

# Kunihiko Yamauchi

## List of Publications by Year in descending order

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Version: 2024-02-01

80  
papers

2,240  
citations

236925

25  
h-index

223800

46  
g-index

80  
all docs

80  
docs citations

80  
times ranked

3116  
citing authors

#	ARTICLE	IF	CITATIONS
1	First-Principles Study on Cathode Properties of $\text{Li}_2\text{MTiO}_4$ and $\text{Na}_2\text{MTiO}_4$ (M = V, Cr, Mn, Fe, Co, Ni). Journal of the Physical Society of Japan, 2022, 91, .	1.6	0
2	Spin-Polarized Band Structure at $\text{MoTe}_2/\text{Bi}_2\text{Se}_3$ Interface Designed from First Principles. Journal of the Physical Society of Japan, 2022, 91, .	1.6	0
3	Rhombic Fermi surfaces in a ferromagnetic MnGa thin film with perpendicular magnetic anisotropy. Physical Review Materials, 2022, 6, .	2.4	0
4	Manipulation of Dirac Cone in Topological Insulator/Topological Insulator Heterostructure. ACS Applied Electronic Materials, 2021, 3, 1080-1085.	4.3	6
5	Origin of magnetovolume effect in a cobaltite. Physical Review B, 2021, 103, .	3.2	3
6	Electric-field tuning of the magnetic properties of bilayer $\text{V}_1\text{Mn}_3\text{S}_2$ : A first-principles study. Physical Review B, 2021, 104, .	3.2	3
7	Large magnetoresistance of a compensated metal $\text{Cu}_2\text{Sb}$ correlated with its Fermi surface topology. Physical Review Materials, 2021, 5, .	2.4	0
8	Dirac semimetal phase and switching of band inversion in $\text{XMg}_2\text{Bi}_2$ (X = Ba and Sr). Scientific Reports, 2021, 11, 21937.	3.3	6
9	First-principles Study on Piezoelectricity and Spontaneous Polarization in $\text{Bi}(\text{Fe},\text{Co})\text{O}_3$ . Journal of the Physical Society of Japan, 2021, 90, .	1.6	0
10	Synthesis, Structure, and Anomalous Magnetic Ordering of the Spin-1/2 Coupled Square Tetramer System $\text{K}(\text{NbO})\text{Cu}_4(\text{PO}_4)_4$ . Inorganic Chemistry, 2020, 59, 10986-10995.	4.0	5
11	Reversible thermally controlled spontaneous magnetization switching in perovskite-type manganite. Applied Physics Letters, 2020, 117, 112404.	3.3	3
12	Unusual temperature evolution of the band structure of Bi(111) studied by angle-resolved photoemission spectroscopy and density functional theory. Physical Review B, 2020, 102, .	3.2	2
13	Ta <sup>181</sup> nuclear quadrupole resonance study of the noncentrosymmetric superconductor $\text{PbTaSe}_2$ . Physical Review B, 2020, 102, .	3.2	3
14	Impact of Inter-site Spin-Orbit Coupling on Perpendicular Magnetocrystalline Anisotropy in Cobalt-Based Thin Films. Journal of the Physical Society of Japan, 2020, 89, 114710.	1.6	2
15	Conversion of a conventional superconductor into a topological superconductor by topological proximity effect. Nature Communications, 2020, 11, 159.	12.8	40
16	DFT-based Engineering of Dirac Surface States in Topological-insulator Multilayers. Journal of the Physical Society of Japan, 2020, 89, 094701.	1.6	4
17	Modulation of Dirac electrons in epitaxial $\text{Bi}_2\text{Se}_3$ ultrathin films on van der Waals ferromagnet $\text{Cr}_2\text{Si}_2\text{Te}_6$ . Physical Review Materials, 2020, 4, .	2.4	3
18	Ferroelectric atomic displacement in multiferroic tetragonal perovskite $\text{Sr}_2\text{Mn}_2\text{O}_7$ . Physical Review Research, 2020, 2, .	1.6	1

#	ARTICLE	IF	CITATIONS
19	<p>Topology analysis for anomalous Hall effect in the noncollinear antiferromagnetic states of</p> $Mn_3N$		

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37	Coupling Ferroelectricity with Spin-Valley Physics in Oxide-Based Heterostructures. Physical Review Letters, 2015, 115, 037602.	7.8	38
38	Ab Initio Study on Pressure-Induced Phase Transition in LaCu <sub>3</sub> Fe <sub>4</sub> O <sub>12</sub> . Journal of the Physical Society of Japan, 2015, 84, 034709.	1.6	2
39	Impact of Ferroelectric Distortion on Thermopower in BaTiO <sub>3</sub> . Journal of the Physical Society of Japan, 2015, 84, 054701.	1.6	4
40	Origin of the band dispersion in a metal phthalocyanine crystal. Physical Review B, 2014, 90, .	3.2	15
41	Ab-initio Prediction of Magnetoelectricity in Infinite-Layer CaFeO <sub>2</sub> and MgFeO <sub>2</sub> . Journal of the Physical Society of Japan, 2014, 83, 094712.	1.6	8
42	Electronic ferroelectricity induced by charge and orbital orderings. Journal of Physics Condensed Matter, 2014, 26, 103201.	1.8	42
43	Giant spin-driven ferroelectric polarization in TbMnO <sub>3</sub> under high pressure. Nature Communications, 2014, 5, 4927.	12.8	131
44	Highly sensitive spin-crossover transition in a metal-organic molecular crystal. Physical Review B, 2013, 88, .	3.2	1
45	Influence of lone pair doping on the multiferroic property of orthorhombic HoMnO <sub>3</sub> :ab initio prediction. Journal of Physics Condensed Matter, 2013, 25, 385901.	1.8	0
46	Beyond standard local density approximation in the study of magnetoelectric effects in Fe/BaTiO <sub>3</sub> and Co/BaTiO <sub>3</sub> interfaces. Journal of Physics Condensed Matter, 2013, 25, 066001.	1.8	14
47	Study of magnetic coupling in CaCu <sub>3</sub> B <sub>4</sub> O <sub>12</sub> . Journal of the Physical Society of Japan, 2013, 82, 113703.	3.2	31
48	Mechanism of Ferroelectricity in Half-Doped Manganites with Pseudocubic and Bilayer Structure. Journal of the Physical Society of Japan, 2013, 82, 113703.	1.6	11
49	Effects of strain on ferroelectric polarization and magnetism in orthorhombic HoMnO <sub>3</sub> . Physical Review B, 2013, 87, .	3.2	17
50	Theoretical Prediction of Multiferroicity in SmBaMn <sub>2</sub> O <sub>6</sub> . Journal of the Physical Society of Japan, 2013, 82, 043702.	1.6	15
51	First-Principles Calculation of X-ray Absorption Spectra for the A-Site Ordered Perovskite CaCu <sub>3</sub> Fe <sub>4</sub> O <sub>12</sub> . Journal of the Physical Society of Japan, 2013, 82, 044701.	1.6	8
52	Structure and intermolecular bonding in NaBH <sub>4</sub> . Physical Review B, 2012, 85, .	3.2	2
53	Orbital degrees of freedom as origin of magnetoelectric coupling in magnetite. Physical Review B, 2012, 85, .	3.2	19
54	Emergent phenomena in perovskite-type manganites. Physica B: Condensed Matter, 2012, 407, 1685-1688.	2.7	5

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55	Ab initio Investigations of Fe <sub>2+</sub> /Fe <sub>3+</sub> Bond Dimerization and Ferroelectricity Induced by Intermediate Site/Bond-Centered Charge Ordering in Magnetite. Journal of the Physical Society of Japan, 2011, 80, 014709.	1.6	10
56	Magnetically driven ferroelectric atomic displacements in orthorhombic YMnO <sub>3</sub> . Physical Review B, 2011, 84, .	3.2	73
57	Role of van der Waals interaction in crystalline ammonia borane. Applied Physics Letters, 2011, 99, 181904.	3.3	12
58	Theoretical investigation of magnetoelectric effects in BaCoGe <sub>2</sub> O <sub>7</sub> . Physical Review B, 2011, 84, .	3.2	38
59	Ferroelectricity due to Orbital Ordering in E-Type Undoped Rare-Earth Manganites. Physical Review Letters, 2011, 106, 072201.	7.8	29
60	Bandstructure and Fermi Surfaces of CeRh <sub>3</sub> B <sub>2</sub> . Journal of the Physical Society of Japan, 2010, 79, 044717.	1.6	7
61	Magnetic anisotropy in Li-phosphates and origin of magnetoelectricity in LiNiPO <sub>4</sub> . Physical Review B, 2010, 82, .	3.2	24
62	Magnetically induced ferroelectricity in Cu <sub>2</sub> O. Physical Review B, 2010, 82, .	3.2	20
63	Interplay between Charge Order, Ferroelectricity, and Ferroelasticity: Tungsten Bronze Structures as a Playground for Multiferroicity. Physical Review Letters, 2010, 105, 107202.	7.8	33
64	Ferroelectric Switching in Multiferroic Magnetite (Fe <sub>3</sub> O <sub>4</sub> ) Thin Films. Advanced Materials, 2009, 21, 4452-4455.	21.0	148
65	Ferroelectricity in multiferroic magnetite Fe <sub>3</sub> O <sub>4</sub> by noncentrosymmetric Fe <sub>3</sub> O <sub>4</sub> . Physical Review B, 2009, 80, 080401.	3.2	89
66	Exchange Bias Driven by the Dzyaloshinskii-Moriya Interaction and Ferroelectric Polarization at G-Type Antiferromagnetic Perovskite Interfaces. Physical Review Letters, 2009, 103, 127201.	7.8	132
67	Magnetically induced ferroelectricity in TbMnO <sub>3</sub> : inverse Goodenough-Kanamori interaction. Journal of Physics Condensed Matter, 2009, 21, 064203.	1.8	12
68	Field angle dependence of the zero-energy density of states in unconventional superconductors: analysis of the borocarbide superconductor YNi <sub>2</sub> B <sub>2</sub> C. Journal of Physics: Conference Series, 2009, 150, 052177.	0.4	4
69	Microscopic mechanisms for improper ferroelectricity in multiferroic perovskites: a theoretical review. Journal of Physics Condensed Matter, 2008, 20, 434208.	1.8	52
70	Magnetically induced ferroelectricity in orthorhombic manganites: Microscopic origin and chemical trends. Physical Review B, 2008, 78, .	3.2	96
71	de Haas-van Alphen effect in the mixed state of LuNi <sub>2</sub> B <sub>2</sub> C. Anisotropy and field dependence of the damping due to superconductivity. Physical Review B, 2008, 78, .	3.2	11
72	Interface effects at a half-metal/ferroelectric junction. Applied Physics Letters, 2007, 91, .	3.3	100

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73	Dual Nature of Improper Ferroelectricity in a Magnetoelectric Multiferroic. Physical Review Letters, 2007, 99, 227201.	7.8	282
74	Calculated positions of point nodes in the gap structure of the borocarbide superconductor $YNi_2B_2C$ . Physical Review B, 2007, 76, .	3.2	20
75	First-principles stabilization of an unconventional collinear magnetic ordering in distorted manganites. Physical Review B, 2006, 74, .	3.2	58
76	Fermi surfaces of $YNi_2B_2C$ : An LSDA+U study. Physica B: Condensed Matter, 2006, 378-380, 688-689.	2.7	0
77	Bandstructure calculations and Fermi surfaces of RNiBC. Physica B: Condensed Matter, 2005, 359-361, 597-599.	2.7	4
78	Band structure calculations and Fermi surfaces of YNi <sub>2</sub> B <sub>2</sub> C. Physica C: Superconductivity and Its Applications, 2004, 412-414, 225-229.	1.2	25
79	Charge and Spin States of Transition-Metal Atoms in a Hemoprotein Based on the Extended Haldane-Anderson Model. Journal of the Physical Society of Japan, 2003, 72, 2029-2032.	1.6	8
80	Pb/Bi heterostructure as a versatile platform to realize topological superconductivity. Progress of Theoretical and Experimental Physics, 0, , .	6.6	1