

# Masao Yonemura

## List of Publications by Year in descending order

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105  
papers

10,125  
citations

159358

30  
h-index

35952

97  
g-index

109  
all docs

109  
docs citations

109  
times ranked

8462  
citing authors

#	ARTICLE	IF	CITATIONS
1	Hydride-ion-conducting K <sub>2</sub> NiF <sub>4</sub> -type BaLi oxyhydride solid electrolyte. <i>Nature Materials</i> , 2022, 21, 325-330.	13.3	26
2	Nondestructive quantitative imaging for spatially nonuniform degradation in a commercial lithium-ion battery using a pulsed neutron beam. <i>Applied Physics Express</i> , 2022, 15, 027005.	1.1	2
3	Anomalously High Ionic Conductivity of Li <sub>2</sub> Si <sub>3</sub> -Type Conductors. <i>Journal of the American Chemical Society</i> , 2022, 144, 4989-4994.	6.6	20
4	Li <sub>10</sub> GeP <sub>2</sub> S <sub>12</sub> -Type Structured Solid Solution Phases in the Li <sub>9</sub> P <sub>3</sub> S <sub>12</sub> O <sub>3</sub> System: Controlling Crystallinity by Synthesis to Improve the Air Stability. <i>Inorganic Chemistry</i> , 2022, 61, 52-61.	1.9	14
5	Revealing the Ion Dynamics in Li <sub>10</sub> GeP <sub>2</sub> S <sub>12</sub> by Quasi-Elastic Neutron Scattering Measurements. <i>Journal of Physical Chemistry C</i> , 2022, 126, 9518-9527.	1.5	8
6	Unexpectedly Large Contribution of Oxygen to Charge Compensation Triggered by Structural Disorder: Detailed Experimental and Theoretical Study on a Li <sub>3</sub> NbO <sub>4</sub> -NiO Binary System. <i>ACS Central Science</i> , 2022, 8, 775-794.	5.3	10
7	Origin of magnetovolume effect in a cobaltite. <i>Physical Review B</i> , 2021, 103, .	1.1	3
8	Efficient Stabilization of Na Storage Reversibility by Ti Integration into O <sup>23</sup> -Type NaMnO <sub>2</sub> . <i>Energy Material Advances</i> , 2021, 2021, .	4.7	15
9	Corrigendum to "Efficient Stabilization of Na Storage Reversibility by Ti Integration into O <sup>23</sup> -Type NaMnO <sub>2</sub> " <i>Energy Material Advances</i> , 2021, 2021, .	4.7	2
10	The effect of cation size on hydride-ion conduction in LnSrLi <sub>2</sub> O <sub>2</sub> (Ln = La, Y). <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 1070-1074.	5.2	15
11	Room Temperature Zero Thermal Expansion in a Cubic Cobaltite. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 6785-6790.	2.1	6
12	Synthesis and H <sup>+</sup> conductivity of a new oxyhydride Ba <sub>2</sub> YHO <sub>3</sub> with anion-ordered rock-salt layers. <i>Chemical Communications</i> , 2020, 56, 10373-10376.	2.2	30
13	Synthesis of Novel Melilite-Type Iron/Cobalt Oxides and Their Oxygen Evolution Reaction Electrocatalytic Activity. <i>Chemistry of Materials</i> , 2020, 32, 6847-6854.	3.2	5
14	Structural Variation in Carbonate Electrolytes by the Addition of Li Salts Studied by X-Ray Total Scattering. <i>Physica Status Solidi (B): Basic Research</i> , 2020, 257, 2000100.	0.7	2
15	Arrangement of water molecules and high proton conductivity of tunnel structure phosphates, KMg <sub>1-x</sub> H <sub>2x</sub> (PO <sub>3</sub> ) <sub>3</sub> ·xH <sub>2</sub> O. <i>RSC Advances</i> , 2020, 10, 7803-7811.	1.7	5
16	Ionic conduction mechanism of a lithium superionic argyrodite in the LiAlSi <sub>4</sub> O system. <i>Materials Advances</i> , 2020, 1, 334-340.	2.6	30
17	Strong lattice anharmonicity exhibited by the high-energy optical phonons in thermoelectric material. <i>New Journal of Physics</i> , 2020, 22, 083083.	1.2	11
18	High oxygen pressure floating zone growth and crystal structure of the metallic nickelates		

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19	Crystal structure, ionic conductivity and lithium-ion diffusion pathway in a La <sup>2+</sup> Li <sup>+</sup> Co <sup>2+</sup> O system. Journal of the Ceramic Society of Japan, 2020, 128, 453-456.	0.5	0
20	Enhancing Fast Lithium Ion Conduction in Li <sub>4</sub> GeO <sub>4</sub> ·Li <sub>3</sub> PO <sub>4</sub> Solid Electrolytes. ACS Applied Energy Materials, 2019, 2, 6608-6615.	2.5	34
21	High Anionic Conductive Form of PbxSn <sub>2</sub> x <sup>+</sup> F <sub>4</sub> . Chemistry of Materials, 2019, 31, 7704-7710.	3.2	11
22	High-Pressure Polymorphs of LaHO with Anion Coordination Reversal. Journal of the American Chemical Society, 2019, 141, 8717-8720.	6.6	19
23	Li <sub>2</sub> NbO <sub>3</sub> ·Li <sub>2</sub> MnO <sub>3</sub> Pseudo-Binary Compounds Crystallizing into Distorted Rocksalt Structures. Physica Status Solidi (B): Basic Research, 2019, 256, 1900003.	0.7	0
24	Conduction Mechanism of Li <sub>10</sub> GeP <sub>2</sub> S <sub>12</sub> -type Lithium Superionic Conductors in a Li <sup>+</sup> Sn <sup>4+</sup> Si <sup>4+</sup> P <sup>5+</sup> S System. Chemistry of Materials, 2019, 31, 3485-3490.	3.2	21
25	Ba <sub>2</sub> ScHO <sub>3</sub> :H <sup>+</sup> Conductive Layered Oxyhydride with H <sup>+</sup> Site Selectivity. Inorganic Chemistry, 2019, 58, 4431-4436.	1.9	41
26	Superionic lithium conductor with a cubic argyrodite-type structure in the Li <sup>+</sup> Al <sup>3+</sup> Si <sup>4+</sup> S system. Journal of Solid State Chemistry, 2019, 270, 487-492.	1.4	35
27	Ambient pressure synthesis of La <sub>2</sub> LiHO <sub>3</sub> as a solid electrolyte for a hydrogen electrochemical cell. Journal of the American Ceramic Society, 2019, 102, 3228-3235.	1.9	12
28	Comprehensive elucidation of crystal structures of lithium-intercalated graphite. Carbon, 2019, 142, 513-517.	5.4	16
29	Weak-ferromagnetism of CoF <sub>3</sub> and FeF <sub>3</sub> . Physica B: Condensed Matter, 2018, 551, 94-97.	1.3	5
30	Z-MEM, Maximum Entropy Method software for electron/nuclear density distribution in Z-Code. Physica B: Condensed Matter, 2018, 551, 472-475.	1.3	17
31	The investigation of magnetic phase transition in cobaltite perovskites by high-resolution neutron powder diffraction under 14T magnetic field. Physica B: Condensed Matter, 2018, 551, 111-114.	1.3	1
32	Temperature dependence of structural disorder in thermoelectric clathrate Ba <sub>8</sub> Al <sub>16</sub> Ge <sub>30</sub> . Physica B: Condensed Matter, 2018, 551, 41-45.	1.3	2
33	Synthesis, crystal structure, and ionic conductivity of hydride ion-conducting Ln <sub>2</sub> LiHO <sub>3</sub> (Ln = La, Pr, Nd) oxyhydrides. Journal of Materials Chemistry A, 2018, 6, 23457-23463.	5.2	31
34	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.	1.9	19
35	Appearance of Lithium-Ion Conduction in a La <sup>2+</sup> Li <sup>+</sup> Co <sup>2+</sup> O Band Insulator: Possible Route to Oxide Electrolyte. ACS Applied Energy Materials, 2018, 1, 2546-2554.	2.5	8
36	Large Magnetovolume Effect Induced by Embedding Ferromagnetic Clusters into Antiferromagnetic Matrix of Cobaltite Perovskite. Advanced Materials, 2017, 29, 1605991.	11.1	21

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37	Mechanical synthesis and structural properties of the fast fluoride-ion conductor PbSnF <sub>4</sub> . Journal of Solid State Chemistry, 2017, 253, 287-293.	1.4	28
38	Hole-doping-induced melting of spin-state ordering in $\text{PrBaCoO}_{5.5}$ . Physical Review B, 2017, 95, .		
39	Visualization of Structures and Li-Ion Conduction Pathways in the Li <sub>2</sub> S-P <sub>2</sub> S <sub>5</sub> System Using Neutron Scattering. Nihon Kessho Gakkaishi, 2017, 59, 230-237.	0.0	0
40	Ambient Pressure Synthesis and H <sup>+</sup> Conductivity of LaSrLiH <sub>2</sub> O <sub>2</sub> . Electrochemistry, 2017, 85, 88-92.	0.6	25
41	Materials and Life Science Experimental Facility (MLF) at the Japan Proton Accelerator Research Complex II: Neutron Scattering Instruments. Quantum Beam Science, 2017, 1, 9.	0.6	69
42	Electrochemistry, 2016, 84, 534-538.		1
43	Neutron reflectometry analysis of Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> /organic electrolyte interfaces: characterization of surface structure changes and lithium intercalation properties. Journal of Materials Research, 2016, 31, 3142-3150.	1.2	10
44	Origin of stabilization and destabilization in solid-state redox reaction of oxide ions for lithium-ion batteries. Nature Communications, 2016, 7, 13814.	5.8	330
45	Structural Understanding of Superior Battery Properties of Partially Ni-Doped Li <sub>2</sub> MnO <sub>3</sub> as Cathode Material. Journal of Physical Chemistry Letters, 2016, 7, 2063-2067.	2.1	29
46	Layered Na <sub>x</sub> Cr <sub>x</sub> Ti <sub>1-x</sub> O <sub>2</sub> as Bifunctional Electrode Materials for Rechargeable Sodium Batteries. Chemistry of Materials, 2016, 28, 7006-7016.	3.2	56
47	Real-time observations of lithium battery reactionsâ€”operando neutron diffraction analysis during practical operation. Scientific Reports, 2016, 6, 28843.	1.6	101
48	High-power all-solid-state batteries using sulfide superionic conductors. Nature Energy, 2016, 1, .	19.8	2,421
49	Degradation analysis of 18650-type lithium-ion cells by operando neutron diffraction. Journal of Power Sources, 2016, 325, 404-409.	4.0	31
50	Two-dimensional imaging of charge/discharge by Bragg edge analysis of electrode materials for pulsed neutron-beam transmission spectra of a Li-ion battery. Solid State Ionics, 2016, 288, 257-261.	1.3	31
51	Dependence of Structural Defects in Li <sub>2</sub> MnO <sub>3</sub> on Synthesis Temperature. Chemistry of Materials, 2016, 28, 4143-4150.	3.2	54
52	Pure H <sup>+</sup> conduction in oxyhydrides. Science, 2016, 351, 1314-1317.	6.0	155
53	Synthesis, structure, and electrochemical properties of crystalline Liâ€”Pâ€”Sâ€”O solid electrolytes: Novel lithium-conducting oxysulfides of Li <sub>10</sub> GeP <sub>2</sub> S <sub>12</sub> family. Solid State Ionics, 2016, 288, 229-234.	1.3	55
54	Direct Observation of Fast Lithium-Ion Diffusion in a Superionic Conductor: $\text{Li}_3\text{P}_3\text{S}_{11}$ . Physical Review Applied, 2015, 4, .	1.5	43

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55	Synthesis, Crystal Structure, and Electrochemical Properties of $\text{Li}_{1.2+x}\text{Mn}_{0.3}\text{Co}_{0.2}\text{Ni}_{0.3}\text{O}_{2+0.6}$ ( $x > 0$ ) for Lithium-ion Battery Cathodes. <i>Electrochemistry</i> , 2015, 83, 820-823.		3
56	First Imaging Experiment of a Lithium Ion Battery by a Pulsed Neutron Beam at J-PARC/MLF/BL09. <i>Physics Procedia</i> , 2015, 69, 612-618.	1.2	11
57	Crystal Structure Refinements Using Powder Diffraction Data for New Solid-State Electrolytes. <i>Nihon Kessho Gakkaishi</i> , 2015, 57, 79-86.	0.0	0
58	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
59	Synthesis, structure, and conduction mechanism of the lithium superionic conductor $\text{Li}_{10+x}\text{Ge}_{1+x}\text{P}_{2x}\text{S}_{12}$ . <i>Journal of Materials Chemistry A</i> , 2015, 3, 438-446.	5.2	144
60	Powder Diffractometer in J-PARC. <i>Hamon</i> , 2015, 25, 60-66.	0.0	0
61	Crystal-Local Structure Analyses for Cathode LIBs $\text{LiNi}_{1+x}\text{Co}_x\text{O}_{2+0.1}$ by Neutron Diffraction. , 2015, , .		3
62	Application of the J-PARC Neutron Beam to the Transmission Measurement for a Li Ion Battery during Charge and Discharge. , 2015, , .		1
63	Synthesis, structure, and ionic conductivity of solid solution, $\text{Li}_{10+x}\text{M}_{1+x}\text{P}_{2x}\text{S}_{12}$ (M = Si, Sn). <i>Faraday Discussions</i> , 2014, 176, 83-94.	1.6	83
64	Neutron diffraction studies on structural effect for Ni-doping in $\text{LiCo}_{1-x}\text{Ni}_x\text{O}_2$ . <i>Solid State Ionics</i> , 2014, 262, 92-97.	1.3	21
65	Study of Crystal Structure and Protonic Conduction Properties of $\text{La}_{0.9}\text{Ba}_{1.1}\text{GaO}_{4-\delta}$ Prepared by Liquid Synthesis Method. <i>Electrochemistry</i> , 2014, 82, 550-556.	0.6	3
66	A Comparative Study of $\text{LiCoO}_2$ Polymorphs: Structural and Electrochemical Characterization of O2-, O3-, and O4-type Phases. <i>Inorganic Chemistry</i> , 2013, 52, 9131-9142.	1.9	51
67	Synthesis, crystal structure, and ionic conductivity of tunnel structure phosphates, $\text{RbMg}_{1-x}\text{H}_2\text{x}(\text{PO}_3)_3 \cdot \gamma(\text{H}_2\text{O})$ . <i>Journal of Materials Chemistry A</i> , 2013, 1, 15544.	5.2	13
68	Development of Automatic Sample Exchange and Transfer System in iMATERIA. <i>Hamon</i> , 2013, 23, 204-209.	0.0	0
69	Structural and Magnetic Phase Determination of $(1-x)\text{BiFeO}_3 \cdot x\text{BaTiO}_3$ Solid Solution. <i>Journal of the Physical Society of Japan</i> , 2012, 81, 024603.	0.7	29
70	Direct synthesis of oxygen-deficient $\text{Li}_2\text{MnO}_3 \cdot x$ for high capacity lithium battery electrodes. <i>Journal of Power Sources</i> , 2012, 216, 249-255.	4.0	113
71	Synthesis, crystal structure, and electrode characteristics of $\text{LiMnPO}_4(\text{OH})$ cathode for lithium batteries. <i>Journal of Solid State Chemistry</i> , 2012, 187, 124-129.	1.4	11
72	Super High Resolution Powder Diffractometer at J-PARC. <i>Journal of the Physical Society of Japan</i> , 2011, 80, SB020.	0.7	66

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73	Design of Air Scattering Chamber for the Powder Diffractometer SPICA. Journal of the Physical Society of Japan, 2011, 80, SB001.	0.7	3
74	Structural and Hydrogen Desorption Properties of Aluminum Hydride. Materials Transactions, 2011, 52, 598-601.	0.4	12
75	A lithium superionic conductor. Nature Materials, 2011, 10, 682-686.	13.3	3,659
76	Crystal structure and phase transitions of the lithium ionic conductor Li <sub>3</sub> PS <sub>4</sub> . Solid State Ionics, 2011, 182, 53-58.	1.3	289
77	Surface Characterization of LiFePO <sub>4</sub> Epitaxial Thin Films by X-ray/Neutron Reflectometry. Electrochemistry, 2010, 78, 413-415.	0.6	48
78	Crystal Structure of High-Temperature Phase of Lithium Ionic Conductor, Li <sub>3</sub> PS <sub>4</sub> . Journal of the Physical Society of Japan, 2010, 79, 90-93.	0.7	40
79	Automatic sample changer for IBARAKI materials design diffractometer (iMATERIA). Journal of Physics: Conference Series, 2010, 251, 012083.	0.3	7
80	Ionic Conductivity and Structural Properties of Lithium Lanthanum Titanate Quenched into Liquid Nitrogen Studied by Neutron Powder Diffraction. Journal of the Physical Society of Japan, 2010, 79, 84-86.	0.7	2
81	Object-oriented data analysis framework for neutron scattering experiments. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 600, 123-125.	0.7	6
82	Oscillatory diffuse scattering study by time-of-flight neutron scattering. Physica B: Condensed Matter, 2008, 403, 2557-2560.	1.3	2
83	Neutron Powder Diffractometers in J-PARC and Its Impact for Materials Science or Materials Developing. Nihon Kessho Gakkaishi, 2008, 50, 18-23.	0.0	0
84	Neutron Powder Diffraction Study of Protonic Conductor K <sub>3</sub> H(SeO <sub>4</sub> ) <sub>2</sub> . Ferroelectrics, 2007, 347, 74-78.	0.3	8
85	Synthesis of Li[(Ni <sub>0.5</sub> Mn <sub>0.5</sub> ) <sub>1-x</sub> Li <sub>x</sub> ]O <sub>2</sub> by Emulsion Drying Method and Impact of Excess Li on Structural and Electrochemical Properties. Chemistry of Materials, 2006, 18, 1658-1666.	3.2	82
86	Electrochemical, Magnetic, and Structural Investigation of the Li <sub>x</sub> (Mn <sub>y</sub> Fe <sub>1-y</sub> )PO <sub>4</sub> Olivine Phases. Chemistry of Materials, 2006, 18, 804-813.	3.2	162
87	Average and Local Structures in Hydrogen Absorbing Ti-Cr-Mo Alloy. Materials Transactions, 2006, 47, 271-274.	0.4	9
88	Room-temperature miscibility gap in Li <sub>x</sub> FePO <sub>4</sub> . Nature Materials, 2006, 5, 357-360.	13.3	507
89	Neutron powder diffraction study on the high-temperature phase of K <sub>3</sub> H(SeO <sub>4</sub> ) <sub>2</sub> . Physica B: Condensed Matter, 2006, 385-386, 156-159.	1.3	11
90	The Ibaraki prefecture materials design diffractometer for J-PARC "Designing neutron guide. Physica B: Condensed Matter, 2006, 385-386, 1025-1028.	1.3	3

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91	Synthesis, structures and phase transitions in the double perovskites $\text{Sr}_{2-x}\text{Ca}_x\text{CrNbO}_6$ . Journal of Solid State Chemistry, 2006, 179, 2487-2494.	1.4	11
92	Neutron powder diffraction study on $\text{Pr}(\text{Ba}_{1-x}\text{Sr}_x)_2\text{Cu}_3\text{O}_y$ compounds with $0 \leq x \leq 0.5$ . Physica B: Condensed Matter, 2006, 385-386, 116-118.	1.3	5
93	Observation of microstructure of hydrated $\text{Ca}_3\text{SiO}_5$ . Physica B: Condensed Matter, 2006, 385-386, 517-519.	1.3	6
94	IBARAKI Materials Design Diffractometer for J-PARC. Physica B: Condensed Matter, 2006, 385-386, 1022-1024.	1.3	20
95	Structure phase transition in $\text{FeSr}_2\text{YCu}_2\text{O}_{6+\delta}$ . Physica B: Condensed Matter, 2006, 385-386, 561-563.	1.3	4
96	Charge states of Ca atoms in $\beta$ -dicalcium silicate. Journal of Solid State Chemistry, 2006, 179, 3286-3294.	1.4	27
97	Fast Charging $\text{LiFePO}_4$ . Electrochemical and Solid-State Letters, 2005, 8, A55.	2.2	56
98	Comparative Kinetic Study of Olivine $\text{Li}_x\text{MPO}_4$ (M=Fe, Mn). Journal of the Electrochemical Society, 2004, 151, A1352.	1.3	363
99	Synthesis, structure, and phase relationship in lithium manganese oxide spinel. Electronic supplementary information (ESI) available: neutron and X-ray Rietveld refinement results of $\text{LiMn}_2\text{O}_4$ . See <a href="http://www.rsc.org/suppdata/jm/b3/b314810f/">http://www.rsc.org/suppdata/jm/b3/b314810f/</a> . Journal of Materials Chemistry, 2004, 14, 1948.	6.7	64
100	Phase Transitions and Low-temperature Structure of Lithium Manganese Oxide Spinel. Materials Transactions, 2004, 45, 2048-2055.	0.4	6
101	Heat capacity of $\text{LiMn}_2\text{O}_4$ : Effect of oxygen content on charge and magnetic ordering. Physical Review B, 2003, 68, .	1.1	15
102	Defect Structure of $\text{LiMn}_2\text{O}_4$ after High-Temperature Storage. Electrochemistry, 2003, 71, 1160-1161.	0.6	7
103	Synthesis and structures of lithium manganese oxide spinel, $\text{LiMn}_2\text{O}_4$ ( $0 \leq \delta \leq 0.27$ ). Journal of Power Sources, 2001, 97-98, 423-426.	4.0	26
104	The relationships between phases and structures of lithium manganese spinels. Journal of Power Sources, 1999, 81-82, 542-546.	4.0	45
105	Preparation of $\text{LiCoO}_2$ and $\text{LiCo}_{1-x}\text{Fe}_x\text{O}_2$ using hydrothermal reactions. Journal of Materials Chemistry, 1999, 9, 199-204.	6.7	75