

# Fumitaka Kagawa

## List of Publications by Year in descending order

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91  
papers

5,245  
citations

76326  
40  
h-index

85541  
71  
g-index

94  
all docs

94  
docs citations

94  
times ranked

5727  
citing authors

#	ARTICLE	IF	CITATIONS
1	Field-induced multiple metal-insulator crossovers of correlated Dirac electrons of perovskite CaIrO <sub>3</sub> . <i>Npj Quantum Materials</i> , 2022, 7, .	5.2	4
2	Room-temperature antiskyrmions and sawtooth surface textures in a non-centrosymmetric magnet with S <sub>4</sub> symmetry. <i>Nature Materials</i> , 2021, 20, 335-340.	27.5	55
3	Kinetic pathway facilitated by a phase competition to achieve a metastable electronic phase. <i>Physical Review B</i> , 2021, 103, .	3.2	6
4	Orbital and magnetic ordering and domain-wall conduction in ferrimagnet La <sub>5</sub> Mo <sub>4</sub> O <sub>16</sub> . <i>Physical Review Research</i> , 2021, 3, .	3.6	0
5	Quantum transport of topological spin solitons in a one-dimensional organic ferroelectric. <i>Physical Review B</i> , 2021, 103, .	3.2	1
6	Real-space observations of 60-nm skyrmion dynamics in an insulating magnet under low heat flow. <i>Nature Communications</i> , 2021, 12, 5079.	12.8	27
7	Emergent electromagnetic induction beyond room temperature. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	30
8	Real-Space Observation of Emergent Complexity of Phase Evolution in Micrometer-Sized IrTe <sub>2</sub> Crystals. <i>Physical Review Letters</i> , 2021, 127, 145701.	7.8	5
9	Emergent electromagnetic induction in a helical-spin magnet. <i>Nature</i> , 2020, 586, 232-236.	27.8	60
10	Evolution of ferroelectricity in ultrathin PbTiO <sub>3</sub> films as revealed by electric double layer gating. <i>Scientific Reports</i> , 2020, 10, 10864.	3.3	12
11	Growth of visible-light-responsive ferroelectric SbSI thin films by molecular beam epitaxy. <i>Applied Physics Letters</i> , 2020, 116, .	3.3	8
12	Propagation dynamics of spin excitations along skyrmion strings. <i>Nature Communications</i> , 2020, 11, 256.	12.8	81
13	Mode locking phenomena of the current-induced skyrmion-lattice motion in microfabricated MnSi. <i>Physical Review B</i> , 2020, 102, .	3.2	6
14	Increased lifetime of metastable skyrmions by controlled doping. <i>Physical Review B</i> , 2019, 100, .	3.2	32
15	Charge density wave dynamics in nonvolatile current-induced phase transition in $\text{S}_{\frac{1}{2}}\text{S}_{\frac{1}{2}}$ . <i>Physical Review B</i> , 2019, 100, .	3.2	6
16	Slow steady flow of a skyrmion lattice in a confined geometry probed by narrow-band resistance noise. <i>Physical Review B</i> , 2019, 100, .	3.2	16
17	Thermal energy harvesting performance in 0.94Bi <sub>0.5</sub> Na <sub>0.5</sub> TiO <sub>3</sub> -0.06BaZr <sub>0.2</sub> Ti <sub>0.8</sub> O <sub>3</sub> : AlN composite ceramics based on the Olsen cycle. <i>Journal of the European Ceramic Society</i> , 2019, 39, 5243-5251.	5.7	17
18	Supramolecular Polymerization in Liquid Crystalline Media: Toward Modular Synthesis of Multifunctional Core-Shell Columnar Liquid Crystals. <i>Journal of the American Chemical Society</i> , 2019, 141, 10033-10038.	13.7	9

#	ARTICLE		IF	CITATIONS
19	Magnetization-polarization cross-control near room temperature in hexaferrite single crystals. Nature Communications, 2019, 10, 1247.		12.8	51
20	Size effects on supercooling phenomena in strongly correlated electron systems: $\text{IrTe}_2$ and $\text{IrTe}_{\frac{1}{2}}$ . Physical Review B, 2018, 97, .		3.2	8
21	Kinetic approach to superconductivity hidden behind a competing order. Science Advances, 2018, 4, eaau3489.		10.3	21
22	Ferroelectric field control of charge density in oxide films with polarization reversal by electric double layer. Applied Physics Letters, 2018, 113, .		3.3	8
23	Aggregation and collapse dynamics of skyrmions in a non-equilibrium state. Nature Physics, 2018, 14, 832-836.		16.7	54
24	Emergence of Topological Hall Effect in Half-Metallic Manganite Thin Films by Tuning Perpendicular Magnetic Anisotropy. Journal of the Physical Society of Japan, 2018, 87, 074704.		1.6	34
25	Phase-transition kinetics of magnetic skyrmions investigated by stroboscopic small-angle neutron scattering. Physical Review B, 2018, 98, .		3.2	10
26	Electrical conduction on the surface of ferroelectric $\text{PbTiO}_3$ thin film induced by electrolyte gating. Applied Physics Letters, 2018, 112, .		3.3	7
27	Uniaxial-stress Effects on Helimagnetic Orders and Skyrmion Lattice in $\text{Cu}_{2\text{SeO}_3}$ . Journal of the Physical Society of Japan, 2018, 87, 094709.		1.6	7
28	Current-induced dynamics of skyrmion strings. Science Advances, 2018, 4, eaat1115.		10.3	49
29	Quenching of Charge and Spin Degrees of Freedom in Condensed Matter. Advanced Materials, 2017, 29, 1601979.		21.0	38
30	Current-induced Nucleation and Annihilation of Magnetic Skyrmions at Room Temperature in a Chiral Magnet. Advanced Materials, 2017, 29, 1606178.		21.0	53
31	Shift current photovoltaic effect in a ferroelectric charge-transfer complex. Nature Communications, 2017, 8, 281.		12.8	149
32	Quantized chiral edge conduction on domain walls of a magnetic topological insulator. Science, 2017, 358, 1311-1314.		12.6	112
33	Current-induced viscoelastic topological unwinding of metastable skyrmion strings. Nature Communications, 2017, 8, 1332.		12.8	47
34	Emergence and magnetic-field variation of chiral-soliton lattice and skyrmion lattice in the strained helimagnet $\text{Cu}_2\text{SeO}_3$ . Physical Review B, 2017, 96, .		3.2	24
35	Skyrmion lattice structural transition in $\text{MnSi}$ . Science Advances, 2017, 3, e1602562.		10.3	89
36	Directional electric-field induced transformation from skyrmion lattice to distinct helices in multiferroic $\text{Cu}_{\frac{3}{2}\text{Se}_{\frac{1}{2}}}$ . Physical Review B, 2017, 95, .		3.2	14

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37	Topological spin-hedgehog crystals of a chiral magnet as engineered with magnetic anisotropy. Physical Review B, 2017, 96, .		3.2	25
38	Stabilization of magnetic skyrmions by uniaxial tensile strain. Physical Review B, 2017, 96, .		3.2	28
39	Electrical magnetochiral effect induced by chiral spin fluctuations. Nature Communications, 2017, 8, 866.		12.8	76
40	Quantum Phenomena Emerging Near a Ferroelectric Critical Point in a Donor-“Acceptor Organic Charge-Transfer Complex. Crystals, 2017, 7, 106.		2.2	12
41	Athermal domain-wall creep near a ferroelectric quantum critical point. Nature Communications, 2016, 7, 10675.		12.8	21
42	Interface-driven topological Hall effect in SrRuO <sub>3</sub> -SrIrO <sub>3</sub> bilayer. Science Advances, 2016, 2, e1600304.		10.3	360
43	Direct observation of anisotropic magnetic field response of the spin helix in FeGe thin films. Physical Review B, 2016, 94, .		3.2	24
44	Robust metastable skyrmions and their triangular-square lattice structural transition in a high-temperature chiral magnet. Nature Materials, 2016, 15, 1237-1242.		27.5	196
45	Magnetochiral nonreciprocity of volume spin wave propagation in chiral-lattice ferromagnets. Physical Review B, 2016, 93, .		3.2	109
46	Spontaneous Polarization and Bulk Photovoltaic Effect Driven by Polar Discontinuity in $\text{LaFeO}_3$ Heterojunctions. Physical Review Letters, 2016, 116, 156801.		7.8	62
47	Transition to and from the skyrmion lattice phase by electric fields in a magnetoelectric compound. Nature Communications, 2016, 7, 12669.		12.8	74
48	Critical phenomena of emergent magnetic monopoles in a chiral magnet. Nature Communications, 2016, 7, 11622.		12.8	97
49	Interplay between topological and thermodynamic stability in a metastable magnetic skyrmion lattice. Nature Physics, 2016, 12, 62-66.		16.7	164
50	Transport signatures of Fermi surface topology change in BiTeI. Physical Review B, 2015, 91, .		3.2	26
51	Few-eV Operation of Printed Organic Ferroelectric Capacitor. Advanced Materials, 2015, 27, 6475-6481.		21.0	38
52	Microwave Magnetochiral Dichroism in the Chiral-Lattice Magnet $\text{Cu}_{2}\text{SeO}_3$ . Physical Review Letters, 2015, 114, 197202.		7.8	60
53	Formation of In-plane Skyrmions in Epitaxial MnSi Thin Films as Revealed by Planar Hall Effect. Journal of the Physical Society of Japan, 2015, 84, 104708.		1.6	40
54	Phase-change memory function of correlated electrons in organic conductors. Physical Review B, 2015, 91, .		3.2	25

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55	Discretized topological Hall effect emerging from skyrmions in constricted geometry. <i>Physical Review B</i> , 2015, 91, .	3.2	84
56	Quantum ferroelectricity in charge-transfer complex crystals. <i>Nature Communications</i> , 2015, 6, 7469.	12.8	65
57	Correlated Proton Transfer and Ferroelectricity along Alternating Zwitterionic and Nonzwitterionic Anthranilic Acid Molecules. <i>Chemistry of Materials</i> , 2015, 27, 6193-6197.	6.7	16
58	Structure-Property Relationship of Supramolecular Ferroelectric [H <sub>66</sub> dmbp][Hca] Accompanied by High Polarization, Competing Structural Phases, and Polymorphs. <i>Chemistry - A European Journal</i> , 2014, 20, 17515-17522.	3.3	24
59	Li <sub>x</sub> etAl. Reply. <i>Physical Review Letters</i> , 2014, 112, 059702.	7.8	7
60	Electric double layer transistors with ferroelectric BaTiO <sub>3</sub> channels. <i>Applied Physics Letters</i> , 2014, 104, .	3.3	11
61	Emergence of nonequilibrium charge dynamics in a charge-cluster glass. <i>Physical Review B</i> , 2014, 89, .	3.2	29
62	Polarization Switching Ability Dependent on Multidomain Topology in a Uniaxial Organic Ferroelectric. <i>Nano Letters</i> , 2014, 14, 239-243.	9.1	53
63	Stability of two-dimensional skyrmions in thin films of Mn <sub>x</sub> Fe <sub>1-x</sub> . Systematic Variations in the Charge-Glass-Forming Ability of Geometrically Frustrated (BEDT-TTF) <sub>2</sub> X Organic Conductors. <i>Physical Review B</i> , 2014, 89, 3273 <i>Physical Review B</i> , 2014, 89, 3273 <i>Journal of the Physical Society of Japan</i> , 2014, 83, 083602.	3.2	27
64	Miniature Hall sensor integrated on a magnetic thin film for detecting domain wall motion. <i>Journal of Applied Physics</i> , 2013, 114, 053909.	2.5	4
66	Microwave magnetoelectric effect via skyrmion resonance modes in a helimagnetic multiferroic. <i>Nature Communications</i> , 2013, 4, 2391.	12.8	163
67	Systematic control of stress-induced anisotropy in pseudomorphic iron garnet thin films. <i>Journal of Magnetism and Magnetic Materials</i> , 2013, 339, 63-70.	2.3	54
68	Robust Formation of Skyrmions and Topological Hall Effect Anomaly in Epitaxial Thin Films of MnSi. <i>Physical Review Letters</i> , 2013, 110, 117202.	7.8	269
69	Charge-cluster glass in an organic conductor. <i>Nature Physics</i> , 2013, 9, 419-422.	16.7	81
70	Successive Phase Transitions and Ferroelectric Domain State in Supramolecular Ferroelectric Phenazine-Chloranilic Acid. <i>Nihon Kessho Gakkaishi</i> , 2013, 55, 135-141.	0.0	0
71	Stress-Induced Perpendicular Magnetization in Epitaxial Iron Garnet Thin Films. <i>Applied Physics Express</i> , 2012, 5, 103002.	2.4	82
72	Above-room-temperature ferroelectricity and antiferroelectricity in benzimidazoles. <i>Nature Communications</i> , 2012, 3, 1308.	12.8	199

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73	Dynamics of multiple phases in a colossal-magnetoresistive manganite as revealed by dielectric spectroscopy. <i>Nature Communications</i> , 2012, 3, 944.	12.8	20
74	Domain-wall dynamics coupled to proton motion in a hydrogen-bonded organic ferroelectric. <i>Physical Review B</i> , 2012, 85, .	3.2	7
75	Electronic Ferroelectricity in a Molecular Crystal with Large Polarization Directing Antiparallel to Ionic Displacement. <i>Physical Review Letters</i> , 2012, 108, 237601.	7.8	189
76	Emergent phenomena in perovskite-type manganites. <i>Physica B: Condensed Matter</i> , 2012, 407, 1685-1688. Displacement Type Ferroelectricity with Off-Center Magnetic Ions in Perovskite $\text{Sr}_{\text{1-x}}\text{Mn}_{\text{x}}$	2.7	5
77	Relaxation dynamics of multiferroic domain walls in $\text{DyMnO}_3$ . <i>Physical Review Letters</i> , 2011, 106, 057601. with cycloidal spin order. <i>Physical Review B</i> , 2011, 83, .	7.8	142
78	Ferroelectricity in a one-dimensional organic quantum magnet. <i>Nature Physics</i> , 2010, 6, 169-172.	3.2	17
79	Electric-Field Control of Solitons in a Ferroelectric Organic Charge-Transfer Salt. <i>Physical Review Letters</i> , 2010, 104, 227602.	7.8	53
80	Dynamics of Multiferroic Domain Wall in Spin-Cycloidal Ferroelectric $\text{DyMnO}_{3-x}$ . <i>Physical Review Letters</i> , 2009, 102, 057604.	7.8	110
82	Dynamical Disorder of $\text{Mn}^{2+}$ -Molecular Structures Induced by Proton Dynamics in an Organic Ferroelectric Compound. <i>Physical Review Letters</i> , 2009, 102, 197601.	7.8	15
83	Magnetic Mott criticality in a $\text{I}^0$ -type organic salt probed by NMR. <i>Nature Physics</i> , 2009, 5, 880-884.	16.7	67
84	Field-induced staggered magnetic moment in the quasi-two-dimensional organic Mott insulator $\text{Mn}^{2+}$ . <i>Physical Review Letters</i> , 2009, 102, 197602.	7.8	110

# ARTICLE

IF CITATIONS

- 91 Cluster reactions in C<sub>60</sub> films induced by electron injection from a scanning tunneling microscope tip. *Surface Science*, 2003, 528, 151-155. 1.9 29