

# 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	A lithium superionic conductor. <i>Nature Materials</i> , 2011, 10, 682-686.	13.3	3,659
2	High-power all-solid-state batteries using sulfide superionic conductors. <i>Nature Energy</i> , 2016, 1, .	19.8	2,421
3	Room-temperature miscibility gap in $\text{Li}_x\text{FePO}_4$ . <i>Nature Materials</i> , 2006, 5, 357-360.	13.3	507
4	Comparative Kinetic Study of Olivine $\text{Li}_{[x]}\text{MPO}_{[4]}$ (M=Fe, Mn). <i>Journal of the Electrochemical Society</i> , 2004, 151, A1352.	1.3	363
5	Origin of stabilization and destabilization in solid-state redox reaction of oxide ions for lithium-ion batteries. <i>Nature Communications</i> , 2016, 7, 13814.	5.8	330
6	Crystal structure and phase transitions of the lithium ionic conductor $\text{Li}_3\text{PS}_4$ . <i>Solid State Ionics</i> , 2011, 182, 53-58.	1.3	289
7	Electrochemical, Magnetic, and Structural Investigation of the $\text{Li}_x(\text{Mn}_y\text{Fe}_{1-y})\text{PO}_4$ Olivine Phases. <i>Chemistry of Materials</i> , 2006, 18, 804-813.	3.2	162
8	Pure H <sup>+</sup> conduction in oxyhydrides. <i>Science</i> , 2016, 351, 1314-1317.	6.0	155
9	Synthesis, structure, and conduction mechanism of the lithium superionic conductor $\text{Li}_{10}\text{Ge}_1\text{P}_2\text{S}_{12}$ . <i>Journal of Materials Chemistry A</i> , 2015, 3, 438-446.	5.2	144
10	Direct synthesis of oxygen-deficient $\text{Li}_2\text{MnO}_3$ for high capacity lithium battery electrodes. <i>Journal of Power Sources</i> , 2012, 216, 249-255.	4.0	113
11	Real-time observations of lithium battery reactions <i>in</i> operando neutron diffraction analysis during practical operation. <i>Scientific Reports</i> , 2016, 6, 28843.	1.6	101
12	Synthesis, structure, and ionic conductivity of solid solution, $\text{Li}_{10}\text{M}_1\text{P}_2\text{S}_{12}$ (M = Si, Sn). <i>Faraday Discussions</i> , 2014, 176, 83-94.	1.6	83
13	Synthesis of $\text{Li}[(\text{Ni}_0.5\text{Mn}_0.5)_{1-x}\text{Li}_x]\text{O}_2$ by Emulsion Drying Method and Impact of Excess Li on Structural and Electrochemical Properties. <i>Chemistry of Materials</i> , 2006, 18, 1658-1666.	3.2	82
14	Preparation of $\text{LiCoO}_2$ and $\text{LiCo}_{1-x}\text{Fe}_x\text{O}_2$ using hydrothermal reactions. <i>Journal of Materials Chemistry</i> , 1999, 9, 199-204.	6.7	75
15	Materials and Life Science Experimental Facility (MLF) at the Japan Proton Accelerator Research Complex II: Neutron Scattering Instruments. <i>Quantum Beam Science</i> , 2017, 1, 9.	0.6	69
16	Super High Resolution Powder Diffractometer at J-PARC. <i>Journal of the Physical Society of Japan</i> , 2011, 80, SB020.	0.7	66
17	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> . <i>Journal of Materials Chemistry</i> , 2004, 14, 1948.	6.7	64
18	Fast Charging $\text{LiFePO}_4$ . <i>Electrochemical and Solid-State Letters</i> , 2005, 8, A55.	2.2	56

#	ARTICLE	IF	CITATIONS
19	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
20	Synthesis, structure, and electrochemical properties of crystalline Li <sub>10</sub> GeP <sub>2</sub> S <sub>12</sub> family. Solid State Ionics, 2016, 288, 229-234.	1.3	55
21	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
22	A Comparative Study of LiCoO <sub>2</sub> Polymorphs: Structural and Electrochemical Characterization of O <sub>2</sub> -, O <sub>3</sub> -, and O <sub>4</sub> -type Phases. Inorganic Chemistry, 2013, 52, 9131-9142.	1.9	51
23	Surface Characterization of LiFePO <sub>4</sub> Epitaxial Thin Films by X-ray/Neutron Reflectometry. Electrochemistry, 2010, 78, 413-415.	0.6	48
24	The relationships between phases and structures of lithium manganese spinels. Journal of Power Sources, 1999, 81-82, 542-546.	4.0	45
25	Direct Observation of Fast Lithium Ion Diffusion in a Superionic Conductor: $P_{\text{Li}} \sim S_{\text{Li}}^{1/5} \nu_{\text{Li}}^{4/3}$ Physical Review Applied, 2015, 4, .	1.5	43
26	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
27	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
28	Superionic lithium conductor with a cubic argyrodite-type structure in the Li-Al-S system. Journal of Solid State Chemistry, 2019, 270, 487-492.	1.4	35
29	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
30	Degradation analysis of 18650-type lithium-ion cells by operando neutron diffraction. Journal of Power Sources, 2016, 325, 404-409.	4.0	31
31	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
32	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
33	Synthesis and H <sup>+</sup> conductivity of a new oxyhydride Ba <sub>2</sub> YHO <sub>3</sub> with anion-ordered rock-salt layers. Chemical Communications, 2020, 56, 10373-10376.	2.2	30
34	Ionic conduction mechanism of a lithium superionic argyrodite in the Li-Al-Si-O system. Materials Advances, 2020, 1, 334-340.	2.6	30
35	Structural and Magnetic Phase Determination of (1-x)BiFeO <sub>3</sub> -xBaTiO <sub>3</sub> Solid Solution. Journal of the Physical Society of Japan, 2012, 81, 024603.	0.7	29
36	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

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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	Charge states of Ca atoms in $\hat{\Gamma}^2$ -dicalcium silicate. Journal of Solid State Chemistry, 2006, 179, 3286-3294.	1.4	27
39	Synthesis and structures of lithium manganese oxide spinel, LiMn <sub>2</sub> O <sub>4</sub> $\hat{\Gamma}^{\sim}$ (O $\hat{\Gamma}^{\sim}$ 0.27). Journal of Power Sources, 2001, 97-98, 423-426.	4.0	26
40	Hydride-ion-conducting K <sub>2</sub> NiF <sub>4</sub> -type Ba $\hat{\Gamma}$ Li oxyhydride solid electrolyte. Nature Materials, 2022, 21, 325-330.	13.3	26
41	Ambient Pressure Synthesis and H <sup>+</sup> &minus; Conductivity of LaSrLiH <sub>2</sub> O <sub>2</sub> . Electrochemistry, 2017, 85, 88-92. High oxygen pressure floating zone growth and crystal structure of the metallic nickelates	0.6	25
42	$\langle \text{mml:math} \text{xmlns:mml}=\text{"http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle \text{R} \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 4 \langle \text{mml:mn} \rangle \langle \text{mml:m} \rangle$		

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55	Efficient Stabilization of Na Storage Reversibility by Ti Integration into $\text{O}^{\delta 23}$ -Type $\text{NaMnO}_2$ . Energy Material Advances, 2021, 2021, .	4.7	15
56	$\text{Li}_{10}\text{GeP}_2\text{S}_{12}$ -Type Structured Solid Solution Phases in the $\text{Li}_9\text{I}_3\text{P}_3\text{S}_{12}\text{O}_k$ System: Controlling Crystallinity by Synthesis to Improve the Air Stability. Inorganic Chemistry, 2022, 61, 52-61.	1.9	14
57	Synthesis, crystal structure, and ionic conductivity of tunnel structure phosphates, $\text{RbMg}_{1-x}\text{H}_2\text{x}(\text{PO}_3)_3\text{y}(\text{H}_2\text{O})$ . Journal of Materials Chemistry A, 2013, 1, 15544.	5.2	13
58	Structural and Hydrogen Desorption Properties of Aluminum Hydride. Materials Transactions, 2011, 52, 598-601.	0.4	12
59	Ambient pressure synthesis of $\text{La}_2\text{LiHO}_3$ as a solid electrolyte for a hydrogen electrochemical cell. Journal of the American Ceramic Society, 2019, 102, 3228-3235.	1.9	12
60	Neutron powder diffraction study on the high-temperature phase of $\text{K}_3\text{H}(\text{SeO}_4)_2$ . Physica B: Condensed Matter, 2006, 385-386, 156-159.	1.3	11
61	Synthesis, structures and phase transitions in the double perovskites $\text{Sr}_2\text{x}\text{CaxCrNbO}_6$ . Journal of Solid State Chemistry, 2006, 179, 2487-2494.	1.4	11
62	Synthesis, crystal structure, and electrode characteristics of $\text{LiMnPO}_4(\text{OH})$ cathode for lithium batteries. Journal of Solid State Chemistry, 2012, 187, 124-129.	1.4	11
63	First Imaging Experiment of a Lithium Ion Battery by a Pulsed Neutron Beam at J-PARC/MLF/BL09. Physics Procedia, 2015, 69, 612-618.	1.2	11
64	Syntheses, structures, and ionic conductivities of perovskite-structured lithium-strontium-aluminum/gallium-tantalum-oxides. Journal of Solid State Chemistry, 2015, 225, 431-437.	1.4	11
65	High Anionic Conductive Form of $\text{PbxSn}_2\text{x}\text{F}_4$ . Chemistry of Materials, 2019, 31, 7704-7710.	3.2	11
66	Strong lattice anharmonicity exhibited by the high-energy optical phonons in thermoelectric material. New Journal of Physics, 2020, 22, 083083.	1.2	11
67	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. Journal of Materials Research, 2016, 31, 3142-3150.	1.2	10
68	Unexpectedly Large Contribution of Oxygen to Charge Compensation Triggered by Structural Disorder: Detailed Experimental and Theoretical Study on a $\text{Li}_3\text{NbO}_4$ -NiO Binary System. ACS Central Science, 2022, 8, 775-794.	5.3	10
69	Average and Local Structures in Hydrogen Absorbing Ti-Cr-Mo Alloy. Materials Transactions, 2006, 47, 271-274.	0.4	9
70	Neutron Powder Diffraction Study of Protonic Conductor $\text{K}_3\text{H}(\text{SeO}_4)_2$ . Ferroelectrics, 2007, 347, 74-78.	0.3	8
71	Appearance of Lithium-Ion Conduction in a $\text{LaLiCoO}$ Band Insulator: Possible Route to Oxide Electrolyte. ACS Applied Energy Materials, 2018, 1, 2546-2554.	2.5	8
72	Revealing the Ion Dynamics in $\text{Li}_{10}\text{GeP}_2\text{S}_{12}$ by Quasi-Elastic Neutron Scattering Measurements. Journal of Physical Chemistry C, 2022, 126, 9518-9527.	1.5	8

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73	Defect Structure of $\text{LiMn}_2\text{O}_4$ after High-Temperature Storage. <i>Electrochemistry</i> , 2003, 71, 1160-1161.	0.6	7
74	Automatic sample changer for IBARAKI materials design diffractometer (iMATERIA). <i>Journal of Physics: Conference Series</i> , 2010, 251, 012083.	0.3	7
75	Phase Transitions and Low-temperature Structure of Lithium Manganese Oxide Spinel. <i>Materials Transactions</i> , 2004, 45, 2048-2055.	0.4	6
76	Observation of microstructure of hydrated $\text{Ca}_3\text{SiO}_5$ . <i>Physica B: Condensed Matter</i> , 2006, 385-386, 517-519.	1.3	6
77	Object-oriented data analysis framework for neutron scattering experiments. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2009, 600, 123-125.	0.7	6
78	Room Temperature Zero Thermal Expansion in a Cubic Cobaltite. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 6785-6790.	2.1	6
79	Neutron powder diffraction study on $\text{Pr}(\text{Ba}_{1-x}\text{Sr}_x)_2\text{Cu}_3\text{O}_y$ compounds with $0 \leq x \leq 0.5$ . <i>Physica B: Condensed Matter</i> , 2006, 385-386, 116-118.	1.3	5
80	Weak-ferromagnetism of $\text{CoF}_3$ and $\text{FeF}_3$ . <i>Physica B: Condensed Matter</i> , 2018, 551, 94-97.	1.3	5
81	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
82	Arrangement of water molecules and high proton conductivity of tunnel structure phosphates, $\text{KMg}_2\text{H}_2(\text{PO}_3)_3 \cdot \text{H}_2\text{O}$ . <i>RSC Advances</i> , 2020, 10, 7803-7811.	1.7	5
83	Structure phase transition in $\text{FeSr}_2\text{YCu}_2\text{O}_6$ . <i>Physica B: Condensed Matter</i> , 2006, 385-386, 561-563.	1.3	4
84	The Ibaraki prefecture materials design diffractometer for J-PARC "Designing neutron guide. <i>Physica B: Condensed Matter</i> , 2006, 385-386, 1025-1028.	1.3	3
85	Design of Air Scattering Chamber for the Powder Diffractometer SPICA. <i>Journal of the Physical Society of Japan</i> , 2011, 80, SB001.	0.7	3
86	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
87	Synthesis, Crystal Structure, and Electrochemical Properties of $\text{Li}_{1.2-x}\text{Mn}_{0.3}\text{Co}_{0.2}\text{Ni}_{0.3}\text{O}_2$ ( $x > 0$ ) for Lithium-ion Battery Cathodes. <i>Electrochemistry</i> , 2015, 83, 820-823.	0.6	3
88	Origin of magnetovolume effect in a cobaltite. <i>Physical Review B</i> , 2021, 103, .	1.1	3
89	Crystal-Local Structure Analyses for Cathode LIBs $\text{LiNi}_{1-x}\text{Co}_x\text{O}_2$ ( $0 \leq x \leq 1$ ) by Neutron Diffraction. , 2015, , .		3
90	Oscillatory diffuse scattering study by time-of-flight neutron scattering. <i>Physica B: Condensed Matter</i> , 2008, 403, 2557-2560.	1.3	2

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91	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
92	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
93	Structural Variation in Carbonate Electrolytes by the Addition of Li Salts Studied by X-Ray Total Scattering. Physica Status Solidi (B): Basic Research, 2020, 257, 2000100.	0.7	2
94	Corrigendum to "Efficient Stabilization of Na Storage Reversibility by Ti Integration into O <sup>3</sup> -Type NaMnO <sub>2</sub> " Energy Material Advances, 2021, 2021, .	4.7	2
95	Nondestructive quantitative imaging for spatially nonuniform degradation in a commercial lithium-ion battery using a pulsed neutron beam. Applied Physics Express, 2022, 15, 027005.	1.1	2
96	3i74Zä,æ€Šââ°,çŽ†æ³•ã,'ç"ã,ãŸãfãfã, ãfã,ã,ããf³é»æ±ç•CEçãââüœè\$£æž• Electrochemistry, 2016, 84, 534-538.		1
97	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
98	Application of the J-PARC Neutron Beam to the Transmission Measurement for a Li Ion Battery during Charge and Discharge. , 2015, , .		1
99	Crystal Structure Refinements Using Powder Diffraction Data for New Solid-State Electrolytes. Nihon Kessho Gakkaishi, 2015, 57, 79-86.	0.0	0
100	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
101	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
102	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
103	Development of Automatic Sample Exchange and Transfer System in iMATERIA. Hamon, 2013, 23, 204-209.	0.0	0
104	Powder Diffractometer in J-PARC. Hamon, 2015, 25, 60-66.	0.0	0
105	Crystal structure, ionic conductivity and lithium-ion diffusion pathway in a LaLiCoO system. Journal of the Ceramic Society of Japan, 2020, 128, 453-456.	0.5	0