

# Tetsuhiro Katsumata

## List of Publications by Year in descending order

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67  
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#	ARTICLE	IF	CITATIONS
1	Existence of Local Polar Domains in Perovskite Oxyfluoride, BaFeO <sub>2</sub> F. Chemistry of Materials, 2024, 36, 3697-3704.	7.1	0
2	Synthesis and ionic conductivity of Li boracites, Li <sub>4</sub> B <sub>7</sub> O <sub>12</sub> Cl and Li <sub>4</sub> B <sub>4</sub> Al <sub>3</sub> O <sub>12</sub> Cl <sub>1</sub> -Br. Solid State Ionics, 2022, 380, 115921.	2.9	6
3	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
4	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
5	Synthesis and examination of GdNb <sub>1-x</sub> WO <sub>4+x</sub> new scheelite-type oxide-ion conductor. Solid State Ionics, 2020, 355, 115415.	2.9	9
6	Low-temperature formation of Pb <sub>2</sub> O <sub>2</sub> F <sub>2</sub> with O/F anion ordering by solid state reaction. Journal of Solid State Chemistry, 2019, 277, 363-367.	3.0	7
7	Synthesis of new perovskite-type oxyfluorides, Ba <sub>n</sub> O <sub>2</sub> F and comparison of the structure among perovskite-type oxyfluorides. Journal of Solid State Chemistry, 2019, 279, 120919.	3.0	11
8	Efficient Planar Perovskite Solar Cells with Entire Low-Temperature Processes via Brookite TiO <sub>2</sub> Nanoparticle Electron Transport Layer. , 2019, , .		1
9	Low-Temperature-Processed Brookite-Based TiO <sub>2</sub> Heterophase Junction Enhances Performance of Planar Perovskite Solar Cells. Nano Letters, 2019, 19, 598-604.	9.5	65
10	Synthesis, Structure and Ionic Conductivity of Garnet Like Lithium Ion Conductor Li <sub>6.25-x</sub> La <sub>3-x</sub> Sr <sub>x</sub> Zr <sub>2</sub> Journal of the Electrochemical Society, 2019, 166, A5168-A5173.		
11	Phase transitions and dielectric properties of perovskite-type oxyfluorides (1-x)KNbO <sub>3-x</sub> KMgF <sub>3</sub> . Journal of Fluorine Chemistry, 2018, 209, 65-72.	1.7	4
12	Synthesis of New LiNbO <sub>3</sub> -type Oxynitrides, Mn(Mn <sub>1/6</sub> Ta <sub>5/6</sub> )O <sub>2.5</sub> N <sub>0.5</sub> under High Pressure and at High Temperature. Chemistry Letters, 2018, 47, 37-39.	1.4	6
13	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
14	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
15	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
16	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
17	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 ETQq1 1,0,784314 rgBT /O	2.9	1
18	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

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19	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
20	Dielectric properties of a polar ZnSnO <sub>3</sub> with LiNbO <sub>3</sub> -type structure. Journal of Solid State Chemistry, 2012, 195, 115-119.	3.0	44
21	Temperature dependence of luminescence properties of praseodymium-doped perovskite CaTiO <sub>3</sub> :Pr <sup>3+</sup> . Thermochemica Acta, 2012, 532, 168-171.	2.7	33
22	An Approach to Control of Band Gap Energy and Photoluminescence upon Band Gap Excitation in Pr <sup>3+</sup> -Doped Perovskites La <sub>1/3</sub> MO <sub>3</sub> (M = Nb, Ta):Pr <sup>3+</sup> . Inorganic Chemistry, 2011, 50, 5389-5395.	4.2	43
23	High-Pressure Synthesis and Correlation between Structure, Magnetic, and Dielectric Properties in LiNbO <sub>3</sub> -Type MnMO <sub>3</sub> (M = Ti, Sn). Inorganic Chemistry, 2011, 50, 6392-6398.	4.2	78
24	High-Pressure Synthesis, Structure, Dielectric and Magnetic Properties for SrCu <sub>3</sub> Ti <sub>4</sub> O <sub>12</sub> . Ferroelectrics, 2011, 414, 180-189.	0.6	10
25	Synthesis, Structural Transformation, Thermal Stability, Valence State, and Magnetic and Electronic Properties of PbNiO <sub>3</sub> with Perovskite- and LiNbO <sub>3</sub> -Type Structures. Journal of the American Chemical Society, 2011, 133, 16920-16929.	14.6	103
26	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
27	First-Principles Studies on Novel Polar Oxide ZnSnO <sub>3</sub> ; Pressure-Induced Phase Transition and Electric Properties. Advanced Materials, 2010, 22, 2579-2582.	24.3	53
28	Predominant Factor of Activation Energy for Ionic Conductivity in Perovskite-Type Lithium Ion-Conducting Oxides. Journal of the Physical Society of Japan, 2010, 79, 69-71.	1.6	8
29	High-pressure synthesis of novel lithium niobate-type oxides. Journal of Physics: Conference Series, 2010, 215, 012131.	0.4	29
30	Low-Driving Voltage Electroluminescence in Perovskite Films. Advanced Materials, 2009, 21, 3699-3702.	24.3	99
31	Microstructural analysis of La <sub>2/3</sub> Li <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
32	Tuning the orthorhombic-rhombohedral phase transition temperature in sodium potassium niobate by incorporating barium zirconate. Physica Status Solidi - Rapid Research Letters, 2009, 3, 142-144.	2.5	135
33	Synthesis and Magnetic and Charge-Transport Properties of the Correlated 4d Post-Perovskite CaRhO <sub>3</sub> . Journal of the American Chemical Society, 2009, 131, 2722-2726.	14.6	48
34	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
35	High-pressure synthesis and characterization of a novel perovskite PbFe <sub>1/2</sub> V <sub>1/2</sub> O <sub>3</sub> . Journal of the Ceramic Society of Japan, 2009, 117, 102-105.	1.3	10
36	Synthesis and adsorption ability of nanoparticles of perovskite oxynitride LaTiO <sub>2</sub> N. Journal of the Ceramic Society of Japan, 2009, 117, 1345-1348.	1.3	4

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37	Occupation site of Pr and luminescent properties in Pr-doped perovskite-type lithium ion-conducting oxides, $A_{0.6}Li_{0.3}Ti_{0.5}Ta_{0.5}O_3$ : Pr (A = Ca and Sr). <i>Solid State Ionics</i> , 2008, 179, 788-792.	2.9	26
38	Synthesis of the novel perovskite-type oxyfluoride $PbScO_2F$ under high pressure and high temperature. <i>Journal of Solid State Chemistry</i> , 2008, 181, 2737-2740.	3.0	38
39	High-Pressure Synthesis, Crystal and Electronic Structures, and Transport Properties of a Novel Perovskite $HgSnO_3$ . <i>Inorganic Chemistry</i> , 2008, 47, 6296-6302.	4.2	17
40	High-Pressure Synthesis, Structure, and Characterization of a Post-perovskite $CaPtO_3$ with $CaIrO_3$ -Type Structure. <i>Inorganic Chemistry</i> , 2008, 47, 1868-1870.	4.2	45
41	Long-Range Antiferromagnetic Ordering in the Novel Magnetically Frustrated Rock Salt Oxide System: $Li_3Mg_2RuO_6$ . <i>Chemistry of Materials</i> , 2008, 20, 5714-5720.	7.1	21
42	A Polar Oxide $ZnSnO_3$ with a $LiNbO_3$ -Type Structure. <i>Journal of the American Chemical Society</i> , 2008, 130, 6704-6705.	14.6	272
43	Structure and dielectric properties of high-pressure perovskite-type oxyfluorides $xKTiO_2F(1-x)BaTiO_3$ . <i>Journal of Applied Physics</i> , 2008, 104, 044101.	2.3	14
44	Nano-scale structural analysis of $(La,Fe)TiO_3$ prepared by Fe/Li ion-exchange. <i>Solid State Communications</i> , 2007, 142, 45-48.	1.9	1
45	Systematic study of photoluminescence upon band gap excitation in perovskite-type titanates $R_{1/2}Na_{1/2}TiO_3:Pr$ (R=La, Gd, Lu, and Y). <i>Journal of Solid State Chemistry</i> , 2007, 180, 1678-1685.	3.0	38
46	Structural investigations of migration pathways in lithium ion-conducting $La_{2/3-x}Li_3xTiO_3$ perovskites. <i>Solid State Ionics</i> , 2006, 177, 3037-3044.	2.9	83
47	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
48	Crystal and Magnetic Structures of High Pressure Perovskite-Type Oxyfluorides, $PbFeO_2F$ and $0.5PbFeO_2F-0.5PbTiO_3$ [ $Pb(Fe_{0.5}Ti_{0.5})O_{2.5}F_{0.5}$ ]. <i>Materials Research Society Symposia Proceedings</i> , 2006, 988, 1.	0.1	4
49	Structure and Mössbauer Studies of $F^{19}O$ Ordering in Antiferromagnetic Perovskite $PbFeO_2F$ . <i>Chemistry of Materials</i> , 2005, 17, 1386-1390.	7.1	63
50	Photoluminescence of Praseodymium-Doped $Sr_{n+1}Ti_nO_{3n+1}$ (n=1, 2, 3, 4, 5, 6, 7, 8). <i>Japanese Journal of Applied Physics</i> , 2005, 44, 761-764.	1.6	27
51	High-pressure synthesis and ferroelectric properties in perovskite-type $BiScO_3$ - $PbTiO_3$ solid solution. <i>Journal of Applied Physics</i> , 2004, 95, 231-235.	2.3	104
52	Synthesis and characterization of novel rocksalt-type oxynitrides, $LiTi_nO_xNy$ (n=1, 2, 3, 4 and 8). <i>Solid State Communications</i> , 2004, 132, 583-587.	1.9	4
53	The relationship between Li ion conductivity and crystal structure for ordered perovskite compounds, $(La_{2/3-1/3p}Li_p)(Mg_{1/2}W_{1/2})O_3$ (p=0.05, 0.11 and 0.14). <i>Solid State Ionics</i> , 2004, 171, 191-198.	2.9	7
54	Synthesis and lithium ion conductivity of cubic deficient perovskites $SrLi_{1-x}TiTaO$ and the La-doped compounds. <i>Solid State Ionics</i> , 2004, 174, 19-26.	2.9	18

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55	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
56	Synthesis and Lattice Distortion of Ferroelectric/Antiferroelectric Bi(III)-containing Perovskites. <i>Materials Research Society Symposia Proceedings</i> , 2002, 755, 1.	0.1	3
57	Discussion about non-Arrhenius behavior of high Li-ion conductor, $(\text{La,Li})\text{TiO}_3$ . <i>Materials Research Society Symposia Proceedings</i> , 2002, 756, 1.	0.1	0
58	Mg <sup>2+</sup> -ion-exchange with the Li <sup>+</sup> -ion in a Fast Li Ion-conducting Perovskite $\text{La}_{0.55}\text{Li}_{0.35}\text{TiO}_3$ . <i>Chemistry Letters</i> , 2002, 31, 1106-1107.	1.4	2
59	Crystal Structure of a Lithium Ion-Conducting Perovskite $\text{La}_{2/3}\text{Li}_x\text{TiO}_3$ ( $x=0.05$ ). <i>Journal of Solid State Chemistry</i> , 2002, 166, 67-72.	3.0	125
60	Influence of Covalent Character on High Li Ion Conductivity in a Perovskite-Type Li Ion Conductor: $\hat{\text{A}}$ 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
61	Synthesis and dielectric properties of a perovskite $\text{Bi}_{1/2}\text{Ag}_{1/2}\text{TiO}_3$ . <i>Ferroelectrics</i> , 2001, 264, 127-132.	0.6	17
62	Lithium Ion Conductivity in A-site Deficient Perovskites $\text{Sr}_{0.5}\text{La}_{0.05}\text{Li}_{0.35}\text{Ti}_{0.1}\text{Ti}_{0.5}\text{O}_3$ and $\text{Sr}_{0.35}\text{La}_{0.15}\text{Li}_{0.35}\text{Ti}_{0.1}\text{Ti}_{0.5}\text{O}_3$ . <i>Electrochemistry</i> , 2000, 68, 534-536.	1.4	7
63	Molecular Dynamics Simulation of the High Lithium Ion Conductor, $\text{La}_{0.6}\text{Li}_{0.2}\text{TiO}_3$ . <i>Journal of the Ceramic Society of Japan</i> , 1999, 107, 615-621.	1.3	29
64	Molecular dynamics simulation in $\text{SrTiO}_3$ . <i>Solid State Ionics</i> , 1998, 108, 175-178.	2.9	22
65	New perovskite-type lithium ion conductors, $\text{La}_x\text{MyLi}_{1-3x}\text{NbO}_3$ (M=Ag and Na). <i>Solid State Ionics</i> , 1998, 113-115, 465-469.	2.9	14
66	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
67	Influence of site percolation and local distortion on lithium ion conductivity in perovskite-type oxides $\text{La}_{0.55}\text{Li}_{0.35}\text{Ti}_x\text{O}_3$ and $\text{La}_{0.55}\text{Li}_{0.35}\text{TiO}_3\text{-KMO}_3$ (M = Nb and Ta). <i>Solid State Ionics</i> , 1996, 86-88, 165-169.	2.9	31