

Ryoji Kanno

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Synthesis and Lithium-ion Conductivity of Sr(La _{1-x} Li _x) ₂ PO ₄ NiF ₄ Structure. Electrochemistry, 2022, 90, 017005-017005.	0.6	1
2	Hydride-ion-conducting K ₂ NiF ₄ -type BaLi oxyhydride solid electrolyte. Nature Materials, 2022, 21, 325-330.	13.3	26
3	Fast Hydride-Ion Conduction in Perovskite Hydrides LiH ₃ . ACS Applied Energy Materials, 2022, 5, 2968-2974.	2.5	10
4	Reversible Charge/Discharge Reaction of a Ternary Metal Fluoride, Pb ₂ CuF ₆ : A Highly Conductive Cathode Material for Fluoride-Ion Batteries. ACS Applied Energy Materials, 2022, 5, 1002-1009.	2.5	10
5	Combinatorial Synthesis and Ionic Conductivity of Amorphous Oxynitrides in a Pseudo-ternary Li ₃ PO ₄ -Li ₄ SiO ₄ -LiAlO ₂ System. Electrochemistry, 2022, 90, 037008-037008.	0.6	1
6	Anomalously High Ionic Conductivity of Li ₂ SiS ₃ -Type Conductors. Journal of the American Chemical Society, 2022, 144, 4989-4994.	6.6	20
7	Li ₁₀ GeP ₂ S ₁₂ -Type Structured Solid Solution Phases in the Li ₉ P ₃ Si ₁₂ O ₁₂ System: Controlling Crystallinity by Synthesis to Improve the Air Stability. Inorganic Chemistry, 2022, 61, 52-61.	1.9	14
8	Reaction Mechanism of Li ₂ MnO ₃ Electrodes in an All-Solid-State Thin-Film Battery Analyzed by Operando Hard X-ray Photoelectron Spectroscopy. Journal of the American Chemical Society, 2022, 144, 236-247.	6.6	16
9	Operando analysis of electronic band structure in an all-solid-state thin-film battery. Communications Chemistry, 2022, 5, .	2.0	11
10	Extending the Frontiers of Lithium-Ion Conducting Oxides: Development of Multicomponent Materials with Li ₃ PO ₄ -Type Structures. Chemistry of Materials, 2022, 34, 3948-3959.	3.2	18
11	Revealing the Ion Dynamics in Li ₁₀ GeP ₂ S ₁₂ by Quasi-Elastic Neutron Scattering Measurements. Journal of Physical Chemistry C, 2022, 126, 9518-9527.	1.5	8
12	Liquid-phase synthesis of the Li ₁₀ GeP ₂ S ₁₂ -type phase in the Li-Pa-Cl system. Journal of Materials Chemistry A, 2022, 10, 14392-14398.	5.2	6
13	Influence of Chemical Composition and Domain Morphology of Li ₂ MnO ₃ on Battery Properties. Batteries and Supercaps, 2021, 4, 493-503.	2.4	3
14	Annealing-induced evolution at the LiCoO ₂ /LiNbO ₃ interface and its functions in all-solid-state batteries with a Li ₁₀ GeP ₂ S ₁₂ electrolyte. Journal of Materials Chemistry A, 2021, 9, 4117-4125.	5.2	11
15	Reactions of the Li ₂ MnO ₃ Cathode in an All-Solid-State Thin-Film Battery during Cycling. ACS Applied Materials & Interfaces, 2021, 13, 7650-7663.	4.0	13
16	Crystalline Electrolyte. , 2021, , 49-60.		0
17	Syntheses and Characterization of Novel Perovskite-Type LaScO ₃ -Based Lithium Ionic Conductors. Molecules, 2021, 26, 299.	1.7	9
18	Correlated Li-ion migration in the superionic conductor Li ₁₀ GeP ₂ S ₁₂ . Journal of Materials Chemistry A, 2021, 9, 11278-11284.	5.2	21

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19	(Invited) Reaction Mechanism of Lithium-Rich Layered Cathode Materials in Thin-Film Solid-State Battery. ECS Meeting Abstracts, 2021, MA2021-02, 234-234.	0.0	0
20	High-Pressure Synthesis and Lithium-Ion Conduction of Li_4OBr_2 Derivatives with a Layered Inverse-Perovskite Structure. Chemistry of Materials, 2021, 33, 9194-9201.	3.2	8
21	$\text{Li}_{10}\text{GeP}_2\text{S}_{12}$ -Type Superionic Conductors: Synthesis, Structure, and Ionic Transportation. Advanced Energy Materials, 2020, 10, 2002153.	10.2	101
22	Oxygen Substitution for LiSiP_2Cl Solid Electrolytes toward Purified $\text{Li}_{10}\text{GeP}_2\text{S}_{12}$ -Type Phase with Enhanced Electrochemical Stabilities for All-Solid-State Batteries. Chemistry of Materials, 2020, 32, 8860-8867.	3.2	24
23	Operando hard X-ray photoelectron spectroscopy of LiCoO_2 thin film in an all-solid-state lithium ion battery. Electrochemistry Communications, 2020, 118, 106790.	2.3	24
24	The effect of cation size on hydride-ion conduction in $\text{LnSrLiH}_2\text{O}_2$ ($\text{Ln} = \text{La}$), $\text{TjETQqO}_0\text{O}$ rgBT/Overlock 10 T	5.2	15
25	High lithium ionic conductivity of $\hat{3}$ - Li_3PO_4 -type solid electrolytes in $\text{Li}_4\text{GeO}_4\sim\text{Li}_4\text{SiO}_4\hat{4}\sim\text{Li}_3\text{VO}_4$ quasi-ternary system. Journal of Solid State Chemistry, 2020, 292, 121651.	1.4	26
26	Precipitation of the Lithium Superionic Conductor $\text{Li}_{10}\text{GeP}_2\text{S}_{12}$ by a Liquid-phase Process. Chemistry Letters, 2020, 49, 1379-1381.	0.7	4
27	Fast material search of lithium ion conducting oxides using a recommender system. Journal of Materials Chemistry A, 2020, 8, 11582-11588.	5.2	19
28	Ionic conduction mechanism of a lithium superionic argyrodite in the LiAlSi_2O system. Materials Advances, 2020, 1, 334-340.	2.6	30
29	(Keynote) Sulfide Electrolytes Based on the LGPS Related Materials. ECS Meeting Abstracts, 2020, MA2020-02, 887-887.	0.0	0
30	$\hat{3}$ - Li_3PO_4 -Type Solid Electrolytes in $\text{Li}_4\text{GeO}_4\text{-Li}_4\text{SiO}_4\text{-Li}_3\text{VO}_4$ Quasi-Ternary System with High Lithium Ionic Conductivity. ECS Meeting Abstracts, 2020, MA2020-02, 913-913.	0.0	0
31	High Energy Density Cathode Composite for All-Solid-State Lithium-Sulfur Battery. ECS Meeting Abstracts, 2020, MA2020-02, 3460-3460.	0.0	0
32	(Invited) Elucidation of Electrochemical Reactions in Li_2MnO_3 Using Thin-Film Solid-State Battery. ECS Meeting Abstracts, 2020, MA2020-02, 37-37.	0.0	0
33	All-Solid-State Three-Electrode Cells with Reduced $\text{Li}_4\text{Ti}_5\text{O}_{12}$ Reference Electrode. ECS Meeting Abstracts, 2020, MA2020-02, 1011-1011.	0.0	0
34	Charge Compensation Mechanism of Li_2MnO_3 Cathode in All-Solid-State Thin Film Battery Investigated By Using Operando HAXPES. ECS Meeting Abstracts, 2020, MA2020-02, 919-919.	0.0	0
35	Enhancing Fast Lithium Ion Conduction in $\text{Li}_4\text{GeO}_4\sim\text{Li}_3\text{PO}_4$ Solid Electrolytes. ACS Applied Energy Materials, 2019, 2, 6608-6615.	2.5	34
36	Excess Lithium in Transition Metal Layers of Epitaxially Grown Thin Film Cathodes of Li_2MnO_3 Leads to Rapid Loss of Covalency during First Battery Cycle. Journal of Physical Chemistry C, 2019, 123, 28519-28526.	1.5	19

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55	Effect of excess Li_2S on electrochemical properties of amorphous Li_3PS_4 films synthesized by pulsed laser deposition. <i>Journal of the American Ceramic Society</i> , 2017, 100, 746-753.	1.9	21
56	Highly Ordered Mesoporous Carbon Support Materials for Air Electrode of Lithium Air Secondary Batteries. <i>Electrochemistry</i> , 2017, 85, 128-132.	0.6	3
57	Raman Imaging Analysis of Local Crystal Structures in LiCoO_2 Thin Films Calcined at Different Temperatures. <i>Analytical Sciences</i> , 2017, 33, 853-858.	0.8	14
58	Ambient Pressure Synthesis and H^+ Conductivity of $\text{LaSrLiH}_{2.2}\text{O}_{2.2}$. <i>Electrochemistry</i> , 2017, 85, 88-92.	0.6	25
59	Lithium Superionic Conductor $\text{Li}_{9.42}\text{Si}_{1.02}\text{P}_{2.15}\text{S}_{9.96}\text{O}_{2.04}$ with $\text{Li}_{10}\text{GeP}_2\text{S}_{12}$ -Type Structure in the $\text{Li}_2\text{S}-\text{P}_2\text{S}_5-\text{SiO}_2$ Pseudoternary System: Synthesis, Electrochemical Properties, and Structure-Composition Relationships. <i>Frontiers in Energy Research</i> , 2016, 4, .	1.2	54
60	Fabrication and All Solid-State Battery Performance of $\text{TiS}_2/\text{Li}_{10}\text{GeP}_2\text{S}_{12}/\text{S}$ Composite Electrodes. <i>Materials Transactions</i> , 2016, 57, 549-552.	0.4	43
61	Neutron reflectometry analysis of $\text{Li}_4\text{Ti}_5\text{O}_{12}$ /organic electrolyte interfaces: characterization of surface structure changes and lithium intercalation properties. <i>Journal of Materials Research</i> , 2016, 31, 3142-3150.	1.2	10
62	All-solid-state lithium-sulfur batteries with three-dimensional mesoporous electrode structures. <i>Journal of Power Sources</i> , 2016, 330, 120-126.	4.0	71
63	Lithium intercalation in the surface region of an $\text{LiNi}_{1/3}\text{Mn}_{1/3}\text{Co}_{1/3}\text{O}_2$ cathode through different crystal planes. <i>RSC Advances</i> , 2016, 6, 78963-78969.	1.7	9
64	Real-time observations of lithium battery reactions—operando neutron diffraction analysis during practical operation. <i>Scientific Reports</i> , 2016, 6, 28843.	1.6	101
65	On the Mechanism of Crystal Water Insertion during Anomalous Spinel-to-Birnessite Phase Transition. <i>Chemistry of Materials</i> , 2016, 28, 5488-5494.	3.2	55
66	High-power all-solid-state batteries using sulfide superionic conductors. <i>Nature Energy</i> , 2016, 1, .	19.8	2,421
67	Synthesis, Crystal Structure, and the Ionic Conductivity of New Lithium Ion Conductors, $(\text{M})\text{-Doped LiScO}_2$ ($\text{M} = \text{Zr, Nb, Ta}$). <i>Materials Transactions</i> , 2016, 57, 1370-1373.	0.4	7
68	Oxygen substitution effects in $\text{Li}_{10}\text{GeP}_2\text{S}_{12}$ solid electrolyte. <i>Journal of Power Sources</i> , 2016, 324, 798-803.	4.0	131
69	Fabrication and electrochemical properties of a LiCoO_2 and $\text{Li}_{10}\text{GeP}_2\text{S}_{12}$ composite electrode for use in all-solid-state batteries. <i>Solid State Ionics</i> , 2016, 285, 136-142.	1.3	57
70	Pure H^+ conduction in oxyhydrides. <i>Science</i> , 2016, 351, 1314-1317.	6.0	155
71	Synthesis, structure, and electrochemical properties of crystalline Li^+O solid electrolytes: Novel lithium-conducting oxysulfides of $\text{Li}_{10}\text{GeP}_2\text{S}_{12}$ family. <i>Solid State Ionics</i> , 2016, 288, 229-234.	1.3	55
72	Electrochemical properties of copper-based compounds with polyanion frameworks. <i>Journal of Solid State Chemistry</i> , 2016, 235, 43-49.	1.4	3

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73	Synthesis, Crystal Structure, and Electrochemical Properties of $\text{Li}_{1.2+x}\text{Mn}_{0.3}\text{Co}_{0.2}\text{Ni}_{0.3}\text{O}_{2.6}$ ($x > 0$) for Lithium-ion Battery Cathodes. <i>Electrochemistry</i> , 2015, 83, 820-823.		3
74	In-situ STEM Observation of Strain Field Movement in a LiMn_2O_4 Nanowire Battery. <i>Microscopy and Microanalysis</i> , 2015, 21, 953-954.	0.2	3
75	Phase Diagram of the Li_4GeS_4 - Li_3PS_4 Quasi-Binary System Containing the Superionic Conductor $\text{Li}_{10}\text{GeP}_2\text{S}_{12}$. <i>Journal of the American Ceramic Society</i> , 2015, 98, 3352-3360.	1.9	64
76	Control of the Phase Fractions in Layered Rock Salt and Spinel-Type Li-(Mn,Co,Ni)-O Epitaxial Thin Films: a Model Blended Cathode System for Lithium Batteries. <i>Funtai Oyobi Fummatsumu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy</i> , 2015, 62, 531-537.	0.1	3
77	Interaction Between the Cathode Active Material and the Carbon Conductive Agent in High-Voltage Cathode System that is Concerned with the Gas Evolution. <i>Funtai Oyobi Fummatsumu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy</i> , 2015, 62, 538-542.	0.1	1
78	Fabrication and All Solid-State Battery Performance of $\text{TiS}_2/\text{Li}_{10}\text{GeP}_2\text{S}_{12}$ Composite Electrodes. <i>Funtai Oyobi Fummatsumu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy</i> , 2015, 62, 548-552.	0.1	2
79	In-situ X-ray Visualization of the Lithiation Process in a Porous Graphite Electrode in an Operating Li-ion Cell. <i>ChemElectroChem</i> , 2015, 2, 1535-1540.	1.7	6
80	Structure-property relationships in lithium superionic conductors having a $\text{Li}_{10}\text{GeP}_2\text{S}_{12}$ -type structure. <i>Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials</i> , 2015, 71, 727-736.	0.5	46
81	Syntheses, structures, and ionic conductivities of perovskite-structured lithium-strontium-aluminum/gallium-tantalum-oxides. <i>Journal of Solid State Chemistry</i> , 2015, 225, 431-437.	1.4	11
82	Synthesis, structure, and conduction mechanism of the lithium superionic conductor $\text{Li}_{10+x}\text{Ge}_{1+y}\text{P}_{2z}\text{S}_{12}$. <i>Journal of Materials Chemistry A</i> , 2015, 3, 438-446.	5.2	144
83	Reversible lithium intercalation in a lithium-rich layered rocksalt Li_2RuO_3 cathode through a Li_3PO_4 solid electrolyte. <i>Journal of Power Sources</i> , 2015, 300, 413-418.	4.0	17
84	Variation of local magnetic environments in olivine-type compounds: Na_xO_4 and Fe_xO_4 . <i>Physical Review B</i> , 2014, 89, 040401.	1.1	7
85	Synthesis, structure, and ionic conductivity of solid solution, $\text{Li}_{10+x}\text{M}_{1+y}\text{P}_{2z}\text{S}_{12}$ ($M = \text{Si}, \text{Sn}$). <i>Faraday Discussions</i> , 2014, 176, 83-94.	1.6	83
86	Mechanistic studies on lithium intercalation in a lithium-rich layered material using Li_2RuO_3 epitaxial film electrodes and in situ surface X-ray analysis. <i>Journal of Materials Chemistry A</i> , 2014, 2, 17875-17882.	5.2	24
87	Low temperature synthesis and ionic conductivity of the epitaxial $\text{Li}_{0.17}\text{La}_{0.61}\text{TiO}_3$ film electrolyte. <i>CrystEngComm</i> , 2014, 16, 1044-1049.	1.3	26
88	Epitaxial growth and lithium ion conductivity of lithium-oxide garnet for an all solid-state battery electrolyte. <i>Dalton Transactions</i> , 2013, 42, 13112.	1.6	114
89	All-solid-state sulfur batteries with mesoporous electrode and thio-LISICON solid electrolyte. <i>Journal of Power Sources</i> , 2013, 222, 237-242.	4.0	194
90	Fabrication and electrochemical properties of $\text{LiMn}_2\text{O}_4/\text{SrRuO}_3$ multi-layer epitaxial thin film electrodes. <i>Journal of Power Sources</i> , 2013, 226, 340-345.	4.0	53

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91	Synthesis, crystal structure, and ionic conductivity of tunnel structure phosphates, $RbMg_{1-x}H_2x(PO_3)_3 \cdot y(H_2O)$. Journal of Materials Chemistry A, 2013, 1, 15544.	5.2	13
92	Discharge Performance of All-Solid-State Battery Using a Lithium Superionic Conductor $Li_{10}GeP_2S_{12}$. Electrochemistry, 2012, 80, 749-751.	0.6	124
93	Synthesis and Reversible Li-intercalation Behavior of $BaFeO_4$ films. Electrochemistry, 2012, 80, 139-141.	0.6	1
94	Characterization of Nano-Sized Epitaxial $Li_4Ti_5O_{12}(110)$ Film Electrode for Lithium Batteries. Electrochemistry, 2012, 80, 800-803.	0.6	13
95	Oxygen Evolution and Reduction Reactions on $La_{0.8}Sr_{0.2}CoO_3$ (001), (110), and (111) Surfaces in an Alkaline Solution. Electrochemistry, 2012, 80, 834-838.	0.6	35
96	Diffusive behavior in LiM_4PO_{10} with $M = Ca, Sr, Ba, Pb$. Journal of Materials Chemistry, 2011, 21, 18575.	1.1	51
97	Elucidating the $LiFePO_4$ air aging mechanism to predict its electrochemical performance. Journal of Materials Chemistry, 2011, 21, 18575.	6.7	21
98	Magnetic and diffusive nature of $LiFePO_4$ investigated by muon spin rotation and relaxation. Physical Review B, 2011, 84, .	1.1	65
99	A lithium superionic conductor. Nature Materials, 2011, 10, 682-686.	13.3	3,659
100	Crystal structure and phase transitions of the lithium ionic conductor Li_3PS_4 . Solid State Ionics, 2011, 182, 53-58.	1.3	289
101	Surface Characterization of $LiFePO_4$ Epitaxial Thin Films by X-ray/Neutron Reflectometry. Electrochemistry, 2010, 78, 413-415.	0.6	48
102	Characterization of Air Exposed $LiFePO_4$ Nanopowders for Li-Ion Batteries. ECS Meeting Abstracts, 2010, , .	0.0	0
103	Crystal Structure of High-Temperature Phase of Lithium Ionic Conductor, Li_3PS_4 . Journal of the Physical Society of Japan, 2010, 79, 90-93.	0.7	40
104	Dynamic Structural Changes at $LiMn_2O_4$ /Electrolyte Interface during Lithium Battery Reaction. Journal of the American Chemical Society, 2010, 132, 15268-15276.	6.6	338
105	Structural changes in surface and bulk $LiNi_{0.5}Mn_{0.5}O_2$ during electrochemical reaction on epitaxial thin-film electrodes characterized by in situ X-ray scattering. Physical Chemistry Chemical Physics, 2010, 12, 3815.	1.3	39
106	Surface Structure of $LiNi_{0.8}Co_{0.2}O_2$: a New Experimental Technique Using in Situ X-ray Diffraction and Two-Dimensional Epitaxial Film Electrodes. Chemistry of Materials, 2009, 21, 2632-2640.	3.2	49
107	Chemically oxidized $\hat{\Gamma}^3$ - MnO_2 for lithium secondary batteries: structure and intercalation/deintercalation properties. Journal of Materials Chemistry, 2009, , .	6.7	5
108	New anti-fluorite solid-solution phases in Li-Ti-N ternary system. Journal of the Ceramic Society of Japan, 2009, 117, 52-55.	0.5	6

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109	Detection of surface layers using ^7Li MAS NMR. <i>Journal of Materials Chemistry</i> , 2008, 18, 4266.	6.7	45
110	Characterization of Electrode/Electrolyte Interface with X-Ray Reflectometry and Epitaxial-Film LiMn_2O_4 Electrode. <i>Journal of the Electrochemical Society</i> , 2007, 154, A1065.	1.3	104
111	Mechanistic study on lithium intercalation using a restricted reaction field in $\text{LiNi}_0.5\text{Mn}_0.5\text{O}_2$. <i>Journal of Power Sources</i> , 2007, 174, 678-682.	4.0	25
112	Magnetic properties of $\text{Li}(\text{MnyFe}_{1-y})\text{PO}_4$ and its delithiated phases. <i>Applied Physics Letters</i> , 2005, 87, 252503.	1.5	10
113	All Solid-State Batteries Using Super Ionic Conductor, Thio-Lisicon “ Electrode/Electrolyte interfacial Design. <i>Materials Research Society Symposia Proceedings</i> , 2004, 835, K11.1.1.	0.1	4
114	Synthesis, structure, and phase relationship in lithium manganese oxide spinel supplementary information (ESI) available: neutron and X-ray Rietveld refinement results of LiMn_2O_4 . See http://www.rsc.org/suppdata/jm/b3/b314810f/ . <i>Journal of Materials Chemistry</i> , 2004, 14, 1948.	6.7	64
115	Structure, and magnetic and electrochemical properties of layered oxides, Li_2IrO_3 . <i>Journal of Materials Chemistry</i> , 2003, 13, 957-962.	6.7	72
116	Fine $\text{Li}_{(4-x)/3}\text{Ti}_{(2-2x)/3}\text{Fe}_x\text{O}_2$ ($0.18 \leq x \leq 0.67$) powder with cubic rock-salt structure as a positive electrode material for rechargeable lithium batteries. <i>Journal of Materials Chemistry</i> , 2003, 13, 1747.	6.7	74
117	Defect Structure of LiMn_2O_4 after High-Temperature Storage. <i>Electrochemistry</i> , 2003, 71, 1160-1161.	0.6	7
118	Evaluation of Migration Energy of Lithium Ions in Chalcogenides and Halides by First Principles Calculation. <i>Materials Transactions</i> , 2002, 43, 1460-1463.	0.4	39
119	Low Temperature SOFCs with the Ruthenium Pyrochlore Cathode. <i>Electrochemistry</i> , 2002, 70, 969-971.	0.6	6
120	Lithium Ionic Conductor Thio-LISICON: The $\text{Li}_2\text{S}-\text{GeS}_2-\text{P}_2\text{S}_5$ System. <i>Journal of the Electrochemical Society</i> , 2001, 148, A742.	1.3	889
121	Ionic conductivity of tetragonal PbSnF_4 prepared by solid state reaction in HF atmosphere. <i>Materials Research Bulletin</i> , 1991, 26, 1111-1117.	2.7	28