

# Tetsuhiro Katsumata

## List of Publications by Year in descending order

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2409  
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#	ARTICLE	IF	CITATIONS
1	A Polar Oxide $\text{ZnSnO}_3$ with a $\text{LiNbO}_3$ -Type Structure. <i>Journal of the American Chemical Society</i> , 2008, 130, 6704-6705.	14.6	272
2	Tuning the orthorhombic-rhombohedral phase transition temperature in sodium potassium niobate by incorporating barium zirconate. <i>Physica Status Solidi - Rapid Research Letters</i> , 2009, 3, 142-144.	2.5	135
3	Crystal Structure of a Lithium Ion-Conducting Perovskite $\text{La}_{2/3}\text{xLi}_3\text{xTiO}_3$ ( $\text{x}=0.05$ ). <i>Journal of Solid State Chemistry</i> , 2002, 166, 67-72.	3.0	125
4	High-pressure synthesis and ferroelectric properties in perovskite-type $\text{BiScO}_3$ - $\text{PbTiO}_3$ solid solution. <i>Journal of Applied Physics</i> , 2004, 95, 231-235.	2.3	104
5	Synthesis, Structural Transformation, Thermal Stability, Valence State, and Magnetic and Electronic Properties of $\text{PbNiO}_3$ with Perovskite- and $\text{LiNbO}_3$ -Type Structures. <i>Journal of the American Chemical Society</i> , 2011, 133, 16920-16929.	14.6	103
6	Low-Driving Voltage Electroluminescence in Perovskite Films. <i>Advanced Materials</i> , 2009, 21, 3699-3702.	24.3	99
7	Structural investigations of migration pathways in lithium ion-conducting $\text{La}_{2/3}\text{xLi}_3\text{xTiO}_3$ perovskites. <i>Solid State Ionics</i> , 2006, 177, 3037-3044.	2.9	83
8	High-Pressure Synthesis and Correlation between Structure, Magnetic, and Dielectric Properties in $\text{LiNbO}_3$ -Type $\text{MnMO}_3$ ( $\text{M} = \text{Ti}, \text{Sn}$ ). <i>Inorganic Chemistry</i> , 2011, 50, 6392-6398.	4.2	78
9	Low-Temperature-Processed Brookite-Based $\text{TiO}_2$ Heterophase Junction Enhances Performance of Planar Perovskite Solar Cells. <i>Nano Letters</i> , 2019, 19, 598-604.	9.5	65
10	Structure and Mössbauer Studies of $\text{Fe}^{2+}$ Ordering in Antiferromagnetic Perovskite $\text{PbFeO}_2\text{F}$ . <i>Chemistry of Materials</i> , 2005, 17, 1386-1390.	7.1	63
11	Influence of Covalent Character on High Li Ion Conductivity in a Perovskite-Type Li Ion Conductor: A Prediction from a Molecular Dynamics Simulation of $\text{La}_{0.6}\text{Li}_{0.2}\text{TiO}_3$ . <i>Chemistry of Materials</i> , 2002, 14, 3930-3936.	7.1	57
12	First-Principles Studies on Novel Polar Oxide $\text{ZnSnO}_3$ ; Pressure-Induced Phase Transition and Electric Properties. <i>Advanced Materials</i> , 2010, 22, 2579-2582.	24.3	53
13	Synthesis and Magnetic and Charge-Transport Properties of the Correlated 4d Post-Perovskite $\text{CaRhO}_3$ . <i>Journal of the American Chemical Society</i> , 2009, 131, 2722-2726.	14.6	48
14	High Pressure Synthesis, Lattice Distortion, and Dielectric Properties of a Perovskite $\text{Bi}(\text{Ni}_{1/2}\text{Ti}_{1/2})\text{O}_3$ . <i>Ferroelectrics</i> , 2003, 286, 111-117.	0.6	47
15	High-Pressure Synthesis, Structure, and Characterization of a Post-perovskite $\text{CaPtO}_3$ with $\text{CaIrO}_3$ -Type Structure. <i>Inorganic Chemistry</i> , 2008, 47, 1868-1870.	4.2	45
16	Lithium Ion Conductivity in a Perovskite Lanthanum Lithium Titanate Single Crystal. <i>Journal of the Ceramic Society of Japan</i> , 1997, 105, 548-550.	1.3	44
17	Dielectric properties of a polar $\text{ZnSnO}_3$ with $\text{LiNbO}_3$ -type structure. <i>Journal of Solid State Chemistry</i> , 2012, 195, 115-119.	3.0	44
18	An Approach to Control of Band Gap Energy and Photoluminescence upon Band Gap Excitation in $\text{Pr}^{3+}$ -Doped Perovskites $\text{La}_{1/3}\text{MO}_3$ ( $\text{M} = \text{Nb}, \text{Ta}$ ): $\text{Pr}^{3+}$ . <i>Inorganic Chemistry</i> , 2011, 50, 5389-5395.	4.2	43

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19	Compact TiO <sub>2</sub> /Anatase TiO <sub>2</sub> Single-Crystalline Nanoparticle Electron-Transport Bilayer for Efficient Planar Perovskite Solar Cells. ACS Sustainable Chemistry and Engineering, 2018, 6, 12070-12078.	6.9	41
20	Systematic study of photoluminescence upon band gap excitation in perovskite-type titanates R <sub>1/2</sub> Na <sub>1/2</sub> TiO <sub>3</sub> :Pr (R=La, Gd, Lu, and Y). Journal of Solid State Chemistry, 2007, 180, 1678-1685.	3.0	38
21	Synthesis of the novel perovskite-type oxyfluoride PbScO <sub>2</sub> F under high pressure and high temperature. Journal of Solid State Chemistry, 2008, 181, 2737-2740.	3.0	38
22	Temperature dependence of luminescence properties of praseodymium-doped perovskite CaTiO <sub>3</sub> :Pr <sup>3+</sup> . Thermochimica Acta, 2012, 532, 168-171.	2.7	33
23	Influence of site percolation and local distortion on lithium ion conductivity in perovskite-type oxides La <sub>0.55</sub> Li <sub>0.35</sub> âˆ’ <sub>x</sub> K <sub>x</sub> TiO <sub>3</sub> and La <sub>0.55</sub> Li <sub>0.35</sub> TiO <sub>3</sub> -KMO <sub>3</sub> (M = Nb and Ta). Solid State Ionics, 1996, 86-88, 165-169.	2.9	31
24	Molecular Dynamics Simulation of the High Lithium Ion Conductor, La <sub>0.6</sub> i <sub>0.2</sub> TiO <sub>3</sub> .. Journal of the Ceramic Society of Japan, 1999, 107, 615-621.	1.3	29
25	High-pressure synthesis of novel lithium niobate-type oxides. Journal of Physics: Conference Series, 2010, 215, 012131.	0.4	29
26	Photoluminescence of Praseodymium-Doped Sr <sub>n+1</sub> Ti <sub>n</sub> O <sub>3n+1</sub> (n=1, 2, âˆž). Japanese Journal of Applied Physics, 2005, 44, 761-764.	1.6	27
27	Occupation site of Pr and luminescent properties in Pr-doped perovskite-type lithium ion-conducting oxides, A <sub>0.6</sub> Li <sub>0.3</sub> Ti <sub>0.5</sub> Ta <sub>0.5</sub> O <sub>3</sub> : Pr (A = Ca and Sr). Solid State Ionics, 2008, 179, 788-792.	2.9	26
28	High-Pressure Synthesis, Crystal Structure, Chemical Bonding, and Ferroelectricity of LiNbO <sub>3</sub> -Type LiSbO <sub>3</sub> . Inorganic Chemistry, 2018, 57, 15462-15473.	4.2	24
29	Molecular dynamics simulation in SrTiO <sub>3</sub> . Solid State Ionics, 1998, 108, 175-178.	2.9	22
30	Microstructural analysis of La <sub>2/3</sub> âˆ’ <sub>Li</sub> <sub>3</sub> TiO <sub>3</sub> single crystals and quenched samples observed by high resolution transmission electron microscopy. Solid State Ionics, 2009, 180, 607-611.	2.9	22
31	Long-Range Antiferromagnetic Ordering in the Novel Magnetically Frustrated Rock Salt Oxide System: Li <sub>3</sub> Mg <sub>2</sub> RuO <sub>6</sub> . Chemistry of Materials, 2008, 20, 5714-5720.	7.1	21
32	Synthesis and lithium ion conductivity of cubic deficient perovskites SrLi <sup>?</sup> TiTaO and the La-doped compounds. Solid State Ionics, 2004, 174, 19-26.	2.9	18
33	Synthesis and dielectric properties of a perovskite Bi <sub>1/2</sub> Ag <sub>1/2</sub> TiO <sub>3</sub> . Ferroelectrics, 2001, 264, 127-132.	0.6	17
34	High-Pressure Synthesis, Crystal and Electronic Structures, and Transport Properties of a Novel Perovskite HgSnO <sub>3</sub> . Inorganic Chemistry, 2008, 47, 6296-6302.	4.2	17
35	Synthesis, Structure and Ionic Conductivity of Garnet Like Lithium Ion Conductor Li <sub>6.25+</sub> <sub>x</sub> <sub>2</sub> Li <sub>0.25</sub> Ga <sub>0.25</sub> La <sub>3</sub> <sub>x</sub> <sub>2</sub> Sr <sub>x</sub> Zr <sub>2</sub> Journal of the Electrochemical Society, 2019, 166, A5168-A5173.		
36	Synthesis of New Perovskite-Type Oxyfluoride, PbMnO <sub>2</sub> F. Bulletin of the Chemical Society of Japan, 2012, 85, 397-399.	3.3	16

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37	New perovskite-type lithium ion conductors, $\text{La}_x\text{MyLi}_{1-x}\text{NbO}_3$ (M=Ag and Na). <i>Solid State Ionics</i> , 1998, 113-115, 465-469.	2.9	14
38	Structure and dielectric properties of high-pressure perovskite-type oxyfluorides $\text{xKTiO}_2\text{F}_{1-x}\text{BaTiO}_3$ . <i>Journal of Applied Physics</i> , 2008, 104, 044101.	2.3	14
39	Synthesis of new perovskite-type oxyfluorides, $\text{Ba}_n\text{O}_2\text{F}$ and comparison of the structure among perovskite-type oxyfluorides. <i>Journal of Solid State Chemistry</i> , 2019, 279, 120919.	3.0	11
40	High-pressure synthesis and characterization of a novel perovskite $\text{PbFe}_{1/2}\text{V}_{1/2}\text{O}_3$ . <i>Journal of the Ceramic Society of Japan</i> , 2009, 117, 102-105.	1.3	10
41	High-Pressure Synthesis, Structure, Dielectric and Magnetic Properties for $\text{SrCu}_3\text{Ti}_4\text{O}_{12}$ . <i>Ferroelectrics</i> , 2011, 414, 180-189.	0.6	10
42	Synthesis and examination of $\text{GdNb}_1\text{W}_4\text{O}_{14}$ new scheelite-type oxide-ion conductor. <i>Solid State Ionics</i> , 2020, 355, 115415.	2.9	9
43	M/Li+ (M=Mg <sup>2+</sup> , Zn <sup>2+</sup> , and Mn <sup>2+</sup> ) ion-exchange on lithium ion-conducting perovskite-type oxides and their properties. <i>Solid State Ionics</i> , 2006, 177, 2705-2709.	2.9	8
44	Predominant Factor of Activation Energy for Ionic Conductivity in Perovskite-Type Lithium Ion-Conducting Oxides. <i>Journal of the Physical Society of Japan</i> , 2010, 79, 69-71.	1.6	8
45	Lithium Ion Conductivity in A-site Deficient Perovskites $\text{Sr}_{1-x}\text{La}_x\text{Li}_{0.35}\text{Ti}_{0.5}\text{O}_{3-x}$ and $\text{Sr}_{1-x}\text{La}_x\text{Li}_{0.35}\text{La}_{0.15}\text{Li}_{0.35}\text{Ti}_{0.5}\text{O}_{3-x}$ . <i>Electrochemistry</i> , 2000, 68, 534-536.	1.4	7
46	The relationship between Li ion conductivity and crystal structure for ordered perovskite compounds, $(\text{La}_{2/3}\text{Pb}_{1/3})\text{(Mg}_{1/2}\text{W}_{1/2})\text{O}_3$ (p=0.05, 0.11 and 0.14). <i>Solid State Ionics</i> , 2004, 171, 191-198.	2.9	7
47	Low-temperature formation of $\text{Pb}_2\text{OF}_2$ with O/F anion ordering by solid state reaction. <i>Journal of Solid State Chemistry</i> , 2019, 277, 363-367.	3.0	7
48	Synthesis of New $\text{LiNbO}_3$ -type Oxynitrides, $\text{Mn}(\text{Mn}_{1/6}\text{Ta}_{5/6})\text{O}_{2.5}\text{N}_{0.5}$ under High Pressure and at High Temperature. <i>Chemistry Letters</i> , 2018, 47, 37-39.	1.4	6
49	Synthesis and ionic conductivity of Li boracites, $\text{Li}_4\text{B}_7\text{O}_{12}\text{Cl}$ and $\text{Li}_4\text{B}_4\text{Al}_3\text{O}_{12}\text{Cl}_1\text{-Br}$ . <i>Solid State Ionics</i> , 2022, 380, 115921.	2.9	6
50	Synthesis and characterization of novel rocksalt-type oxynitrides, $\text{LiTi}_n\text{O}_x\text{N}_y$ (n=1, 2, 3, 4 and 8). <i>Solid State Communications</i> , 2004, 132, 583-587.	1.9	4
51	Crystal and Magnetic Structures of High Pressure Perovskite-Type Oxyfluorides, $\text{PbFeO}_2\text{F}$ and $0.5\text{PbFeO}_2\text{F}-0.5\text{PbTiO}_3$ [ $\text{Pb}(\text{Fe}_{0.5}\text{Ti}_{0.5})\text{O}_{2.5}\text{F}_{0.5}$ ]. <i>Materials Research Society Symposia Proceedings</i> , 2006, 988, 1.	0.1	4
52	Synthesis and adsorption ability of nanoparticles of perovskite oxynitride $\text{LaTiO}_2\text{N}$ . <i>Journal of the Ceramic Society of Japan</i> , 2009, 117, 1345-1348.	1.3	4
53	Phase transitions and dielectric properties of perovskite-type oxyfluorides $(1-x)\text{KNbO}_3-x\text{KMgF}_3$ . <i>Journal of Fluorine Chemistry</i> , 2018, 209, 65-72.	1.7	4
54	Synthesis and Lattice Distortion of Ferroelectric/Antiferroelectric Bi(III)-containing Perovskites. <i>Materials Research Society Symposia Proceedings</i> , 2002, 755, 1.	0.1	3

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55	Mg <sup>2+</sup> -ion-exchange with the Li <sup>+</sup> -ion in a Fast Li Ion-conducting Perovskite La <sub>0.55</sub> Li <sub>0.35</sub> TiO <sub>3</sub> . Chemistry Letters, 2002, 31, 1106-1107.	1.4	2
56	High-Pressure Synthesis of Perovskite Related Compounds with Polar Structure and Their Functional Properties. Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu, 2014, 24, 212-222.	0.0	2
57	Nano-scale structural analysis of (La,Fe)TiO <sub>3</sub> prepared by Fe/Li ion-exchange. Solid State Communications, 2007, 142, 45-48.	1.9	1
58	HREM and EDS analysis of (La, M)TiO <sub>3</sub> (M = Zn, Mn) prepared by M/Li ion exchange. Journal of Electron Microscopy, 2009, 58, 349-355.	1.0	1
59	High-Pressure Synthesis of CuBa <sub>2</sub> Ca <sub>3</sub> Cu <sub>4</sub> O <sub>10</sub> Superconductor from Precursors Prepared by a Polymerized Complex Method. Japanese Journal of Applied Physics, 2011, 50, 01BE15.	1.6	1
60	Synthesis, structure and ionic conductivities of novel Li-ion conductor A <sub>3</sub> Li Ta <sub>6</sub> Zr Si <sub>4</sub> O <sub>26</sub> (A= Sr and Tj). Journal of Solid State Chemistry, 2009, 183, 1-10.	2.9	1
61	Efficient Planar Perovskite Solar Cells with Entire Low-Temperature Processes via Brookite TiO <sub>2</sub> Nanoparticle Electron Transport Layer. , 2019, , .		1
62	Development of flexible perovskite solar cells by the low-temperature fabrication of TiO <sub>2</sub> electron transport layers. Journal of Advanced Science, 2020, 32, n/a.	0.1	1
63	Optimization of Brookite TiO <sub>2</sub> NPs Solution for Preparing the Electron Transport Layer of Flexible Perovskite Solar Cells. Journal of Advanced Science, 2022, 34, n/a.	0.1	1
64	Discussion about non-Arrhenius behavior of high Li-ion conductor, (La,Li)TiO <sub>3</sub> . Materials Research Society Symposia Proceedings, 2002, 756, 1.	0.1	0
65	Highly Efficient Planar Perovskite Solar Cells Exploiting a Compact TiO <sub>2</sub> /Anatase TiO <sub>2</sub> Single Crystalline Nanoparticles Electron Transport Bilayer. , 2018, , .		0
66	High-Pressure Synthesis and Structures of Perovskite-Type Oxyfluorides. Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu, 2018, 28, 193-205.	0.0	0
67	Existence of Local Polar Domains in Perovskite Oxyfluoride, BaFeO <sub>2</sub> F. Chemistry of Materials, 2024, 36, 3697-3704.	7.1	0