

# Kunimitsu Kataoka

## List of Publications by Year in descending order

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516710

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docs citations

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times ranked

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#	ARTICLE	IF	CITATIONS
1	Crystal Structure of Fast Lithium-ion-conducting Cubic $\text{Li}_7\text{La}_3\text{Zr}_2\text{O}_{12}$ . Chemistry Letters, 2011, 40, 60-62.	1.3	336
2	Crystal growth and structure refinement of monoclinic $\text{Li}_2\text{TiO}_3$ . Materials Research Bulletin, 2009, 44, 168-172.	5.2	146
3	A New Layered Iron Arsenide Superconductor: $(\text{Ca},\text{Pr})\text{FeAs}_2$ . Journal of the American Chemical Society, 2014, 136, 846-849.	13.7	105
4	Lithium-ion conducting oxide single crystal as solid electrolyte for advanced lithium battery application. Scientific Reports, 2018, 8, 9965.	3.3	93
5	Neutron powder diffraction study of tetragonal $\text{Li}_7\text{La}_3\text{Hf}_2\text{O}_{12}$ with the garnet-related type structure. Journal of Solid State Chemistry, 2010, 183, 180-185.	2.9	70
6	Single crystal growth and structure refinement of $\text{Li}_4\text{Ti}_5\text{O}_{12}$ . Journal of Physics and Chemistry of Solids, 2008, 69, 1454-1456.	4.0	61
7	Ion-Exchange Synthesis, Crystal Structure, and Electrochemical Properties of $\text{Li}_2\text{Ti}_6\text{O}_{13}$ . Chemistry of Materials, 2011, 23, 2344-2352.	6.7	51
8	Synthesis, crystal structure and conductive properties of garnet-type lithium ion conductor Al-free $\text{Li}_{7-x}\text{La}_3\text{Zr}_2\text{O}_{12}$ ( $0 \leq x \leq 0.6$ ). Journal of the Ceramic Society of Japan, 2016, 124, 678-683.	4.7	47
9	A single-crystal study of the electrochemically Li-ion intercalated spinel-type $\text{Li}_4\text{Ti}_5\text{O}_{12}$ . Solid State Ionics, 2009, 180, 631-635.	2.7	46
10	Diffusion coefficient of lithium ions in garnet-type $\text{Li}_{6.5}\text{La}_3\text{Zr}_{1.5}\text{Ta}_{0.5}\text{O}_{12}$ single crystal probed by $^7\text{Li}$ pulsed field gradient-NMR spectroscopy. Solid State Ionics, 2018, 327, 18-26.	2.7	41
11	Ion-Exchange Synthesis, Crystal Structure, and Physical Properties of Hydrogen Titanium Oxide $\text{H}_2\text{Ti}_3\text{O}_7$ . Inorganic Chemistry, 2013, 52, 13861-13864.	4.0	35
12	Lithium-ion conductivity and crystal structure of garnet-type solid electrolyte $\text{Li}_{7-x}\text{La}_3\text{Zr}_2\text{O}_{12}$ using single-crystal. Journal of the Ceramic Society of Japan, 2019, 127, 521-526.	4.7	47
13	High Ionic Conductor Member of Garnet-type Oxide $\text{Li}_{6.5}\text{La}_3\text{Zr}_{1.5}\text{Ta}_{0.5}\text{O}_{12}$ . ChemElectroChem, 2018, 5, 2551-2557.	3.4	26
14	A novel soft-chemical synthetic route using $\text{Na}_2\text{Ti}_6\text{O}_{13}$ as a starting compound and electrochemical properties of $\text{H}_2\text{Ti}_3\text{O}_7$ . Journal of Power Sources, 2013, 244, 679-683.	7.8	25
15	Toward understanding the anomalous Li diffusion in inorganic solid electrolytes by studying a single-crystal garnet of $\text{LLZO-Ta}$ by pulsed-gradient spin-echo nuclear magnetic resonance spectroscopy. Journal of Chemical Physics, 2019, 150, 194502.	3.0	23
16	Relationship between $\text{Li}^+$ diffusion and ion conduction for single-crystal and powder garnet-type electrolytes studied by $^7\text{Li}$ PGSE NMR spectroscopy. Physical Chemistry Chemical Physics, 2019, 21, 23589-23597.	2.8	21
17	Synthesis and electrochemical sodium and lithium insertion properties of sodium titanium oxide with the tunnel type structure. Journal of Power Sources, 2016, 305, 151-155.	7.8	15
18	Electrochemical properties of transition metal substituted calcium ferrite-type $\text{Li}_x(\text{M}_{0.1}\text{Mn}_{0.9})_2\text{O}_4$ ( $\text{M}=\text{Ni}, \text{Ti}$ ). Journal of Power Sources, 2013, 244, 561-564.	7.8	14

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19	Crystal Structure and Superconductivity of $\text{BaIr}_2\text{Ge}_7$ and $\text{Ba}_3\text{Ir}_4\text{Ge}_{16}$ with Two-Dimensional Ba-Ge Networks. <i>Journal of the American Chemical Society</i> , 2014, 136, 5245-5248.	13.7	14
20	Lithium ionic conductivities of $\text{LiBO}_2$ with two-dimensional Li-Li networks and $\text{Li}_3\text{LiBO}_2$ with three-dimensional ones synthesized under high pressure. <i>Journal of Solid State Chemistry</i> , 2019, 274, 100-104.	2.9	14
21	Structural stability of the Li-ion conductor $\text{Li}_7\text{La}_3\text{Zr}_2\text{O}_{12}$ investigated by high-pressure in-situ X-ray diffraction and Raman spectroscopy. <i>Materials Research Bulletin</i> , 2018, 107, 361-365.	5.2	13
22	Structural and Li-ion diffusion properties of lithium tantalum phosphate $\text{LiTa}_2\text{PO}_8$ . <i>Solid State Ionics</i> , 2020, 351, 115314.	2.7	13
23	Oxide single crystals with high lithium-ion conductivity as solid electrolytes for all-solid-state lithium secondary battery applications. <i>Journal of the Ceramic Society of Japan</i> , 2020, 128, 7-18.	1.1	12
24	Synthesis, crystal structure, and electrochemical properties of hollandite-type $\text{K Ti}_{1-x}\text{Mn}_x\text{O}_2$ . <i>Solid State Ionics</i> , 2014, 262, 14-17.	2.7	10
25	Quantitative analysis of cation mixing and local valence states in $\text{LiNi}_x\text{Mn}_{2-x}\text{O}_4$ using concurrent HARECXS and HARECES measurements. <i>Microscopy (Oxford, England)</i> , 2016, 65, 253-262.	1.5	10
26	Large single-crystal growth of tetragonal garnet-type $\text{Li}_7\text{La}_3\text{Zr}_2\text{O}_{12}$ by melting method. <i>Solid State Ionics</i> , 2020, 349, 115312.	2.7	10
27	Structural and electrochemical properties of hydrogen titanium oxides. <i>Solid State Ionics</i> , 2013, 252, 109-115.	2.7	9
28	Soft chemical synthesis and crystal structure of novel hydrogen titanium oxide $\text{H}_{12}\text{Ti}_{12}\text{O}_{25}$ . <i>Journal of the Ceramic Society of Japan</i> , 2016, 124, 710-713.	1.1	9
29	Single-crystal synthesis, structure analysis, and physical properties of the calcium ferrite-type $\text{Na}_x\text{Ti}_2\text{O}_4$ with $0.558 < x < 1$ . <i>Journal of Solid State Chemistry</i> , 2007, 180, 1020-1027.	2.9	8
30	Ion-exchange synthesis and improved Li insertion property of lithiated $\text{H}_2\text{Ti}_{12}\text{O}_{25}$ as a negative electrode material for lithium-ion batteries. <i>Journal of Asian Ceramic Societies</i> , 2016, 4, 75-80.	2.3	7
31	Li-ion conductivity and crystal structure of garnet-type $\text{Li}_{6.5}\text{La}_3\text{M}_{1.5}\text{Ta}_{0.5}\text{O}_{14}$ ( $\text{M} = \text{Hf, Sn}$ ) oxides. <i>Journal of the Ceramic Society of Japan</i> , 2017, 125, 272-275.		
32	Orthorhombic Crystal System for a Garnet-type Lithium-Ion Conductor. <i>Inorganic Chemistry</i> , 2020, 59, 14376-14381.	4.0	7
33	Structural Change and Morphological Surface Degradation upon Electrochemical Li Extraction from a Single Crystal of Spinel-type $\text{LiNi}_0.5\text{Mn}_{1.5}\text{O}_4$ . <i>Crystal Growth and Design</i> , 2020, 20, 4533-4539.	3.0	7
34	Synthesis and Electrochemical Properties of Hollandite-Type $\text{K}_x\text{TiO}_2$ . <i>Key Engineering Materials</i> , 0, 485, 123-126.	0.4	6
35	Single-crystal growth, crystal structure analysis and physical properties of lithium overstoichiometric $\text{Li}_{1+x}\text{CoO}_2$ . <i>Solid State Ionics</i> , 2014, 262, 106-109.	2.7	6
36	Synthesis, structure and physical properties of reduced barium titanate $\text{BaTi}_{1-x}\text{O}_{2-2x}$ . <i>Journal of Solid State Chemistry</i> , 2011, 184, 3117-3120.	2.9	4

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37	Compressed-exponential relaxations in supercooled liquid trehalose. <i>Current Applied Physics</i> , 2012, 12, 1548-1552.	2.4	4
38	Synthesis, crystal structure and electrochemical properties of $\text{Li}_{0.55}\text{Co}_{0.5}\text{Mn}_{0.5}\text{O}_2$ with the O6-type layered structure. <i>Solid State Ionics</i> , 2014, 263, 167-171.	2.7	4
39	Electrochemical Property of Particle-size Controlled $\text{H}_{2}\text{Ti}_{12}\text{O}_{25}$ as a Negative Electrode Material for Lithium-ion Battery. <i>Electrochemistry</i> , 2015, 83, 834-836.	1.4	4
40	Development of a compact all-solid-state lithium secondary battery using single-crystal electrolyte. <i>Synthesiology</i> , 2019, 12, 29-40.	0.2	4
41	A novel synthetic route of micrometer-sized $\text{LiCoMnO}_4$ as 5V cathode material for advanced lithium ion batteries. <i>Solid State Ionics</i> , 2019, 333, 9-15.	2.7	4
42	Synthesis, Crystal Structure and Physical Properties of $\text{Ba}_4\text{Ti}_{12}\text{O}_{27}$ . <i>Key Engineering Materials</i> , 2013, 566, 211-214.	0.4	3
43	Single-crystal synthesis and structure refinement of $\text{La}_2\text{Li}_{0.5}\text{Al}_{0.5}\text{O}_4$ with $\text{K}_2\text{NiF}_4$ -type structure. <i>Journal of Asian Ceramic Societies</i> , 2015, 3, 301-304.	2.3	3
44	Single crystal synthesis, crystal structure and electrochemical property of spinel-type $\text{LiCoMnO}_4$ as 5 V positive electrode materials. <i>Journal of the Ceramic Society of Japan</i> , 2016, 124, 706-709.	1.1	3
45	Development of a compact all-solid-state lithium secondary battery using single-crystal electrolyte. <i>Synthesiology</i> , 2019, 12, 28-38.	0.2	3
46	Structural Study of Trehalose Dihydrate by Neutron and X-ray Diffraction Experiments. <i>Journal of the Physical Society of Japan</i> , 2010, 79, 074608.	1.6	2
47	Synthesis and structure analysis of a new titanium oxide having an intergrowth structure between ramsdellite-type and calcium ferrite-type. <i>Journal of Physics and Chemistry of Solids</i> , 2012, 73, 1460-1462.	4.0	2
48	Synthesis of $\text{H}_2\text{Ti}_{12}\text{O}_{25}$ with anisotropic morphology by impregnation of $\text{Na}_2\text{CO}_3$ solution into porous titanium hydroxide. <i>Journal of the Ceramic Society of Japan</i> , 2017, 125, 686-689.	1.1	2
49	Synthesis of $\text{H}_2\text{Ti}_{12}\text{O}_{25}$ containing fine carbon particles by impregnation method using porous titanium hydroxide. <i>Journal of the Ceramic Society of Japan</i> , 2019, 127, 399-403.	1.1	2
50	Garnet-Type Lithium Ion Conducting Oxides: $\text{Li}_7\text{La}_3\text{Zr}_2\text{O}_{12}$ and Its Chemical Derivatives. , 2021, , 201-219.		2
51	Discovery of the $\text{LiSrLaZrO}$ Compound and the Investigation of Its Lithium-Ion Conductivity. <i>Inorganic Chemistry</i> , 2022, 61, 7835-7840.	4.0	2
52	Synthesis and Crystal Structure of Cubic Perovskite-type $\text{BaMoTiO}_3$ with $\delta = 0.175$ . <i>Chemistry Letters</i> , 2011, 40, 524-526.	1.3	1
53	High-Pressure Synthesis, Crystal Chemistry, and Ionic Conductivity of a Structural Polymorph of $\text{Li}_3\text{BP}_2\text{O}_8$ . <i>Inorganic Chemistry</i> , 2018, 57, 15048-15050.	4.0	1
54	Synthesis, crystal structure and electrochemical property of $\text{Li}_{2.7}\text{MnTi}_3\text{O}_9$ with the $\text{Na}_{2.08}\text{Ti}_4\text{O}_9$ -type tunnel structure. <i>Solid State Ionics</i> , 2020, 357, 115467.	2.7	1

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55	Structural Reinvestigation of Alkali Hexatitanate. <i>Solid State Phenomena</i> , 2011, 170, 208-212.	0.3	0
56	Structure and phase transition in a lead-based inorganic-organic perovskites $C_5H_{10}NH_2PbI_3$ . <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2008, 64, C428-C429.	0.3	0
57	Temperature-dependent structural change of trehalose dihydrate and anhydrate crystals. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2008, 64, C383-C383.	0.3	0
58	Synthesis, structural reinvestigation and physical properties of alkali hexatitanate. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2011, 67, C731-C731.	0.3	0
59	Synthesis and Crystal Structure Analysis of Lithium-Ion Rechargeable Battery Anode Materials. <i>Nihon Kessho Gakkaishi</i> , 2013, 55, 180-187.	0.0	0