

# Istvan Kezsmarki

## List of Publications by Year in descending order

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119  
papers

3,549  
citations

159525

30  
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155592

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120  
all docs

120  
docs citations

120  
times ranked

3371  
citing authors

#	ARTICLE	IF	CITATIONS
1	Magnetic Order and Sign of the Dzyaloshinskii-Moriya Interaction in 2-D Antiferromagnet $\text{BaCoGe}_2\text{O}_7$ Under Applied Magnetic Field. IEEE Transactions on Magnetism, 2022, 58, 1-5.	1.2	6
2	Doping Control of Magnetic Anisotropy for Stable Antiskyrmion Formation in Schreibersite $(\text{Fe,Ni})_3\text{P}$ with $S_4$ symmetry. Advanced Materials, 2022, 34, e2108770.	11.1	15
3	Confirming the trilinear form of the optical magnetoelectric effect in the polar honeycomb antiferromagnet $\text{Co}_2\text{Mo}_3\text{O}_8$ . Npj Quantum Materials, 2022, 7, .	1.8	26
4	Probing multiferroic order parameters and domain population via nuclear spins. Physical Review B, 2022, 105, .	1.1	3
5	How Correlations and Spin-Orbit Coupling Work within Extended Orbitals of Transition-Metal Tetrahedra of 4d/5d Lacunar Spinels. Journal of Physical Chemistry Letters, 2022, 13, 1681-1686.	2.1	6
6	Squeezing the periodicity of Néel-type magnetic modulations by enhanced Dzyaloshinskii-Moriya interaction of 4d electrons. Npj Quantum Materials, 2022, 7, .	1.8	9
7	Mode splitting of spin waves in magnetic nanotubes with discrete symmetries. Physical Review B, 2022, 105, .	1.1	4
8	Resolving structural changes and symmetry lowering in spinel $\text{FeCr}_2\text{S}_4$ . Physical Review B, 2022, 105, .	1.1	3
9	Slowdown of photoexcited spin dynamics in the non-collinear spin-ordered phases in skyrmion host $\text{GaV}_4\text{S}_8$ . Nature Communications, 2022, 13, .	5.8	3
10	Strain Driven Conducting Domain Walls in a Mott Insulator. Advanced Electronic Materials, 2022, 8, .	2.6	2
11	Magneto-optical diagnosis of symptomatic malaria in Papua New Guinea. Nature Communications, 2021, 12, 969.	5.8	28
12	From Semiconducting to Metallic: Jahn-Teller-Induced Phase Transformation in Skyrmion Host $\text{GaV}_4\text{S}_8$ . Journal of Physical Chemistry C, 2021, 125, 5771-5780.	1.5	7
13	Cooperative Cluster Jahn-Teller Effect as a Possible Route to Antiferroelectricity. Physical Review Letters, 2021, 126, 187601.	2.9	12
14	Giant conductivity of mobile non-oxide domain walls. Nature Communications, 2021, 12, 3975.	5.8	14
15	Vital role of magnetocrystalline anisotropy in cubic chiral skyrmion hosts. Npj Quantum Materials, 2021, 6, .	1.8	21
16	New method of transport measurements on van der Waals heterostructures under pressure. Journal of Applied Physics, 2021, 130, .	1.1	16
17	Sensitive detection of Plasmodium vivax malaria by the rotating-crystal magneto-optical method in Thailand. Scientific Reports, 2021, 11, 18547.	1.6	2
18	In-Situ Electric-Field Control of THz Nonreciprocal Directional Dichroism in the Multiferroic $\text{Ba}_2\text{CoGe}_2\text{O}_7$ . Physical Review Letters, 2021, 127, 157201.	2.9	3

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19	Symmetry and curvature effects on spin waves in vortex-state hexagonal nanotubes. <i>Physical Review B</i> , 2021, 104, .	1.1	12
20	Selection rules and dynamic magnetoelectric effect of the spin waves in multiferroic $\text{BiFeO}_3$ . <i>Physical Review B</i> , 2021, 104, .	1.1	2
21	Magnetic and geometric control of spin textures in the itinerant kagome magnet $\text{Mn}_2\text{Sb}$ . <i>Physical Review Research</i> , 2021, 3, .	1.3	10
22	Magnetic anisotropy and exchange paths for octahedrally and tetrahedrally coordinated $\text{Mn}^{2+}$ ions in the honeycomb multiferroic $\text{Mn}_2\text{Sb}$ . <i>Physical Review B</i> , 2020, 102, .	1.1	9
23	Macroscopic manifestation of domain-wall magnetism and magnetoelectric effect in a $\text{NiTe}$ -type skyrmion host. <i>Npj Quantum Materials</i> , 2020, 5, .	1.8	20
24	Stability of $\text{NiTe}$ -type skyrmion lattice against oblique magnetic fields in $\text{GaV}_4\text{S}_8$ and $\text{GaV}_8\text{S}_8$ . <i>Physical Review B</i> , 2020, 102, .	1.1	11
25	Rapid and quantitative antimalarial drug efficacy testing via the magneto-optical detection of hemozoin. <i>Scientific Reports</i> , 2020, 10, 14025.	1.6	11
26	Structure, phonons, and orbital degrees of freedom in $\text{VFeO}_8$ . <i>Physical Review B</i> , 2020, 102, .	1.1	23
27	Magnetic and vibronic terahertz excitations in Zn-doped $\text{VFeO}_8$ . <i>Physical Review B</i> , 2020, 102, .	1.1	9
28	Quantum paraelectricity in the Kitaev quantum spin liquid candidates $\text{H}_3\text{LiIr}_2\text{O}_6$ and $\text{D}_3\text{LiIr}_2\text{O}_6$ . <i>Physical Review B</i> , 2020, 101, .	1.1	17
29	Field evolution of low-energy excitations in the hyperhoneycomb magnet $\text{Ir}_2\text{V}_2\text{O}_{14}$ . <i>Physical Review B</i> , 2020, 101, .	1.1	10
30	Lattice dynamics and electronic excitations in a large family of lacunar spinels with a breathing pyrochlore lattice structure. <i>Physical Review B</i> , 2020, 101, .	1.1	15
31	Field and anisotropy driven transformations of spin spirals in cubic skyrmion hosts. <i>Physical Review Research</i> , 2020, 2, .	1.3	15
32	Spin excitations of magnetoelectric $\text{LiNiPO}_4$ in multiple magnetic phases. <i>Physical Review B</i> , 2019, 100, .	1.1	11
33	Magnetoelectric spectroscopy of spin excitations in $\text{LiCoPO}_4$ . <i>Physical Review B</i> , 2019, 100, .	1.1	5
34	Highly Sensitive and Rapid Characterization of the Development of Synchronized Blood Stage Malaria Parasites Via Magneto-Optical Hemozoin Quantification. <i>Biomolecules</i> , 2019, 9, 579.	1.8	12
35	Optically Driven Collective Spin Excitations and Magnetization Dynamics in the $\text{NiTe}$ -type Skyrmion Host $\text{GaV}_4\text{S}_8$ . <i>Physical Review Letters</i> , 2019, 122, 057202.	1.1	20
36	Microwave Directional Dichroism Resonance with Spin Excitations in the Polar Ferromagnet $\text{GaV}_8\text{S}_8$ . <i>Physical Review Letters</i> , 2019, 122, 057202.	1.1	12

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37	Directional dichroism in the paramagnetic state of multiferroics: A case study of infrared light absorption in Sr <sub>2</sub> CoSi <sub>2</sub> O <sub>7</sub> at high temperatures. Physical Review B, 2019, 99, .	1.1	12
38	Magnetic Field Control of Cycloidal Domains and Electric Polarization in Multiferroic $\text{BiFeO}_3$ . Physical Review Letters, 2018, 120, 147203.	2.9	15
39	Orbital-order driven ferroelectricity and dipolar relaxation dynamics in multiferroic $\text{GaMnO}_4$ . Physical Review B, 2018, 98, .	1.1	12
40	Architecture of nanoscale ferroelectric domains in $\text{GaMo}_4\text{S}_8$ . Journal of Physics Condensed Matter, 2018, 30, 445402.	1.1	19
41	Cryogenic TEM Studies of Bloch and Neel Skyrmion Textures in Lacunar Spinels and Cubic Helimagnets. Microscopy and Microanalysis, 2018, 24, 946-947.	0.7	17
42	Identification of Antiferromagnetic Domains Via the Optical Magnetoelectric Effect. Physical Review Letters, 2018, 121, 057601.	0.2	1
43	Exchange anisotropy in the skyrmion host $\text{GaV}_4\text{S}_8$ . Journal of Physics Condensed Matter, 2017, 29, 065803.	2.9	28
44	Magnetic resonances of multiferroic $\text{TbFeO}_3$ . Physical Review B, 2017, 95, .	0.7	22
45	Characteristics of ferroelectric-ferroelastic domains in Néel-type skyrmion host $\text{GaV}_4\text{S}_8$ . Scientific Reports, 2017, 7, 44663.	1.6	41
46	Optical conductivity in multiferroic $\text{GaV}_4\text{S}_8$ and $\text{GeV}_4\text{S}_8$ . Physical Review B, 2017, 96, .	1.1	16
47	Polar and magnetic order in $\text{GaV}_4\text{S}_8$ . Physical Review B, 2017, 96, .	1.1	29
48	Equilibrium Skyrmion Lattice Ground State in a Polar Easy-plane Magnet. Scientific Reports, 2017, 7, 7584.	1.1	87
49	Relaxation dynamics of modulated magnetic phases in the skyrmion host $\text{GaV}_4\text{S}_8$ : An ac magnetic susceptibility study. Physical Review B, 2017, 96, .	1.1	12
50	Asymmetric isolated skyrmions in polar magnets with easy-plane anisotropy. Physical Review B, 2017, 96, .	1.1	57
51	Magnetic structure of the magnetoelectric material $\text{Ca}_2\text{O}_7$ . Physical Review B, 2017, 95, .	1.1	4
52	On the multiferroic skyrmion-host $\text{GaV}_4\text{S}_8$ . Philosophical Magazine, 2017, 97, 3428-3445.	0.7	40
53	Skyrmion robustness in noncentrosymmetric magnets with axial symmetry: The role of anisotropy and tilted magnetic fields. Physical Review B, 2017, 96, .	1.1	59

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55	Secondary Structure Prediction of Protein Constructs Using Random Incremental Truncation and Vacuum-Ultraviolet CD Spectroscopy. PLoS ONE, 2016, 11, e0156238.	1.1	5
56	Efficient monitoring of the blood-stage infection in a malaria rodent model by the rotating-crystal magneto-optical method. Scientific Reports, 2016, 6, 23218.	1.6	21
57	Origin of forbidden reflections in multiferroic Ba <sub>2</sub> CoGe <sub>2</sub> O <sub>7</sub> by neutron diffraction: symmetry lowering or Renninger effect?. Journal of Applied Crystallography, 2016, 49, 556-560.	1.9	10
58	Skyrmion dynamics under uniaxial anisotropy. Physical Review B, 2016, 94, .	1.1	45
59	Lattice modes and the Jahn-Teller ferroelectric transition of $\text{GaV}_4\text{S}_8$ . Physical Review B, 2016, 94, .	1.1	30
60	Magnetoelectric effect and magnetic phase diagram of a polar ferrimagnet $\text{CaBaFe}_4\text{O}_7$ . Physical Review B, 2016, 93, .	1.1	19
61	The low-temperature crystal structure of the multiferroic melilite $\text{Ca}_2\text{CoSi}_2\text{O}_7$ . Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2016, 72, 126-132.	0.5	7
62	Spin-induced polarizations and nonreciprocal directional dichroism of the room-temperature multiferroic $\text{BiFeO}_3$ . Physical Review B, 2015, 92, .	1.1	23
63	Optical Diode Effect at Spin-Wave Excitations of the Room-Temperature Multiferroic $\text{GaV}_4\text{S}_8$ . Physical Review Letters, 2015, 115, 127203.	2.9	39
64	Multiferroicity and skyrmions carrying electric polarization in $\text{GaV}_4\text{S}_8$ . Science Advances, 2015, 1, e1500916.	2.9	65
65	Néel-type skyrmion lattice with confined orientation in the polar magnetic semiconductor $\text{GaV}_4\text{S}_8$ . Nature Materials, 2015, 14, 1116-1122.	4.7	136
66	Effect of spin excitations with simultaneous magnetic- and electric-dipole character on the static magnetoelectric properties of multiferroic materials. Physical Review B, 2014, 89, .	13.3	523
67	One-way transparency of four-coloured spin-wave excitations in multiferroic materials. Nature Communications, 2014, 5, 3203.	1.1	26
68	Evolution of two-dimensional antiferromagnetism with temperature and magnetic field in multiferroic $\text{Ba}_2\text{CoGe}_2\text{O}_7$ . Physical Review B, 2014, 89, .	5.8	94
69	Evaluation of a Novel Magneto-Optical Method for the Detection of Malaria Parasites. PLoS ONE, 2014, 9, e96981.	1.1	20
70	Electrochemical template synthesis of protein-imprinted magnetic polymer microrods. Journal of Materials Science, 2013, 48, 5209-5218.	1.1	41
71	Magnetoelasticity in $\text{Cr}_2\text{O}_3$ . Physical Review B, 2013, 87, 014407.	1.7	27
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73	Symmetry conditions for nonreciprocal light propagation in magnetic crystals. Physical Review B, 2013, 87, .	1.1	70
74	Malaria pigment crystals as magnetic micro-rotors: key for high-sensitivity diagnosis. Scientific Reports, 2013, 3, 1431.	1.6	71
75	Enhanced Infrared Magneto-Optical Response of the Nonmagnetic Semiconductor BiTeI Driven by Bulk Rashba Splitting. Physical Review Letters, 2012, 109, 167401.	2.9	43
76	Disorder Promotes Ferromagnetism: Rounding of the Quantum Phase Transition in $\text{Sr}_{1-x}\text{Ca}_x\text{RuO}_3$ . Physical Review Letters, 2012, 108, 185701.	2.9	27
77	Determination of the magnetic order and the crystal symmetry in the multiferroic ground state of $\text{BaCo}_2\text{Ge}_2\text{O}_7$ . Physical Review Letters, 2011, 106, 057403.	1.1	27
78	Chirality of matter shows up via spin excitations. Nature Physics, 2012, 8, 734-738.	6.5	128
79	Spin-Stretching Modes in Anisotropic Magnets: Spin-Wave Excitations in the Multiferroic $\text{BaCo}_2\text{Ge}_2\text{O}_7$ . Physical Review Letters, 2011, 106, 057403.	1.1	27
80	Enhanced Directional Dichroism of Terahertz Light in Resonance with Magnetic Excitations of the Multiferroic $\text{BaCo}_2\text{Ge}_2\text{O}_7$ . Physical Review Letters, 2011, 106, 057403.	1.1	27
81	Improved thermal relaxation method for the simultaneous measurement of the specific heat and thermal conductivity. European Physical Journal B, 2010, 74, 27-33.	0.6	7
82	Experimental band structure of the nearly half-metallic $\text{CuCr}_2\text{Se}_4$ : an optical and magneto-optical study. New Journal of Physics, 2010, 12, 053039.	1.2	22
83	Optical Probe for Anomalous Hall Resonance in Ferromagnets with Spin Chirality. Physical Review Letters, 2009, 103, 267206.	2.9	10
84	Magnetic-Order-Induced Crystal Symmetry Lowering in $\text{Cr}_2\text{O}_3$ . Physical Review Letters, 2009, 103, 077205.	2.9	47
85	Multicritical End Point of the First-Order Ferromagnetic Transition in Colossal Magnetoresistive Manganites. Physical Review Letters, 2008, 101, 037206.	2.9	47
86	Anomalous Hall Effect in the (In,Mn)Sb Dilute Magnetic Semiconductor. Physical Review Letters, 2008, 100, 107201.	2.9	38
87	An alternative of spectroscopic ellipsometry: The double-reference method. Applied Physics Letters, 2008, 92, 131104.	1.5	0
88	Optical phase diagram of perovskite colossal magnetoresistance manganites near half doping. Physical Review B, 2008, 77, .	1.1	15
89	Anomalous Nernst Effects in Pyrochlore Molybdates with Spin Chirality. Physical Review Letters, 2008, 100, 106601.	2.9	46
90	Ultrafast Photoinduced Formation of Metallic State in a Perovskite-type Manganite with Short Range Charge and Orbital Order. Journal of the Physical Society of Japan, 2007, 76, 043702.	0.7	42

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91	High-pressure infrared spectroscopy: Tuning of the low-energy excitations in correlated electron systems. <i>Physical Review B</i> , 2007, 76, .	1.1	5
92	Magnetic-field-induced transition in BaVS <sub>3</sub> . <i>Physical Review B</i> , 2007, 75, .	1.1	6
93	Nature of the Transition between a Ferromagnetic Metal and a Spin-Glass Insulator in Pyrochlore Molybdates. <i>Physical Review Letters</i> , 2007, 99, 086401.	2.9	78
94	The electronic structure and the phases of. <i>Journal of Magnetism and Magnetic Materials</i> , 2007, 310, 928-934.	1.0	6
95	Separation of Orbital Contributions to the Optical Conductivity of BaVS <sub>3</sub> . <i>Physical Review Letters</i> , 2006, 96, 186402.	2.9	26
96	Mott-Anderson Transition Controlled by a Magnetic Field in Pyrochlore Molybdate. <i>Physical Review Letters</i> , 2006, 96, 116403.	2.9	24
97	Variation of the charge dynamics in bandwidth- and filling-controlled metal-insulator transitions of pyrochlore-type molybdates. <i>Physical Review B</i> , 2006, 73, .	1.1	20
98	Depressed charge gap in the triangular-lattice Mott insulator $\hat{\rho}^{\sim}(ET)_2Cu_2(CN)_3$ . <i>Physical Review B</i> , 2006, 74, .	1.1	55
99	Magneto-optical effect induced by spin chirality of the itinerant ferromagnet Nd <sub>2</sub> Mo <sub>2</sub> O <sub>7</sub> . <i>Physical Review B</i> , 2005, 72, .	1.1	13
100	Pressure-induced suppression of the spin-gapped insulator phase in BaVS <sub>3</sub> : An infrared optical study. <i>Physical Review B</i> , 2005, 71, .	1.1	11
101	Charge Dynamics Near the Electron-Correlation Induced Metal-Insulator Transition in Pyrochlore-Type Molybdates. <i>Physical Review Letters</i> , 2004, 93, 266401.	2.9	39
102	Phonon and spin dynamics in BaVS <sub>3</sub> single crystals. <i>Physical Review B</i> , 2002, 65, .	1.1	6
103	Pressure dependence of the thermoelectric power of single-walled carbon nanotubes. <i>Physical Review B</i> , 2002, 65, .	1.1	12
104	Interface Magnetoresistance of Fe/Ag Multilayers. <i>Physica Status Solidi A</i> , 2002, 189, 621-624.	1.7	3
105	BaVS <sub>3</sub> : from spin gap insulator to non-Fermi-liquid. <i>Physica B: Condensed Matter</i> , 2002, 312-313, 694-695.	1.3	4
106	Magnetoresistance of Ag/Fe/Ag and Cr/Fe/Cr trilayers. <i>Solid State Communications</i> , 2002, 122, 59-63.	0.9	11
107	Pressure induced crossover in the electronic states of (TMTTF) <sub>2</sub> Br. <i>Ferroelectrics</i> , 2001, 249, 57-62.	0.3	1
108	Pressure dependence of the spin gap in BaVS <sub>3</sub> . <i>Physical Review B</i> , 2001, 63, .	1.1	17

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109	Dimensional Crossover, Electronic Confinement and Charge Localization in Organic Metals. , 2001, , 263-271.		0
110	Non-Magnetic Mott Insulator Phase and Anomalous Conducting States in Barium Vanadium Trisulphide. , 2001, , 387-392.		0
111	Orbitally driven spin pairing in the three-dimensional nonmagnetic Mott insulator BaVS <sub>3</sub> : Evidence from single-crystal studies. Physical Review B, 2000, 61, R7831-R7834.	1.1	59
112	Hall Effect and Conduction Anisotropy in the Organic Conductor (TMTSF) <sub>2</sub> PF <sub>6</sub> . Physical Review Letters, 2000, 84, 2670-2673.	2.9	51
113	Pressure Induced Quantum Critical Point and Non-Fermi-Liquid Behavior in BaVS <sub>3</sub> . Physical Review Letters, 2000, 85, 1938-1941.	2.9	54
114	Field scaling and exponential temperature dependence of the magnetoresistance in (TMTSF) <sub>2</sub> PF <sub>6</sub> . Physical Review B, 1999, 60, R8434-R8437.	1.1	5
115	Conduction anisotropy of the Bechgaard salts. European Physical Journal Special Topics, 1999, 09, Pr10-263-Pr10-264.	0.2	0
116	Power law field dependence of the 2D magnetoresistance in (TMTSF) <sub>2</sub> PF <sub>6</sub> . European Physical Journal Special Topics, 1999, 09, Pr10-235-Pr10-238.	0.2	0
117	Magneto-Optical Characterization on the Ferromagnetic-Paramagnetic Transitions in the Composition-Spread Epitaxial Film of Sr <sub>1-x</sub> Ca <sub>x</sub> RuO <sub>3</sub> . Applied Physics Express, 0, 1, 113001.	1.1	7
118	Optical, Dielectric, and Magnetoelectric Properties of Ferroelectric and Antiferroelectric Lacunar Spinels. Physica Status Solidi (B): Basic Research, 0, , 2100160.	0.7	9
119	Nuclear and Electron Spin Resonance Studies on Skyrmion-Hosting Lacunar Spinels. Physica Status Solidi (B): Basic Research, 0, , 2100170.	0.7	0