K Matsuhira

List of Publications by Year
in descending order

36 papers	1,523 citations	471061 17 h-index	377514 34 g-index
36 all docs	36 docs citations	36 times ranked	1341 citing authors

#	Article	IF	Citations
1	Metalâ€“Insulator Transitions in Pyrochlore Oxides Ln₂Ir₂O₇. Journal of the Physical Society of Japan, 2011, 80, 094701.	0.7	210
2	Metalâ€“Insulator Transition in Pyrochlore Iridates Ln2Ir2O7 (Ln = Nd, Sm, and Eu). Journal of the Physical Society of Japan, 2007, 76, 043706.	0.7	179
3	Observation of Magnetic Monopoles in Spin Ice. Journal of the Physical Society of Japan, 2009, 78, 103706.	0.7	146
4	Emergence of Magnetic Long-range Order in Frustrated Pyrochlore Nd₂Ir₂O₇with Metalâ€“Insulator Transition. Journal of the Physical Society of Japan, 2012, 81, 034709.	0.7	139
5	Specific Heat of KagomÃ© Ice in the Pyrochlore Oxide Dy2Ti2O7. Journal of the Physical Society of Japan, 2003, 72, 411-418.	0.7	119
6	Temperatureâ€dependent Raman scattering studies of the geometrically frustrated pyrochlores Dy₂Ti₂O₇, Gd₂Ti₂O₇ and Er₂Ti₂O₇. Journal of Raman Spectroscopy, 2008, 39, 537-544.	1.2	78
7	Temperature-dependent studies of the geometrically frustrated pyrochlores<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Ho</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:msub>	1.1	78
8	Specific Heat Study on Sm-based Filled Skutterudite Phosphides SmT4P12 (T=Fe, Ru and Os). Journal of the Physical Society of Japan, 2005, 74, 1030-1035.	0.7	69
9	Systematic Study of Lattice Specific Heat of Filled Skutterudites. Journal of the Physical Society of Japan, 2009, 78, 124601.	0.7	68
10	Ferromagnetic Ising Spin Chains Emerging from the Spin Ice under Magnetic Field. Journal of the Physical Society of Japan, 2003, 72, 3045-3048.	0.7	51
11	Magnetocaloric Effect Study on the Pyrochlore Spin Ice Compound Dy2Ti2O7in a [111] Magnetic Field. Journal of the Physical Society of Japan, 2004, 73, 2851-2856.	0.7	50
12	Far-from-equilibrium monopole dynamics in spin ice. Nature Physics, 2014, 10, 135-139.	6.5	47
13	Giant Magnetoresistance Effect in the Metalâ€“Insulator Transition of Pyrochlore Oxide Nd₂Ir₂O₇. Journal of the Physical Society of Japan, 2013, 82, 023706.	0.7	38
14	Magnetic order in the pyrochlore iridate Nd2Ir2O7probed by muon spin relaxation. Physical Review B, 2013, 88, .	1.1	38
15	Experimental signature of the attractive Coulomb force between positive and negative magnetic monopoles in spin ice. Nature Physics, 2016, 12, 661-666.	6.5	32
16	A Magnetic Transition Probed by the Ce Ion in Square-Lattice Antiferromagnet CeMnAsO. Journal of the Physical Society of Japan, 2011, 80, 094708.	0.7	23
17	Nonlinear Conductivity of Geometrically Frustrated Iridate Ca₅Ir₃O₁₂. Journal of the Physical Society of Japan, 2018, 87, 013703.	0.7	19
18	First Observation of Superlattice Reflections in the Hidden Order at 105 K of Spinâ€“Orbit Coupled Iridium Oxide Ca5Ir3O12. Journal of the Physical Society of Japan, 2021, 90, 063702.	0.7	18

#	Article	IF	Citations
19	Uniaxial pressure effects on spin-ice compound Dy2Ti2O7. Journal of Magnetism and Magnetic Materials, 2007, 310, e432-e434.	1.0	15
20	Magnetic Moments and Ordered States in Pyrochlore Iridates Nd₂Ir₂O₇ and Sm₂Ir₂O₇ Studied by Muon-Spin Relaxation. Journal of the Physical Society of Japan, 2017, 86, 024705.	0.7	15
21	Raman Scattering Investigation of Structural Transition in Ca₅Ir₃O₁₂. Journal of the Physical Society of Japan, 2020, 89, 054602.	0.7	14
22	Dynamic behavior of magnetic avalanches in the spin-ice compound <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">Dy</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">Ti</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>7</mml:mn></mml:msub></mml:math>. Physical Review B, 2014, 90, .	1.1	12
23	Ab initio derivation of low-energy Hamiltonians for systems with strong spin-orbit interaction: Application to Ca5Ir3O12. Physical Review B, 2021, 104, .	1.1	11
24	Nuclear spin assisted quantum tunnelling of magnetic monopoles in spin ice. Nature Communications, 2019, 10, 1509.	5.8	9
25	Study of Phonon Dispersion of Iridium Oxide Ca₅Ir₃O₁₂ with Strong Spinâ€“Orbit Interaction. Journal of the Physical Society of Japan, 2020, 89, 053601.	0.7	9
26	Ferrimagnetism of New Filled Skutterudite SmFe₄As₁₂ Synthesized at High Pressure. Journal of the Physical Society of Japan, 2010, 79, 074714.	0.7	8
27	¹⁹³Ir Synchrotron-Radiation-Based MÃ¶ssbauer Spectroscopy for Ir Valence Disproportionation in Ca₅Ir₃O₁₂. Journal of the Physical Society of Japan, 2021, 90, 083701.	0.7	8
28	Effects of uniaxial pressure on the spin ice <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Ho</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>7</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2020, 102, .	1.1	5
29	Metal-Insulator Transition in Pyrochlore Oxide (Nd_{1â^'}_xPr_x)₂Ir₂O₇ (0.7 â‰¤ x â‰¤ 1). , 2014, , .		4
30	Ultrasonic Measurement of Filled Skutterudite with Heavy Lanthanide TbRu4P12. Journal of the Physical Society of Japan, 2008, 77, 306-308.	0.7	3
31	Different High-Temperature Spin Dynamics of Ising Pyrochlore Dy2Sn2O7 and Heisenberg Pyrochlore Gd2Sn2O7. Journal of the Physical Society of Japan, 2012, 81, 054701.	0.7	3
32	Application of synchrotron-radiation-based MÃ¶ssbauer spectroscopy to 193Ir 73ÂkeV transition. Hyperfine Interactions, 2021, 242, 1.	0.2	2
33	Thermal Properties of Filled Skutterudite PrOs₄P₁₂. Journal of the Physical Society of Japan, 2011, 80, SA025.	0.7	1
34	A new mathematical approach to finding global solutions of the magnetic structure determination problem. Scientific Reports, 2018, 8, 16228.	1.6	1
35	Universal Dynamics of Magnetic Monopoles in Two-Dimensional KagomÃ© Ice. Journal of the Physical Society of Japan, 2021, 90, .	0.7	1
36	A New Macroscopically Degenerate Ground State in the Spin Ice Induced by a Magnetic Field. Nihon Kessho Gakkaishi, 2004, 46, 94-97.	0.0	0