

# Satoshi Hori

## List of Publications by Year in descending order

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28  
papers

3,593  
citations

430754

18  
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552653

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g-index

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28  
docs citations

28  
times ranked

3496  
citing authors

#	ARTICLE	IF	CITATIONS
1	High-power all-solid-state batteries using sulfide superionic conductors. <i>Nature Energy</i> , 2016, 1, .	19.8	2,421
2	Tuning mobility and stability of lithium ion conductors based on lattice dynamics. <i>Energy and Environmental Science</i> , 2018, 11, 850-859.	15.6	158
3	Superionic Conductors: $\text{Li}_{10}\text{P}_{2}\text{S}_{12}[\text{Sn}_x\text{Si}_{1-x}]_{10}\text{P}_{2}\text{S}_{12}$ with a $\text{Li}_{10}\text{GeP}_2\text{S}_{12}$ -type Structure in the $\text{Li}_3\text{PS}_4$ - $\text{Li}_4\text{SnS}_4$ - $\text{Li}_4\text{SiS}_4$ Quasi-ternary System. <i>Chemistry of Materials</i> , 2017, 29, 5858-5864.	3.2	134
4	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
5	$\text{Li}_{10}\text{GeP}_2\text{S}_{12}$ Type Superionic Conductors: Synthesis, Structure, and Ionic Transportation. <i>Advanced Energy Materials</i> , 2020, 10, 2002153.	10.2	101
6	Synthesis, structure, and ionic conductivity of solid solution, $\text{Li}_{10}\text{M}_{1-x}\text{P}_{2}\text{S}_{12}$ (M = Si, Sn). <i>Faraday Discussions</i> , 2014, 176, 83-94.	1.6	83
7	A mechanistic investigation of the $\text{Li}_{10}\text{GeP}_2\text{S}_{12}   \text{LiNi}_{1-x}\text{Co}_x\text{Mn}_y\text{O}_2$ interface stability in all-solid-state lithium batteries. <i>Nature Communications</i> , 2021, 12, 6669.	5.8	72
8	Phase Diagram of the $\text{Li}_4\text{GeS}_4$ - $\text{Li}_3\text{PS}_4$ 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
9	Weak Anisotropic Lithium-Ion Conductivity in Single Crystals of $\text{Li}_{10}\text{GeP}_2\text{S}_{12}$ . <i>Chemistry of Materials</i> , 2019, 31, 3694-3699.	3.2	57
10	Synthesis, structure, and electrochemical properties of crystalline $\text{Li}_x\text{P}_2\text{S}_{12}\text{O}$ 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
11	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 $\text{Li}_2\text{P}_2\text{S}_5$ - $\text{SiO}_2$ Pseudoternary System: Synthesis, Electrochemical Properties, and Structure-Composition Relationships. <i>Frontiers in Energy Research</i> , 2016, 4, .	1.2	54
12	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
13	Superionic lithium conductor with a cubic argyrodite-type structure in the $\text{LiAlSiS}$ system. <i>Journal of Solid State Chemistry</i> , 2019, 270, 487-492.	1.4	35
14	Ionic conduction mechanism of a lithium superionic argyrodite in the $\text{LiAlSiS}$ system. <i>Materials Advances</i> , 2020, 1, 334-340.	2.6	30
15	Oxygen Substitution for $\text{LiAlSiS}$ Solid Electrolytes toward Purified $\text{Li}_{10}\text{GeP}_2\text{S}_{12}$ -Type Phase with Enhanced Electrochemical Stabilities for All-Solid-State Batteries. <i>Chemistry of Materials</i> , 2020, 32, 8860-8867.	3.2	24
16	Conduction Mechanism of $\text{Li}_{10}\text{GeP}_2\text{S}_{12}$ -type Lithium Superionic Conductors in a $\text{LiSnSiP}$ System. <i>Chemistry of Materials</i> , 2019, 31, 3485-3490.	3.2	21
17	Correlated Li-ion migration in the superionic conductor $\text{Li}_{10}\text{GeP}_2\text{S}_{12}$ . <i>Journal of Materials Chemistry A</i> , 2021, 9, 11278-11284.	5.2	21
18	Anomalously High Ionic Conductivity of $\text{Li}_2\text{Si}_3$ -Type Conductors. <i>Journal of the American Chemical Society</i> , 2022, 144, 4989-4994.	6.6	20

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19	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 System: Controlling Crystallinity by Synthesis to Improve the Air Stability. <i>Inorganic Chemistry</i> , 2022, 61, 52-61.	1.9	14
20	Synthesis of Li <sub>10</sub> GeP <sub>2</sub> S <sub>12</sub> -type lithium superionic conductors under Ar gas flow. <i>Journal of Power Sources</i> , 2020, 473, 228524.	4.0	11
21	Annealing-induced evolution at the LiCoO <sub>2</sub> /LiNbO <sub>3</sub> interface and its functions in all-solid-state batteries with a Li <sub>10</sub> GeP <sub>2</sub> S <sub>12</sub> electrolyte. <i>Journal of Materials Chemistry A</i> , 2021, 9, 4117-4125.	5.2	11
22	A lithium conductor Li <sub>6.96</sub> Sn <sub>1.55</sub> Si <sub>1.71</sub> P <sub>0.8</sub> S <sub>12</sub> with a cubic argyrodite-type structure in the Li <sub>2</sub> SnS <sub>2</sub> SiS <sub>2</sub> P <sub>2</sub> S <sub>5</sub> system: Synthesis, structure, and electrochemical properties. <i>Solid State Ionics</i> , 2020, 356, 115458.	1.3	8
23	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
24	Liquid-phase synthesis of the Li <sub>10</sub> GeP <sub>2</sub> S <sub>12</sub> -type phase in the Li <sub>2</sub> SnS <sub>2</sub> P <sub>2</sub> SiS <sub>2</sub> Cl system. <i>Journal of Materials Chemistry A</i> , 2022, 10, 14392-14398.	5.2	6
25	Precipitation of the Lithium Superionic Conductor Li <sub>10</sub> GeP <sub>2</sub> S <sub>12</sub> by a Liquid-phase Process. <i>Chemistry Letters</i> , 2020, 49, 1379-1381.	0.7	4
26	Discharge voltage profile changes <i>via</i> physicochemical phenomena in cycled all-solid-state cells based on Li <sub>10</sub> GeP <sub>2</sub> S <sub>12</sub> and LiNbO <sub>3</sub> -coated LiCoO <sub>2</sub> . <i>Journal of Materials Chemistry A</i> , 2021, 9, 17905-17912.	5.2	4
27	Crystalline Electrolyte. , 2021, , 49-60.		0
28	Correlated Lithium-Ion Migration in Solid Electrolyte Li <sub>10</sub> GeP <sub>2</sub> S <sub>12</sub> . <i>Nihon Kessho Gakkaishi</i> , 2021, 63, 280-286.	0.0	0