

Hirofumi Akamatsu

List of Publications by Year in descending order

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docs citations

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times ranked

2255
citing authors

#	ARTICLE	IF	CITATIONS
1	Synthesis of Hydride-Doped Perovskite Stannate with Visible Light Absorption Capability. Inorganic Chemistry, 2022, , .	4.0	2
2	Glass-ceramic route to NASICON-type Na Ti ₂ (PO ₄) ₃ electrodes for Na-ion batteries. Ceramics International, 2022, 48, 24758-24764.	4.8	2
3	Controlling Defects to Achieve Reproducibly High Ionic Conductivity in Na ₃ SbS ₄ Solid Electrolytes. Chemistry of Materials, 2022, 34, 5634-5643.	6.7	9
4	Interplay between Oxygen Octahedral Rotation and Deformation in the Acentric ARTiO ₄ Series toward Negative Thermal Expansion. Chemistry of Materials, 2022, 34, 6492-6504.	6.7	5
5	Sn-Based Perovskite with a Wide Visible-Light Absorption Band Assisted by Hydride Doping. Chemistry of Materials, 2021, 33, 3631-3638.	6.7	12
6	Environmental impact of amino acids on the release of selenate immobilized in hydrotalcite: Integrated interpretation of experimental and density-functional theory study. Chemosphere, 2021, 274, 129927.	8.2	5
7	Influence of Amino Acids on the Mobility of Iodide in Hydrocalumite. Minerals (Basel, Switzerland), 2021, 11, 836.	2.0	0
8	Environmental impact of amino acids on selenate-bearing hydrocalumite: Experimental and DFT studies. Environmental Pollution, 2021, 288, 117687.	7.5	4
9	Electronic Origin of Non-Zone-Center Phonon Condensation: Octahedral Rotation as a Case Study. Physical Review Letters, 2021, 127, 215701.	7.8	7
10	Reversible Electrochemical Insertion/Extraction of Magnesium Ion into/from Robust NASICON-Type Crystal Lattice in a Mg(BF ₄) ₂ -Based Electrolyte. ACS Applied Energy Materials, 2020, 3, 6824-6833.	5.1	14
11	Variation of meso- and macroporous morphologies in resorcinol-formaldehyde (RF) gels tailored via a sol-gel process combined with soft-templating and phase separation. Journal of Sol-Gel Science and Technology, 2020, 95, 801-812.	2.4	8
12	Antiferroelectricity and robust dielectric response owing to competing polar and antipolar instabilities in tetragonal tungsten bronze $K_2Nb_{15}O_{15}$ ($R\bar{4}c$) Tj ETQq0.0.0 rgBT /Overlock 10 Tf	2.4	8
13	Ferroelectricity of Dionâ€“Jacobson layered perovskites CsNdNb ₂ O ₇ and RbNdNb ₂ O ₇ . Japanese Journal of Applied Physics, 2020, 59, SPPC04.	1.5	12
14	Sodium titanium oxide bronze nanoparticles synthesized <i>via</i> concurrent reduction and Na ⁺ -doping into TiO ₂ (B). Nanoscale, 2019, 11, 1442-1450.	5.6	8
15	Structural dynamics of LaVO ₃ on the nanosecond time scale. Structural Dynamics, 2019, 6, 014502.	2.3	3
16	Emergent room temperature polar phase in CaTiO ₃ nanoparticles and single crystals. APL Materials, 2019, 7, .	5.1	10
17	Comprehensive magnetic phase diagrams of the polar metal C_{2v}		

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19	A highly conductive Na ₃ V ₂ (PO ₄) ₃ ceramic sheet prepared by tape-casting method. <i>Electrochimica Acta</i> , 2019, 305, 197-203.	5.2	7
20	Insights into Sodium Ion Transfer at the Na/NASICON Interface Improved by Uniaxial Compression. <i>ACS Applied Energy Materials</i> , 2019, 2, 2913-2920.	5.1	51
21	A -site cation size effect on oxygen octahedral rotations in acentric Ruddlesden-Popper alkali rare-earth titanates. <i>Physical Review Materials</i> , 2019, 3, .	2.4	7
22	Light-Activated Gigahertz Ferroelectric Domain Dynamics. <i>Physical Review Letters</i> , 2018, 120, 096101.	7.8	39
23	Random anion distribution in MSxSe2 ^x (M = Mo, W) crystals and nanosheets. <i>RSC Advances</i> , 2018, 8, 9871-9878.	3.6	2
24	Artificial two-dimensional polar metal at room temperature. <i>Nature Communications</i> , 2018, 9, 1547.	12.8	61
25	Hybrid Improper Ferroelectricity in (Sr,Ca) ₃ Sn ₂ O ₇ and Beyond: Universal Relationship between Ferroelectric Transition Temperature and Tolerance Factor in $n = 2$ Ruddlesden-Popper Phases. <i>Journal of the American Chemical Society</i> , 2018, 140, 15690-15700.	13.7	74
26	Ferroelectric Sr ₃ Zr ₂ O ₇ : Competition between Hybrid Improper Ferroelectric and Antiferroelectric Mechanisms. <i>Advanced Functional Materials</i> , 2018, 28, 1801856.	14.9	89
27	Discovering minimum energy pathways via distortion symmetry groups. <i>Physical Review B</i> , 2018, 98, .	3.2	14
28	Strain-engineered Peierls instability in layered perovskite $\text{La}_{3}\text{O}_{7}$ from first principles. <i>Physical Review Materials</i> , 2018, 2, .	2.4	10
29	Polar metallic behavior of strained antiperovskites ACNi ₃ (A=Mg,Zn,and Cd) from first principles. <i>Physical Review Materials</i> , 2018, 2, .	2.4	14
30	Competing Structural Instabilities in the Ruddlesden-Popper Derivatives RTiO_{4} (R = Rare) TjETQqO_{000} /Overlock Centrosymmetry. <i>Chemistry of Materials</i> , 2017, 29, 656-665.	6.7	22
31	Perovskite-Type InCoO ₃ with Low-Spin Co ³⁺ : Effect of In-O Covalency on Structural Stabilization in Comparison with Rare-Earth Series. <i>Inorganic Chemistry</i> , 2017, 56, 11113-11122.	4.0	7
32	Carrier-Induced Band-Gap Variation and Point Defects in $\text{Zn}_{3}\text{N}_{2}$ from First Principles. <i>Physical Review Applied</i> , 2017, 8, .	3.8	18
33	Low-Temperature Cationic Rearrangement in a Bulk Metal Oxide. <i>Angewandte Chemie</i> , 2016, 128, 10016-10021.	2.0	3
34	Low-Temperature Cationic Rearrangement in a Bulk Metal Oxide. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 9862-9867.	13.8	20
35	Emergent Noncentrosymmetry and Piezoelectricity Driven by Oxygen Octahedral Rotations in $n = 2$ Dion-Jacobson Phase Layer Perovskites. <i>Advanced Functional Materials</i> , 2016, 26, 1930-1937.	14.9	33
36	Frontispiz: Low-Temperature Cationic Rearrangement in a Bulk Metal Oxide. <i>Angewandte Chemie</i> , 2016, 128, .	2.0	0

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37	Improper Inversion Symmetry Breaking and Piezoelectricity through Oxygen Octahedral Rotations in Layered Perovskite Family, LiR_2TiO_4 ($\text{R} = \text{Rare Earths}$). <i>Advanced Electronic Materials</i> , 2016, 2, 1500196.	5.1	28
38	Frontispiece: Low-Temperature Cationic Rearrangement in a Bulk Metal Oxide. <i>Angewandte Chemie - International Edition</i> , 2016, 55, .	13.8	0
39	LiNbO_3 -Type InFeO_3 : Room-Temperature Polar Magnet without Second-Order Jahn-Teller Active Ions. <i>Chemistry of Materials</i> , 2016, 28, 6644-6655.	6.7	43
40	Structural phase transitions in EuNbO_3 perovskite. <i>Journal of Solid State Chemistry</i> , 2016, 239, 192-199.	2.9	12
41	PbMn(IV)TeO_6 : A New Noncentrosymmetric Layered Honeycomb Magnetic Oxide. <i>Inorganic Chemistry</i> , 2016, 55, 1333-1338.	4.0	22
42	Mn_2FeWO_6 : A New Ni_3TeO_6 -Type Polar and Magnetic Oxide. <i>Advanced Materials</i> , 2015, 27, 2177-2181.	21.0	53
43	A labile hydride strategy for the synthesis of heavily nitrized BaTiO_3 . <i>Nature Chemistry</i> , 2015, 7, 1017-1023.	13.6	118
44	Inversion Symmetry Breaking by Oxygen Octahedral Rotations in the Ruddlesden-Popper $\text{Na}_2\text{R}_2\text{TiO}_7$ System. <i>Physical Review Letters</i> , 2014, 112, 187602.	7.8	60
45	Room-Temperature Polar Ferromagnet ScFeO_3 Transformed from a High-Pressure Orthorhombic Perovskite Phase. <i>Journal of the American Chemical Society</i> , 2014, 136, 15291-15299.	13.7	78
46	Superspin glass behavior of amorphous FeO-SiO_2 thin films. <i>Japanese Journal of Applied Physics</i> , 2014, 53, 05FB11.	1.5	1
47	Strong Spin-Lattice Coupling Through Oxygen Octahedral Rotation in Divalent Europium Perovskites. <i>Advanced Functional Materials</i> , 2013, 23, 1864-1872.	14.9	41
48	Magneto-optical properties of Eu^{2+} -containing aluminoborosilicate glasses with ferromagnetic interactions. <i>Optical Materials</i> , 2013, 35, 1997-2000.	3.6	21
49	$\text{AgCu}_3\text{V}_4\text{O}_{12}$: a Novel Perovskite Containing Mixed-Valence Silver ions. <i>Inorganic Chemistry</i> , 2013, 52, 13824-13826.	4.0	9
50	Magnetic and magneto-optical quenching in $(\text{Mn}^{2+}, \text{Sr}^{2+})$ metaphosphate glasses. <i>Optical Materials Express</i> , 2013, 3, 184.	3.0	38
51	Ferromagnetic amorphous oxides in the EuO-TiO_2 system studied by the Faraday effect in the visible region and the x-ray magnetic circular dichroism at the Eu^{2+} L _{2,3} edges. <i>Journal of Materials Research</i> , 2013, 28, 1031-1041.	3.2	7
52	Ferromagnetism induced by lattice volume expansion and amorphization in EuTiO_3 thin films. <i>Journal of Materials Research</i> , 2013, 28, 1031-1041.	2.6	17
53	Crystal and Electronic Structure and Magnetic Properties of Divalent Europium Perovskite Oxides EuM_2O_7 ($\text{M} = \text{Ti, Zr, and Hf}$): Experimental and First-Principles Approaches. <i>Inorganic Chemistry</i> , 2012, 51, 4560-4567.	4.0	54
54	Effect of Substrate Strain and Interface on Magnetic Properties of EuTiO_3 Thin Film. <i>Materials Research Society Symposia Proceedings</i> , 2012, 1454, 149-159.	0.1	2

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55	Local Structure of Amorphous EuTiO_2 Thin Films Probed by X-Ray Absorption Fine Structure. Journal of the American Ceramic Society, 2012, 95, 716-720. Antiferromagnetic superexchange via $\langle \mathbf{d} \rangle$ states of titanium in EuTiO_3 as seen from hybrid Hartree-Fock density functional calculations. Physical Review B, 2011, 83, .	3.8	7
56	Antiferromagnetic superexchange via $\langle \mathbf{d} \rangle$ states of titanium in EuTiO_3 as seen from hybrid Hartree-Fock density functional calculations. Physical Review B, 2011, 83, .	3.2	104
57	Ferromagnetic properties with reentrant spin glass behavior in amorphous EuZrO_3 thin film. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 3051-3054.	0.8	8
58	Magnetic properties of oxide glasses containing iron and rare-earth ions. Physical Review B, 2011, 84, .	3.2	25
59	Antiferromagnetism of perovskite EuZrO_3 . Journal of Solid State Chemistry, 2010, 183, 168-172.	2.9	38
60	Impact of amorphization on the magnetic properties of EuO-TiO_2 . Physical Review B, 2010, 82, .	3.2	12
61	Preparation and magnetic properties of amorphous EuTiO_3 thin films. Journal of Non-Crystalline Solids, 2010, 356, 2389-2392.	3.1	13
62	Ferromagnetic EuO-TiO_2 oxide glasses with reentrant spin glass behavior. Physical Review B, 2010, 81, .	3.2	25
63	Magnetic properties of mixed-valence iron phosphate glasses. Physical Review B, 2009, 80, .	3.2	25
64	Structural characterization of hierarchically porous alumina aerogel and xerogel monoliths. Journal of Colloid and Interface Science, 2009, 338, 506-513.	9.4	87
65	Magnetic phase transitions in $\text{Bi}_2\text{O}_3\text{-B}_2\text{O}_3$ glasses. Journal of Physics Condensed Matter, 2008, 20, 235216.	1.8	22
66	Magnetic properties of disordered oxides with iron and manganese ions. Journal of Non-Crystalline Solids, 2008, 354, 1347-1352.	3.1	17
67	Magnetic Properties of Amorphous $\text{Fe}_2\text{O}_3\text{-R}_2\text{O}_3$ (R=La, Gd and Tb) Thin Films Fabricated by Sputtering Method. Advanced Materials Research, 2008, 39-40, 207-212.	0.3	6
68	Structural and Magnetic Properties of CdFe_2O_4 Thin Films Fabricated via Sputtering Method. IEEE Transactions on Magnetics, 2008, 44, 2796-2799.	2.1	6
69	Magneto-optical properties of transparent divalent iron phosphate glasses. Applied Physics Letters, 2008, 92, .	3.3	36
70	Spin dynamics in oxide glass of $\text{Fe}_2\text{O}_3\text{-Bi}_2\text{O}_3\text{-B}_2\text{O}_3$ system. Journal of Magnetism and Magnetic Materials, 2007, 310, 1506-1507.	2.3	12
71	Spin dynamics in $\text{Fe}_2\text{O}_3\text{-TeO}_2$ glass: Experimental evidence for an amorphous oxide spin glass. Physical Review B, 2006, 74, .	3.2	26
72	Mechanical and thermal properties of porous polyimide monoliths crosslinked with aromatic and aliphatic triamines. Journal of Sol-Gel Science and Technology, 0, , .	2.4	1