect of Meissner Screening and Trapped Magnetic Flux on Magnetization Dynamics in Thick $\text{Nb}/\text{Ni}$ Trilayers. <i>Physical Review Applied</i> , 2019, 11, .	1.5	44
20	Spin transport in germanium at room temperature. <i>Applied Physics Letters</i> , 2010, 97, 162104.	1.5	43
21	Uniaxial anisotropy of two-magnon scattering in an ultrathin epitaxial Fe layer on GaAs. <i>Applied Physics Letters</i> , 2013, 102, 062415.	1.5	40
22	Spin-Pumping-Induced Inverse Spin Hall Effect in $\text{Nb}/\text{Ni}$ Bilayers and its Strong Decay Across the Superconducting Transition Temperature. <i>Physical Review Applied</i> , 2018, 10, .	1.5	38
23	Complementary spin-Hall and inverse spin-galvanic effect torques in a ferromagnet/semiconductor bilayer. <i>Nature Communications</i> , 2015, 6, 6730.	5.8	36
24	Exchange-field enhancement of superconducting spin pumping. <i>Physical Review B</i> , 2019, 99, .	1.1	31
25	Reconfigurable magnonic mode-hybridisation and spectral control in a bicomponent artificial spin ice. <i>Nature Communications</i> , 2021, 12, 2488.	5.8	30
26	Spin transport parameters of NbN thin films characterized by spin pumping experiments. <i>Physical Review Materials</i> , 2019, 3, .	0.9	30
27	Spin polarization control through resonant states in an Fe/GaAs Schottky barrier. <i>Physical Review B</i> , 2008, 78, .	1.1	28
28	Spin dynamics study in layered van der Waals single-crystal $\text{Cr}/\text{Pt}$ . <i>Physical Review B</i> , 2019, 100, .	1.1	25
29	Spin dynamics study in layered van der Waals single-crystal $\text{Cr}/\text{Pt}$ . <i>Physical Review B</i> , 2019, 100, .	1.1	25
30	Initial/final state selection of the spin polarization in electron tunneling across an epitaxial $\text{Fe}/\text{GaAs}(001)$ interface. <i>Applied Physics Letters</i> , 2007, 91, .	1.5	23
31	Characterisation of ferromagnetic rings for Zernike phase plates using the Aharonov-Bohm effect. <i>Ultramicroscopy</i> , 2012, 120, 78-85.	0.8	20
32	Magnetic properties of L21-structured $\text{Co}_2(\text{Cr,Fe})\text{Al}$ films grown on GaAs(001) substrates. <i>Journal of Applied Physics</i> , 2005, 97, 10C308.	1.1	18
33	Tunable Pure Spin Supercurrents and the Demonstration of Their Gateability in a Spin-Wave Device. <i>Physical Review X</i> , 2020, 10, .	2.8	17
34	Magnon-photon coupling in the noncollinear magnetic insulator $\text{Cu}_2\text{OSeO}_3$ . <i>Physical Review B</i> , 2019, 99, .	1.1	16
35	Spin-orbit coupling suppression and singlet-state blocking of spin-triplet Cooper pairs. <i>Science Advances</i> , 2021, 7, .	4.7	14
36	Electrical determination of the spin relaxation time of photoexcited electrons in GaAs. <i>Applied Physics Letters</i> , 2010, 96, .	1.5	13

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37	Observation and control of collective spin-wave mode hybridization in chevron arrays and in square, staircase, and brickwork artificial spin ices. <i>Physical Review Research</i> , 2022, 4, .	1.3	13
38	Memristive, Spintronic, and 2D Materials-Based Devices to Improve and Complement Computing Hardware. <i>Advanced Intelligent Systems</i> , 2022, 4, .	3.3	13
39	Magnetic properties of epitaxial $\text{Co}/\text{Cr}/\text{Fe}/\text{Al}$ full Heusler alloy thin films with the $L2_{10}$ structure. <i>IEEE Transactions on Magnetics</i> , 2005, 41, 2802-2804.	1.2	12
40	Schottky Barrier Height in Fe/GaAs Films. <i>IEEE Transactions on Magnetics</i> , 2010, 46, 1737-1740.	1.2	12
41	Enhanced inverse spin-Hall effect in ultrathin ferromagnetic/normal metal bilayers. <i>Applied Physics Letters</i> , 2013, 102, .	1.5	12
42	Perpendicularly magnetized Ni/Pt (001) epitaxial superlattice. <i>Physical Review Materials</i> , 2020, 4, .	0.9	11
43	Effect of the magnetic film thickness on the enhancement of the spin current by multi-magnon processes. <i>Applied Physics Letters</i> , 2013, 102, .	1.5	10
44	Charge Density Waves in Electron-Doped Molybdenum Disulfide. <i>Nano Letters</i> , 2021, 21, 5516-5521.	4.5	10
45	Effect of MgO barriers on ferromagnetic metallic layers studied by polarized neutron reflectivity. <i>Applied Physics Letters</i> , 2008, 93, 012505.	1.5	9
46	Spin current depolarization under high electric fields in undoped InGaAs. <i>Applied Physics Letters</i> , 2011, 98, 242104.	1.5	9
47	Development of Automatic Badminton Playing Robot with Distance Image Sensor. <i>IFAC-PapersOnLine</i> , 2019, 52, 67-72.	0.5	7
48	Parity-controlled spin-wave excitations in synthetic antiferromagnets. <i>Applied Physics Letters</i> , 2021, 118, .	1.5	7
49	Bolometric ferromagnetic resonance techniques for characterising spin-Hall effect at high temperatures. <i>Journal of Magnetism and Magnetic Materials</i> , 2019, 485, 304-307.	1.0	6
50	Coupling microwave photons to topological spin textures in $\text{CuMn}_2$ . <i>Physical Review B</i> , 2021, 104, .		
51	Tunable gigahertz dynamics of low-temperature skyrmion lattice in a chiral magnet. <i>Journal of Physics Condensed Matter</i> , 2022, 34, 095801.	0.7	4
52	Electrical excitation and detection of magnetic dynamics with impedance matching. <i>Applied Physics Letters</i> , 2012, 101, 182402.	1.5	3
53	Electric power transfer in spin-pumping experiments. <i>Applied Physics Express</i> , 2018, 11, 013004.	1.1	3
54	Growth, strain, and spin-orbit torques in epitaxial Ni-Mn-Sb films sputtered on GaAs. <i>Physical Review Materials</i> , 2021, 5, .	0.9	3

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55	Crystal structure and crystal growth of the polar ferrimagnet CaBaFe <sub>4</sub> O <sub>7</sub> . <i>Physical Review Materials</i> , 2018, 2, .	0.9	3
56	Distinct evolution of magnetism and anisotropy of ultrathin CoFe and Co films on Cu(110) upon gas adsorption. <i>Journal of Applied Physics</i> , 2008, 103, 07C911.	1.1	2
57	Spin-engineering in the Co <sub>75</sub> Fe <sub>25</sub> /Cu(110) system. <i>Journal of Magnetism and Magnetic Materials</i> , 2010, 322, 2493-2497.	1.0	2
58	Control of Pure Spin Current by Magnon Tunneling and Three-Magnon Splitting in Insulating Yttrium Iron Garnet Films. <i>Solid State Physics</i> , 2013, 64, 83-122.	1.3	2
59	Going in the right direction. <i>Nature Physics</i> , 2017, 13, 209-210.	6.5	2
60	Numerical calculation model for spin-dependent transport of photoexcited electrons across Fe/GaAs(0001) interfaces. <i>Journal Physics D: Applied Physics</i> , 2010, 43, 305001.	1.3	1
61	Anatomy of spin-orbit torques. <i>Nature Nanotechnology</i> , 2017, 12, 941-942.	15.6	1
62	The initial growth mode of Co on Cu(311). <i>Journal of Applied Physics</i> , 2010, 107, 09E101.	1.1	0