

# Masahiro Tatsumisago

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/4710871/masahiro-tatsumisago-publications-by-citations.pdf>  
**Version:** 2024-04-10

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.  
The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

259 papers	9,889 citations	46 h-index	91 g-index
268 ext. papers	11,197 ext. citations	4.6 avg, IF	6.52 L-index

#	Paper	IF	Citations
259	A sulphide lithium super ion conductor is superior to liquid ion conductors for use in rechargeable batteries. <i>Energy and Environmental Science</i> , <b>2014</b> , 7, 627-631	35.4	771
258	New, Highly Ion-Conductive Crystals Precipitated from Li <sub>2</sub> S-P <sub>2</sub> S <sub>5</sub> Glasses. <i>Advanced Materials</i> , <b>2005</b> , 17, 918-921	24	607
257	Superionic glass-ceramic electrolytes for room-temperature rechargeable sodium batteries. <i>Nature Communications</i> , <b>2012</b> , 3, 856	17.4	603
256	Sulfide solid electrolyte with favorable mechanical property for all-solid-state lithium battery. <i>Scientific Reports</i> , <b>2013</b> , 3, 2261	4.9	504
255	Interfacial Observation between LiCoO <sub>2</sub> Electrode and Li <sub>2</sub> S-P <sub>2</sub> S <sub>5</sub> Solid Electrolytes of All-Solid-State Lithium Secondary Batteries Using Transmission Electron Microscopy. <i>Chemistry of Materials</i> , <b>2010</b> , 22, 949-956	9.6	415
254	Preparation of Li <sub>2</sub> S-P <sub>2</sub> S <sub>5</sub> Amorphous Solid Electrolytes by Mechanical Milling. <i>Journal of the American Ceramic Society</i> , <b>2004</b> , 84, 477-79	3.8	263
253	Sulfur-Carbon composite electrode for all-solid-state Li/S battery with Li <sub>2</sub> S-P <sub>2</sub> S <sub>5</sub> solid electrolyte. <i>Electrochimica Acta</i> , <b>2011</b> , 56, 6055-6059	6.7	238
252	Recent progress of glass and glass-ceramics as solid electrolytes for lithium secondary batteries. <i>Solid State Ionics</i> , <b>2006</b> , 177, 2715-2720	3.3	214
251	High-capacity Li <sub>2</sub> S-Carbon composite electrode for all-solid-state rechargeable lithium batteries. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 10015		210
250	Stabilization of superionic AgI at room temperature in a glass matrix. <i>Nature</i> , <b>1991</b> , 354, 217-218	50.4	155
249	Transparent Anatase Nanocomposite Films by the Sol-Gel Process at Low Temperatures. <i>Journal of the American Ceramic Society</i> , <b>2000</b> , 83, 229-31	3.8	139
248	Liquid-phase syntheses of sulfide electrolytes for all-solid-state lithium battery. <i>Nature Reviews Chemistry</i> , <b>2019</b> , 3, 189-198	34.6	138
247	Preparation and characterization of highly sodium ion conducting Na <sub>3</sub> PS <sub>4</sub> -Na <sub>4</sub> Si <sub>3</sub> S <sub>4</sub> solid electrolytes. <i>RSC Advances</i> , <b>2014</b> , 4, 17120-17123	3.7	123
246	Fabrication of electrode-electrolyte interfaces in all-solid-state rechargeable lithium batteries by using a supercooled liquid state of the glassy electrolytes. <i>Journal of Materials Chemistry</i> , <b>2011</b> , 21, 118-124		117
245	Improvement of chemical stability of Li <sub>3</sub> PS <sub>4</sub> glass electrolytes by adding MxOy (M = Fe, Zn, and Bi) nanoparticles. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 6320	13	115
244	Sulfide Glass-Ceramic Electrolytes for All-Solid-State Lithium and Sodium Batteries. <i>International Journal of Applied Glass Science</i> , <b>2014</b> , 5, 226-235	1.8	114
243	Structural and Electronic-State Changes of a Sulfide Solid Electrolyte during the Li Deinsertion/Insertion Processes. <i>Chemistry of Materials</i> , <b>2017</b> , 29, 4768-4774	9.6	111

242	A sodium-ion sulfide solid electrolyte with unprecedented conductivity at room temperature. <i>Nature Communications</i> , <b>2019</b> , 10, 5266	17.4	108
241	Liquid-phase synthesis of a Li <sub>3</sub> PS <sub>4</sub> solid electrolyte using N-methylformamide for all-solid-state lithium batteries. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 5095	13	107
240	Evaluation of elastic modulus of Li <sub>2</sub> S-P <sub>2</sub> S <sub>5</sub> glassy solid electrolyte by ultrasonic sound velocity measurement and compression test. <i>Journal of the Ceramic Society of Japan</i> , <b>2013</b> , 121, 946-949	1	100
239	Mechanochemical Synthesis of New Amorphous Materials of 60Li <sub>2</sub> S-40SiS <sub>2</sub> with High Lithium Ion Conductivity. <i>Journal of the American Ceramic Society</i> , <b>2004</b> , 82, 1352-1354	3.8	96
238	All-Solid-State Na/S Batteries with a Na <sub>3</sub> PS <sub>4</sub> Electrolyte Operating at Room Temperature. <i>Chemistry of Materials</i> , <b>2017</b> , 29, 5232-5238	9.6	95
237	Mechanical Properties of Li <sub>2</sub> S-P <sub>2</sub> S <sub>5</sub> Glasses with Lithium Halides and Application in All-Solid-State Batteries. <i>ACS Applied Energy Materials</i> , <b>2018</b> , 1, 1002-1007	6.1	89
236	An argyrodite sulfide-based superionic conductor synthesized by a liquid-phase technique with tetrahydrofuran and ethanol. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 558-566	13	79
235	Preparation of Li <sub>3</sub> BO <sub>3</sub> -Li <sub>2</sub> SO <sub>4</sub> glass-ceramic electrolytes for all-oxide lithium batteries. <i>Journal of Power Sources</i> , <b>2014</b> , 270, 603-607	8.9	78
234	X-ray Crystal Structure Analysis of Sodium-Ion Conductivity in 94 Na <sub>3</sub> PS <sub>4</sub> -6 Na <sub>4</sub> Si <sub>3</sub> S <sub>4</sub> Glass-Ceramic Electrolytes. <i>ChemElectroChem</i> , <b>2014</b> , 1, 1130-1132	4.3	76
233	Electrochemical Performance of All-Solid-State Li/S Batteries with Sulfur-Based Composite Electrodes Prepared by Mechanical Milling at High Temperature. <i>Energy Technology</i> , <b>2013</b> , 1, 186-192	3.5	71
232	Lithium-Ion-Conducting Argyrodite-Type Li <sub>6</sub> PS <sub>5</sub> X (X = Cl, Br, I) Solid Electrolytes Prepared by a Liquid-Phase Technique Using Ethanol as a Solvent. <i>ACS Applied Energy Materials</i> , <b>2018</b> , 1, 3622-3629	6.1	69
231	Synthesis of nanosized nickel sulfide in high-boiling solvent for all-solid-state lithium secondary batteries. <i>Journal of Materials Chemistry</i> , <b>2011</b> , 21, 2987		69
230	Preparation of Proton-Conducting Amorphous Films Containing Dodecamolybdophosphoric Acid by the Sol-Gel Method. <i>Journal of the American Ceramic Society</i> , <b>1989</b> , 72, 484-486	3.8	69
229	Crystallization Process for Superionic Li <sub>7</sub> P <sub>3</sub> S <sub>11</sub> Glass-Ceramic Electrolytes. <i>Journal of the American Ceramic Society</i> , <b>2011</b> , 94, 1779-1783	3.8	65
228	Preparation and characterization of superionic conducting Li <sub>7</sub> P <sub>3</sub> S <sub>11</sub> crystal from glassy liquids. <i>Journal of the Ceramic Society of Japan</i> , <b>2010</b> , 118, 305-308	1	64
227	Li <sub>2</sub> S-Based Solid Solutions as Positive Electrodes with Full Utilization and Superlong Cycle Life in All-Solid-State Li/S Batteries. <i>Advanced Sustainable Systems</i> , <b>2017</b> , 1, 1700017	5.9	63
226	Invited paper: Recent development of bulk-type solid-state rechargeable lithium batteries with sulfide glass-ceramic electrolytes. <i>Electronic Materials Letters</i> , <b>2012</b> , 8, 199-207	2.9	62
225	Bulk-Type Lithium Metal Secondary Battery with Indium Thin Layer at Interface between Li Electrode and Li <sub>2</sub> S-P <sub>2</sub> S <sub>5</sub> Solid Electrolyte. <i>Electrochemistry</i> , <b>2012</b> , 80, 734-736	1.2	60

224	Superionic Conduction in Rapidly Quenched Li <sub>2</sub> S-SiS <sub>2</sub> -Li <sub>3</sub> PO <sub>4</sub> Glasses. <i>Journal of the Ceramic Society of Japan</i> , <b>1993</b> , 101, 1315-1317		60
223	Structure and properties of the Na <sub>2</sub> S <sub>2</sub> P <sub>2</sub> S <sub>5</sub> glasses and glass-ceramics prepared by mechanical milling. <i>Journal of Power Sources</i> , <b>2014</b> , 269, 260-265	8.9	54
222	Suppression of H <sub>2</sub> S gas generation from the 75Li <sub>2</sub> S <sub>2</sub> P <sub>2</sub> S <sub>5</sub> glass electrolyte by additives. <i>Journal of Materials Science</i> , <b>2013</b> , 48, 4137-4142	4.3	53
221	Rapid Quenching Technique Using Thermal-Image Furnace for Glass Preparation. <i>Journal of the American Ceramic Society</i> , <b>1981</b> , 64, C-97-C-98	3.8	53
220	All-solid-state sodium batteries using amorphous TiS <sub>3</sub> electrode with high capacity. <i>Journal of Power Sources</i> , <b>2015</b> , 275, 284-287	8.9	51
219	Electrochemical properties of all-solid-state lithium batteries with amorphous MoS <sub>3</sub> electrodes prepared by mechanical milling. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 14142-14147	13	50
218	Formation of Anatase Nanocrystals in Sol-Gel Derived TiO <sub>2</sub> -SiO <sub>2</sub> Thin Films with Hot Water Treatment. <i>Journal of Sol-Gel Science and Technology</i> , <b>2000</b> , 19, 585-588	2.3	50
217	Fine Patterning and Characterization of Gel Films Derived from Methyltriethoxysilane and Tetraethoxysilane. <i>Journal of the American Ceramic Society</i> , <b>2005</b> , 81, 2849-2852	3.8	49
216	Anatase nanocrystal-dispersed thin films via sol-gel process with hot water treatment: effects of poly(ethylene glycol) addition on photocatalytic activities of the films. <i>Journal of Materials Chemistry</i> , <b>2001</b> , 11, 2045-2048		49
215	Mechanochemical Synthesis and Anode Properties of SnO-Based Amorphous Materials. <i>Journal of the Electrochemical Society</i> , <b>1999</b> , 146, 3970-3973	3.9	49
214	Amorphous Titanium Sulfide Electrode for All-solid-state Rechargeable Lithium Batteries with High Capacity. <i>Chemistry Letters</i> , <b>2012</b> , 41, 886-888	1.7	48
213	All-solid-state lithium secondary batteries with metal-sulfide-coated LiCoO <sub>2</sub> prepared by thermal decomposition of dithiocarbamate complexes. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 15247		46
212	Glass Electrolytes with High Ion Conductivity and High Chemical Stability in the System LiI-Li <sub>2</sub> O-Li <sub>2</sub> S-P <sub>2</sub> S <sub>5</sub> . <i>Electrochemistry</i> , <b>2013</b> , 81, 428-431	1.2	46
211	Mechanical properties of sulfide glasses in all-solid-state batteries. <i>Journal of the Ceramic Society of Japan</i> , <b>2018</b> , 126, 719-727	1	46
210	Evaluation of mechanical properties of Na <sub>2</sub> S <sub>2</sub> P <sub>2</sub> S <sub>5</sub> sulfide glass electrolytes. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 22061-22065	13	45
209	Development of sulfide glass-ceramic electrolytes for all-solid-state lithium rechargeable batteries. <i>Journal of Solid State Electrochemistry</i> , <b>2010</b> , 14, 1761-1767	2.6	44
208	Liquid-phase sintering of highly Na <sup>+</sup> ion conducting Na <sub>3</sub> Zr <sub>2</sub> Si <sub>2</sub> PO <sub>12</sub> ceramics using Na <sub>3</sub> BO <sub>3</sub> additive. <i>Journal of the American Ceramic Society</i> , <b>2018</b> , 101, 1255-1265	3.8	44
207	Effects of the microstructure of solid-electrolyte-coated LiCoO <sub>2</sub> on its discharge properties in all-solid-state lithium batteries. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 10658-10668	13	43

206	Preparation of Transparent Thick Films by Electrophoretic Sol-Gel Deposition Using Phenyltriethoxysilane-Derived Particles. <i>Journal of the American Ceramic Society</i> , <b>2005</b> , 81, 2501-2503	3.8	42
205	Mechanochemical Synthesis and Characterization of Metastable Hexagonal LiSnS Solid Electrolyte. <i>Inorganic Chemistry</i> , <b>2018</b> , 57, 9925-9930	5.1	40
204	Thermal Softening Behavior and Application to Transparent Thick Films of Poly(benzylsilsesquioxane) Particles Prepared by the Sol-Gel Process. <i>Journal of the American Ceramic Society</i> , <b>2001</b> , 84, 775-780	3.8	40
203	Electrochemical Properties for the Lithium Ion Conductive (100-x) (0.6Li <sub>2</sub> S - 0.4SiS <sub>2</sub> ) - xLi <sub>4</sub> SiO <sub>4</sub> Oxyulfide Glasses. <i>Journal of the Electrochemical Society</i> , <b>1999</b> , 146, 3472-3475	3.9	40
202	Synthesis of monodispersed silica nanoparticles with high concentration by the Stober process. <i>Journal of Sol-Gel Science and Technology</i> , <b>2013</b> , 68, 341-345	2.3	39
201	Formation of Anatase Nanocrystals-Precipitated Silica Coatings on Plastic Substrates by the Sol-Gel Process with Hot Water Treatment. <i>Journal of Sol-Gel Science and Technology</i> , <b>2003</b> , 27, 61-69	2.3	39
200	A novel discharge-charge mechanism of a SP2S5 composite electrode without electrolytes in all-solid-state Li/S batteries. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 11224-11228	13	38
199	Preparation and ionic conductivity of (100-x)(0.8Li <sub>2</sub> S-0.2P <sub>2</sub> S <sub>5</sub> )-xLiI glass-ceramic electrolytes. <i>Journal of Solid State Electrochemistry</i> , <b>2013</b> , 17, 675-680	2.6	38
198	Effects of Addition of Poly(ethylene glycol) on the Formation of Anatase Nanocrystals in SiO <sub>2</sub> -TiO <sub>2</sub> Gel Films with Hot Water Treatment. <i>Chemistry of Materials</i> , <b>2001</b> , 13, 2144-2149	9.6	38
197	Electrical and mechanical properties of glass and glass-ceramic electrolytes in the system Li <sub>3</sub> BO <sub>3</sub> -Li <sub>2</sub> SO <sub>4</sub> . <i>Journal of the Ceramic Society of Japan</i> , <b>2017</b> , 125, 433-437	1	37
196	Formation of Li <sup>+</sup> superionic crystals from the Li <sub>2</sub> S-P <sub>2</sub> S <sub>5</sub> melt-quenched glasses. <i>Journal of Materials Science</i> , <b>2008</b> , 43, 1885-1889	4.3	37
195	Morphological Effect on Reaction Distribution Influenced by Binder Materials in Composite Electrodes for Sheet-type All-Solid-State Lithium-Ion Batteries with the Sulfide-based Solid Electrolyte. <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 3292-3298	3.8	35
194	Highly Utilized Lithium Sulfide Active Material by Enhancing Conductivity in All-solid-state Batteries. <i>Chemistry Letters</i> , <b>2015</b> , 44, 1664-1666	1.7	35
193	All-solid-state batteries with Li <sub>2</sub> O-Li <sub>2</sub> S-P <sub>2</sub> S <sub>5</sub> glass electrolytes synthesized by two-step mechanical milling. <i>Journal of Solid State Electrochemistry</i> , <b>2013</b> , 17, 2551-2557	2.6	34
192	Preparation of Highly Lithium-Ion Conductive 80Li <sub>2</sub> S-20P <sub>2</sub> S <sub>5</sub> Thin-Film Electrolytes Using Pulsed Laser Deposition. <i>Journal of the American Ceramic Society</i> , <b>2010</b> , 93, 765-768	3.8	34
191	ALL-SOLID-STATE LITHIUM SECONDARY, BATTERIES USING SULFIDE-BASED GLASS CERAMIC ELECTROLYTES. <i>Functional Materials Letters</i> , <b>2008</b> , 01, 31-36	1.2	34
190	The crystal structure and sodium disorder of high-temperature polymorph -Na <sub>3</sub> PS <sub>4</sub> . <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 25025-25030	13	32
189	Direct observation of a non-crystalline state of LiS-PS solid electrolytes. <i>Scientific Reports</i> , <b>2017</b> , 7, 4142	4.9	31

- 188 Synthesis of Needlelike and Platelike SnS Active Materials in High-Boiling Solvents and Their Application to All-Solid-State Lithium Secondary Batteries. *Crystal Growth and Design*, **2011**, 11, 3900-3904 31
- 187 Preparation of Thick Silica Films by the Electrophoretic Sol-Gel Deposition on a Stainless Steel Sheet. *Journal of the Ceramic Society of Japan*, **1995**, 103, 78-80 31
- 186 Structure analyses using X-ray photoelectron spectroscopy and X-ray absorption near edge structure for amorphous MS3 (M: Ti, Mo) electrodes in all-solid-state lithium batteries. *Journal of Power Sources*, **2016**, 313, 104-111 8.9 30
- 185 Sodium-ion Conducting Na3PS4 Electrolyte Synthesized via a Liquid-phase Process Using N-Methylformamide. *Chemistry Letters*, **2015**, 44, 884-886 1.7 29
- 184 Thermoplastic and thermosetting properties of polyphenylsilsesquioxane particles prepared by two-step acid-base catalyzed sol-gel process. *Journal of Sol-Gel Science and Technology*, **2007**, 41, 217-222 3 29
- 183 Anti-Reflective Coatings of Flowerlike Alumina on Various Glass Substrates by the Sol-Gel Process with the Hot Water Treatment. *Journal of Sol-Gel Science and Technology*, **2005**, 33, 117-120 2.3 29
- 182 Photocatalytic Decomposition of Acetaldehyde with Anatase Nanocrystals-Dispersed Silica Films Prepared by the Sol-Gel Process with Hot Water Treatment. *Journal of Sol-Gel Science and Technology*, **2001**, 22, 41-46 2.3 29
- 181 High-Temperature Performance of All-Solid-State Lithium-Metal Batteries Having Li/Li3PS4 Interfaces Modified with Au Thin Films. *Journal of the Electrochemical Society*, **2018**, 165, A1950-A1954 3.9 28
- 180 Direct Formation of Mg/Al-Layered Double-Hydroxide Films on Glass Substrate by the Sol-Gel Method With Hot Water Treatment. *Journal of the American Ceramic Society*, **2007**, 90, 1940-1942 3.8 28
- 179 Thermal Softening Behavior of Poly(phenylsilsesquioxane) and Poly(benzylsilsesquioxane) Particles.. *Journal of the Ceramic Society of Japan*, **2000**, 108, 830-835 28
- 178 Evaluation of young's modulus of Li2S-B2S5-B2O5 oxysulfide glass solid electrolytes. *Journal of the Ceramic Society of Japan*, **2014**, 122, 552-555 1 27
- 177 Preparation of Thick Films by Electrophoretic Deposition Using Surface Modified Silica Particles Derived from Sol-Gel Method. *Journal of Sol-Gel Science and Technology*, **1999**, 15, 243-249 2.3 27
- 176 Preparation of LiCoPO4 for Lithium Battery Cathodes through Solution Process. *Electrochemistry*, **2003**, 71, 1192-1195 1.2 26
- 175 Preparation and Characterization of Highly Proton-Conductive Composites Composed of Phosphoric Acid-Doped Silica Gel and Styrene-Ethylene-Butylene-Styrene Elastomer. *Journal of Sol-Gel Science and Technology*, **2000**, 17, 61-69 2.3 26
- 174 Transition range viscosity of rapidly quenched Bi-Ca-Sr-Cu-O glasses. *Applied Physics Letters*, **1989**, 54, 2268-2270 3.4 26
- 173 Crystallization kinetics for quenched Bi-Ca-Sr-Cu-O glasses. *Applied Physics Letters*, **1989**, 55, 600-602 3.4 26
- 172 Vitrification and Crystallization Processes of High-Tc Superconducting Oxides in the System Bi-Ca-Sr-Cu-O. *Journal of the Ceramic Society of Japan*, **1989**, 97, 334-338 26
- 171 Structural Investigation of Rapidly Quenched Li2O-B2O3 Glasses by Raman Spectroscopy. *Journal of the Ceramic Association Japan*, **1986**, 94, 464-469 26



170	Structure Analyses of Amorphous MoS <sub>3</sub> Active Materials in All-solid-state Lithium Batteries. <i>Electrochemistry</i> , <b>2015</b> , 83, 889-893	1.2	25
169	Formation of Li <sub>2</sub> S-P <sub>2</sub> S <sub>5</sub> Solid Electrolyte from N-Methylformamide Solution. <i>Chemistry Letters</i> , <b>2013</b> , 42, 1435-1437	1.7	25
168	Preparation of Thick Silica Films by the Electrophoretic Sol-Gel Deposition Using a Cationic Polymer Surfactant. <i>Journal of the Ceramic Society of Japan</i> , <b>1997</b> , 105, 569-572		25
167	Preparation Conditions and Morphology of Superconducting Fine Particles in the Bi-Ca-Sr-Cu-O System Prepared by Spray Pyrolysis. <i>Journal of the American Ceramic Society</i> , <b>1991</b> , 74, 2117-2122	3.8	25
166	X-ray photoelectron spectroscopy for sulfide glass electrolytes in the systems Li <sub>2</sub> S-P <sub>2</sub> S <sub>5</sub> and Li <sub>2</sub> S-P <sub>2</sub> S <sub>5</sub> -LiBr. <i>Journal of the Ceramic Society of Japan</i> , <b>2016</b> , 124, 597-601	1	24
165	Characterization of sulfur nanocomposite electrodes containing phosphorus sulfide for high-capacity all-solid-state Na/S batteries. <i>Solid State Ionics</i> , <b>2017</b> , 311, 6-13	3.3	24
164	All-solid-state Lithium Secondary Batteries Using Li <sub>2</sub> S-P <sub>2</sub> S <sub>5</sub> Solid Electrolytes and LiFePO <sub>4</sub> Electrode Particles with Amorphous Surface Layer. <i>Chemistry Letters</i> , <b>2012</b> , 41, 260-261	1.7	24
163	Mechanochemically Prepared LiS-PS-LiBH Solid Electrolytes with an Argyrodite Structure. <i>ACS Omega</i> , <b>2018</b> , 3, 5453-5458	3.9	24
162	<sup>29</sup> Si and <sup>31</sup> P MAS-NMR Spectra of Li <sub>2</sub> S-SiS <sub>2</sub> -Li <sub>3</sub> PO <sub>4</sub> Rapidly Quenched Glasses. <i>Journal of the American Ceramic Society</i> , <b>1996</b> , 79, 349-352	3.8	23
161	Mixed Anion Effect in Conductivity of Rapidly Quenched Li <sub>4</sub> SiO <sub>4</sub> -Li <sub>3</sub> BO <sub>3</sub> Glasses. <i>Journal of the Ceramic Association Japan</i> , <b>1987</b> , 95, 197-201		23
160	Confocal Microscopy for Dynamic Changes of Li Ion Conduction Path in Graphite Electrode Layers of All-Solid-State Batteries. <i>Journal of Physical Chemistry Letters</i> , <b>2020</b> , 11, 900-904	6.4	22
159	Crystallization behavior of the LiS-PS glass electrolyte in the LiNiMnCoO positive electrode layer. <i>Scientific Reports</i> , <b>2018</b> , 8, 6214	4.9	22
158	Preparation of CoAl and NiAl layered double hydroxide thin films by a sol-gel process with hot water treatment. <i>Journal of Sol-Gel Science and Technology</i> , <b>2012</b> , 62, 111-116	2.3	22
157	Formation of TiO <sub>2</sub> (B) Nanocrystallites in Sol-Gel-Derived SiO <sub>2</sub> -TiO <sub>2</sub> Film. <i>Journal of the American Ceramic Society</i> , <b>2004</b> , 82, 3248-3250	3.8	22
156	Structural Investigation of 95(0.6Li <sub>2</sub> S <sub>0.4</sub> SiS <sub>2</sub> ) <sub>5</sub> Li <sub>4</sub> SiO <sub>4</sub> Oxysulfide Glass by Using X-ray Photoelectron Spectroscopy. <i>Journal of the American Ceramic Society</i> , <b>2005</b> , 81, 1305-1309	3.8	22
155	Amorphous LiCoO <sub>2</sub> -Li <sub>2</sub> SO <sub>4</sub> active materials: Potential positive electrodes for bulk-type all-oxide solid-state lithium batteries with high energy density. <i>Journal of Power Sources</i> , <b>2017</b> , 348, 1-8	8.9	21
154	Hot-water treatment of sol-gel derived SiO <sub>2</sub> -TiO <sub>2</sub> microparticles and application to electrophoretic deposition for thick films. <i>Journal of Materials Science</i> , <b>2006</b> , 41, 8101-8108	4.3	21
153	Preparation of Thick Silica Films by Combined Sol-Gel and Electrophoretic Deposition Methods. <i>Journal of the Ceramic Society of Japan</i> , <b>1994</b> , 102, 336-340		21

- 152 Preparation of Sodium Ion Conductive Na<sub>10</sub>GeP<sub>2</sub>S<sub>12</sub> Glass-ceramic Electrolytes. *Chemistry Letters*, **2018**, 47, 13-15 1.7 20
- 151 Photocatalytic Micropatterning of Transparent Ethylsilsesquioxane/Titania Hybrid Films. *Chemistry of Materials*, **2002**, 14, 2693-2700 9.6 20
- 150 Preparation of Titania Thick Films by Electrophoretic Sol-Gel Deposition Using Hydrothermally Treated Particles. *Journal of the Ceramic Society of Japan*, **1998**, 106, 1034-1036 20
- 149 Mechanochemical synthesis and crystallization of Li<sub>3</sub>BO<sub>3</sub>-Li<sub>2</sub>CO<sub>3</sub> glass electrolytes. *Journal of the Ceramic Society of Japan*, **2016**, 124, 915-919 1 19
- 148 Changes in Porosity and Amounts of Adsorbed Water in Sol-Gel Derived Porous Silica Films with Heat Treatment. *Journal of Sol-Gel Science and Technology*, **2001**, 20, 129-134 2.3 19
- 147 Temperature-time-transformation diagrams for crystallization process of rapidly quenched Bi-Pb-Ca-Sr-Cu-O glasses. *Applied Physics Letters*, **1990**, 57, 195-197 3.4 19
- 146 Aqueous solution synthesis of Na<sub>3</sub>SbS<sub>4</sub>/Na<sub>2</sub>WS<sub>4</sub> superionic conductors. *Journal of Materials Chemistry A*, **2020**, 8, 1947-1954 13 19
- 145 Visualization and Control of Chemically Induced Crack Formation in All-Solid-State Lithium-Metal Batteries with Sulfide Electrolyte. *ACS Applied Materials & Interfaces*, **2021**, 13, 5000-5007 9.5 19
- 144 Sulfur-Based Composite Electrode with Interconnected Mesoporous Carbon for All-Solid-State Lithium/Sulfur Batteries. *Energy Technology*, **2019**, 7, 1900077 3.5 18
- 143 Preparation and electrochemical characterization of (100 ± 0.3P2S<sub>5</sub>)/LiBr glass/ceramic electrolytes. *Materials for Renewable and Sustainable Energy*, **2014**, 3, 1 4.7 18
- 142 Electrochemical properties of all-solid-state lithium batteries with amorphous titanium sulfide electrodes prepared by mechanical milling. *Journal of Solid State Electrochemistry*, **2013**, 17, 2697-2701 2.6 18
- 141 Characterization of Li<sub>2</sub>S/P<sub>2</sub>S<sub>5</sub>/Cu composite electrode for all-solid-state lithium secondary batteries. *Journal of Materials Science*, **2010**, 45, 377-381 4.3 18
- 140 Growth mechanism of large monodispersed silica particles prepared from tetraethoxysilane in the presence of sodium dodecyl sulfate. *Journal of Sol-Gel Science and Technology*, **1997**, 9, 25-31 2.3 18
- 139 Lowering of Preparation Temperatures of Anatase Nanocrystals-Dispersed Coatings via Sol-Gel Process with Hot Water Treatment. *Journal of the American Ceramic Society*, **2005**, 88, 1421-1426 3.8 18
- 138 Heat-treatment effect of dispersed particles on the preparation of thick silica films by using electrophoretic sol-gel deposition. *Journal of Materials Science*, **1996**, 31, 6529-6533 4.3 18
- 137 Infrared Spectra of Rapidly Quenched Glasses in the Systems Li<sub>2</sub>O-RO-Nb<sub>2</sub>O<sub>5</sub> (R=Ba, Ca, Mg). *Journal of the American Ceramic Society*, **1983**, 66, 117-119 3.8 18
- 136 Preparation of Rapidly Quenched Glasses in Pseudobinary Systems Composed of Lithium Ortho-Oxosalts. *Journal of the American Ceramic Society*, **1983**, 66, c210-c211 3.8 17
- 135 Raman Spectroscopy for LiNi<sub>1/3</sub>Mn<sub>1/3</sub>Co<sub>1/3</sub>O<sub>2</sub> Composite Positive Electrodes in All-Solid-State Lithium Batteries. *Electrochemistry*, **2016**, 84, 812-814 1.2 17



- 134 A reversible oxygen redox reaction in bulk-type all-solid-state batteries. *Science Advances*, **2020**, 6, eaax7236 16
- 133 Phosphosilicate Gels as a Solid State Proton Conductor at Medium Temperature and Low Humidity.. *Journal of the Ceramic Society of Japan*, **2002**, 110, 131-134 16
- 132 Transformation-Range Viscosity and Thermal Property of Sodium Silicate Glasses. *Journal of the Ceramic Society of Japan*, **1993**, 101, 1018-1020 16
- 131 Preparation of Copolymerized Phenylsilsesquioxane-Benzylsilsesquioxane Particles. *Journal of Sol-Gel Science and Technology*, **2002**, 23, 247-252 2.3 15
- 130 Formation of Frozen  $\beta$ -AgI in Twin-Roller-Quenched AgI-Ag<sub>2</sub>O-MxO<sub>y</sub> (MxO<sub>y</sub>= WO<sub>3</sub>, V<sub>2</sub>O<sub>5</sub>) Glasses at Ambient Temperature. *Journal of the American Ceramic Society*, **1993**, 76, 235-237 3.8 15
- 129 Electrochromic Properties of Sputtered Amorphous Films in the Systems WO<sub>3</sub> - Nb<sub>2</sub>O<sub>5</sub> and Li<sub>2</sub>O - WO<sub>3</sub> - Nb<sub>2</sub>O<sub>5</sub>. *Journal of the Electrochemical Society*, **1986**, 133, 1963-1966 3.9 15
- 128 Li<sub>4</sub>GeS<sub>4</sub>-Li<sub>3</sub>PS<sub>4</sub> electrolyte thin films with highly ion-conductive crystals prepared by pulsed laser deposition. *Journal of the Ceramic Society of Japan*, **2014**, 122, 341-345 1 14
- 127 Preparation of Fast Lithium Ion Conducting Glasses in the System Li<sub>2</sub>S-Bi<sub>2</sub>S<sub>3</sub>-Li<sub>3</sub>N. *Journal of Physical Chemistry B*, **1999**, 103, 4029-4031 3.4 14
- 126 Preparation and characterization of rapidly quenched glasses in the systems R<sub>2</sub>O-WO<sub>3</sub> (R=Li, Na, K). *Journal of Materials Science*, **1982**, 17, 3593-3597 4.3 14
- 125 Preparation and Properties of Quenched Li<sub>2</sub>O-BaO-Nb<sub>2</sub>O<sub>5</sub> Glasses. *Journal of the American Ceramic Society*, **1982**, 65, 575-577 3.8 14
- 124 Thermal behavior and microstructures of cathodes for liquid electrolyte-based lithium batteries. *Scientific Reports*, **2018**, 8, 15613 4.9 14
- 123 Preparation of amorphous TiS<sub>x</sub> thin film electrodes by the PLD method and their application to all-solid-state lithium secondary batteries. *Journal of Materials Science*, **2012**, 47, 6601-6606 4.3 13
- 122 SnP<sub>0.94</sub> active material synthesized in high-boiling solvents for all-solid-state lithium batteries. *Journal of the Ceramic Society of Japan*, **2010**, 118, 620-622 1 13
- 121 Micropatterning of Sol-Gel Derived Thin Films Using Hydrophobic-Hydrophilic Patterned Surface. *Journal of Sol-Gel Science and Technology*, **2004**, 31, 299-302 2.3 13
- 120 Micropatterning on Methylsilsesquioxane-Phenylsilsesquioxane Thick Films by the Sol-Gel Method. *Journal of the American Ceramic Society*, **2000**, 83, 3211-3213 3.8 13
- 119 Synthesis of Sulfide Solid Electrolytes through the Liquid Phase: Optimization of the Preparation Conditions. *ACS Omega*, **2020**, 5, 26287-26294 3.9 13
- 118 Quantitative analysis of crystallinity in an argyrodite sulfide-based solid electrolyte synthesized solution processing.. *RSC Advances*, **2019**, 9, 14465-14471 3.7 12
- 117 Influence of copolymerization with alkyltrialkoxysilanes on condensation and thermal behaviour of poly(phenylsilsesquioxane) particles. *Journal of Sol-Gel Science and Technology*, **2010**, 53, 31-37 2.3 12

- <sup>116</sup> Investigation of the Suppression of Dendritic Lithium Growth with a Lithium-Iodide-Containing Solid Electrolyte. *Chemistry of Materials*, **2021**, 33, 4907-4914 9.6 12
- <sup>115</sup> Oxide-Based Composite Electrolytes Using NaZrSiPO/NaPS Interfacial Ion Transfer. *ACS Applied Materials & Interfaces*, **2018**, 10, 19605-19614 9.5 12
- <sup>114</sup> Electrochemical Properties of All-solid-state Lithium Batteries with Amorphous FeS<sub>x</sub>-based Composite Positive Electrodes Prepared via Mechanochemistry. *Electrochemistry*, **2018**, 86, 175-178 1.2 11
- <sup>113</sup> Mechanochemical synthesis of SnO-B<sub>2</sub>O<sub>3</sub> glassy anode materials for rechargeable lithium batteries. *Journal of Materials Science*, **2004**, 39, 5361-5364 4.3 11
- <sup>112</sup> Preparation and Structure of Lithium-Ion-Conducting Mixed-Anion Glasses in the System LiBO<sub>2</sub>-LiBS<sub>2</sub>. *Journal of the American Ceramic Society*, **1988**, 71, 766-769 3.8 11
- <sup>111</sup> Glass Formation by Rapid Quenching in Lithium Silicates Containing Large Amounts of Li<sub>2</sub>O. *Journal of the Ceramic Association Japan*, **1985**, 93, 581-584 11
- <sup>110</sup> All-solid-state sodium-sulfur battery showing full capacity with activated carbon MSP20-sulfur-Na<sub>3</sub>SbS<sub>4</sub> composite. *Electrochemistry Communications*, **2020**, 116, 106741 5.1 11
- <sup>109</sup> Preparation conditions of NiS active material in high-boiling solvents for all-solid-state lithium secondary batteries. *New Journal of Chemistry*, **2014**, 38, 1731-1737 3.6 10
- <sup>108</sup> Preparation of Titania Nanosheet-Precipitated Coatings on Glass Substrates by Treating SiO<sub>2</sub>-TiO<sub>2</sub> Gel Films with Hot Water Under Vibrations. *Journal of Sol-Gel Science and Technology*, **2004**, 31, 229-233 2.3 10
- <sup>107</sup> Dispersity and Size of Silica Particles Constructing Thick Films Prepared by Electrophoretic Sol-Gel Deposition. *Journal of the Ceramic Society of Japan*, **1995**, 103, 743-745 10
- <sup>106</sup> Improved electrochemical performance of amorphous TiS<sub>3</sub> electrodes compared to its crystal for all-solid-state rechargeable lithium batteries. *Journal of the Ceramic Society of Japan*, **2016**, 124, 242-246<sup>1</sup> 10
- <sup>105</sup> Mechanochemical synthesis and characterization of amorphous Li<sub>2</sub>CN<sub>2</sub> as a lithium ion conductor. *Journal of the Ceramic Society of Japan*, **2019**, 127, 518-520 1 9
- <sup>104</sup> Bulk-type All-solid-state Lithium Secondary Batteries Using Highly Ion-conductive Sulfide Solid Electrolyte Thin Films. *Electrochemistry*, **2014**, 82, 591-594 1.2 9
- <sup>103</sup> Bulk-Type All-Solid-State Lithium Secondary Battery with Li<sub>2</sub>S-P<sub>2</sub>S<sub>5</sub> Thin-Film Separator. *Electrochemistry*, **2012**, 80, 839-841 1.2 9
- <sup>102</sup> Effects of Phenyltriethoxysilane Concentration in Starting Solutions on Thermal Properties of Polyphenylsilsesquioxane Particles Prepared by a Two-Step Acid-Base Catalyzed Sol-Gel Process. *Journal of the Ceramic Society of Japan*, **2007**, 115, 131-135 9
- <sup>101</sup> Formation of convex shaped poly(phenylsilsesquioxane) micropatterns on indium tin oxide substrates with hydrophobic-hydrophilic patterns using the electrophoretic sol-gel deposition method. *Journal of Materials Research*, **2006**, 21, 1255-1260 2.5 9
- <sup>100</sup> Micropatterning of Inorganic-Organic Hybrid Thick Films from Vinyltriethoxysilane. *Journal of the Ceramic Society of Japan*, **2006**, 114, 125-127 9
- <sup>99</sup> Amorphous solid electrolytes in the system Li<sub>2</sub>S-Al<sub>2</sub>S<sub>3</sub>-SiS<sub>2</sub> prepared by mechanical milling. *Journal of Materials Science*, **2004**, 39, 5125-5127 4.3 9

98	Crystallization Kinetics of $\beta$ -AgI in Ag I-Based Silver Orthoborate Glasses. <i>Journal of the American Ceramic Society</i> , <b>1995</b> , 78, 460-464	3.8	9
97	Phase Transformation and Lattice Strain of Alpha-AgI Stabilized in Superionic Glass. <i>Journal of the Electrochemical Society</i> , <b>1996</b> , 143, 687-691	3.9	9
96	Relationship between Average Coordination Number and Fragility of Sodium Borate Glasses. <i>Journal of the Ceramic Society of Japan</i> , <b>1995</b> , 103, 398-400		9
95	Amorphization of Sodium Cobalt Oxide Active Materials for High-Capacity All-Solid-State Sodium Batteries. <i>Chemistry of Materials</i> , <b>2018</b> , 30, 6998-7004	9.6	9
94	Amorphous Ni-Rich $\text{Li}(\text{Ni}_{1-x}\text{Mn}_x\text{Co}_x)\text{O}_2/\text{Li}_2\text{SO}_4$ Positive Electrode Materials for Bulk-Type All-Oxide Solid-State Batteries. <i>Advanced Materials Interfaces</i> , <b>2019</b> , 6, 1802016	4.6	8
93	Amorphous $\text{LiCoO}_2$ -based Positive Electrode Active Materials with Good Formability for All-Solid-State Rechargeable Batteries. <i>MRS Advances</i> , <b>2018</b> , 3, 1319-1327	0.7	8
92	Structural Changes in $\text{RSiO}_3/2\text{-TiO}_2$ Hybrid Films with UV Irradiation and Their Photocatalytic Micropatterning. <i>Journal of the Ceramic Society of Japan</i> , <b>2005</b> , 113, 519-524		8
91	Formation Process of $60\text{Li}_2\text{S}-40\text{SiS}_2$ Amorphous Materials with High Lithium Ion Conductivity Prepared by Mechanical Milling.. <i>Journal of the Ceramic Society of Japan</i> , <b>2000</b> , 108, 973-978		8
90	Proton Conduction of Acid/Salt Doped Silica Gels. <i>Journal of the Ceramic Society of Japan</i> , <b>1995</b> , 103, 189-190		8
89	Structure and Properties of Rapidly Quenched $\text{Li}_2\text{O-Al}_2\text{O}_3\text{-Nb}_2\text{O}_5$ Glasses. <i>Journal of the American Ceramic Society</i> , <b>1983</b> , 66, 890-892	3.8	8
88	Metastable Materials for All-Solid-State Batteries. <i>Electrochemistry</i> , <b>2019</b> , 87, 247-250	1.2	7
87	Highly Stable $\text{Li/Li}_3\text{BO}_3/\text{Li}_2\text{SO}_4$ Interface and Application to Bulk-Type All-Solid-State Lithium Metal Batteries. <i>ACS Applied Energy Materials</i> , <b>2019</b> , 2, 3042-3048	6.1	7
86	Effects of Various Additives during Hot Water Treatment on the Formation of Alumina Thin Films for Superhydrophobic Surfaces. <i>Journal of Adhesion Science and Technology</i> , <b>2008</b> , 22, 387-394	2	7
85	External-Field Hot-Water Treatments of Sol-Gel Derived $\text{SiO}_2\text{-TiO}_2$ Coatings for Surface Nanostructure Control-A Review-. <i>Journal of the Ceramic Society of Japan</i> , <b>2006</b> , 114, 26-35		7
84	Preparation and characterization of copolymerized methylsilsesquioxane-benzylsilsesquioxane microparticles for electrophoretic sol-gel deposition. <i>Journal of Materials Science</i> , <b>2004</b> , 39, 903-909	4.3	7
83	Preparation of Proton Conductive Inorganic-Organic Hybrid Films Using Epoxycyclohexylethyltrimethoxysilane and Orthophosphoric Acid. <i>Journal of Sol-Gel Science and Technology</i> , <b>2004</b> , 31, 365-368	2.3	7
82	Effect of Heat Treatment on Rapidly Quenched AgI-Based Silver Orthoborate Glasses Containing Large Amounts of AgI. <i>Journal of the American Ceramic Society</i> , <b>2005</b> , 80, 3209-3212	3.8	7
81	Preparation of thick silica films in the presence of poly(acrylic acid) by using electrophoretic sol-gel deposition. <i>Journal of Sol-Gel Science and Technology</i> , <b>1996</b> , 7, 211-216	2.3	7

- 80 Formation process of high  $T_c$  superconducting Bi-Pb-Ca-Sr-Cu-O thick films via melt solidification. *Applied Physics Letters*, **1990**, 57, 2597-2599 3.4 7
- 79 Proton Conductive Inorganic-Organic Hybrid Membranes as an Electrolyte for Fuel Cells Prepared from 3-Glycidoxypropyltrimethoxysilane and Orthophosphoric Acid. *Electrochemistry*, **2002**, 70, 998-1000 1.2 7
- 78 Electrode performance of amorphous  $\text{MoS}_3$  in all-solid-state sodium secondary batteries. *Journal of Power Sources Advances*, **2021**, 10, 100061 3.3 7
- 77 Formation of  $\text{ZnAl}$  layered double hydroxide thin films intercalated with sulfonated spiropyran. *Research on Chemical Intermediates*, **2009**, 35, 949-956 2.8 6
- 76 All-solid-state rechargeable lithium batteries using  $\text{SnX-P}_2\text{X}_5$  ( $\text{X} = \text{S}$  and  $\text{O}$ ) amorphous negative electrodes. *Research on Chemical Intermediates*, **2006**, 32, 497-506 2.8 6
- 75 Characterization and Electrophoretic Deposition of Poly(Phenylsilsesquioxane)/Titania Hybrid Particles Prepared by the Sol-Gel Method. *Journal of the American Ceramic Society*, **2006**, 89, 3107-3111 3.8 6
- 74 Micropatterning of Transparent Poly(Benzylsilsesquioxane) Thick Films Prepared by the Electrophoretic Sol-Gel Deposition Process Using a Hydrophobic/Hydrophilic-Patterned Surface. *Journal of the American Ceramic Society*, **2006**, 89, 3832-3835 3.8 6
- 73 Proton-Conductive Composites Composed of Phosphoric Acid-Doped Silica Gel and Organic Polymers with Sulfo Groups.. *Journal of the Ceramic Society of Japan*, **2000**, 108, 45-50 6
- 72 Preparation and Characterization of Cation-Substituted  $\text{Na}_3\text{SbS}_4$  Solid Electrolytes. *ACS Applied Energy Materials*, **2020**, 3, 11706-11712 6.1 6
- 71 Amorphous  $\text{Li}_2\text{O}$ - $\text{SiO}_2$  Solid Electrolytes Compatible to Li Metal. *Electrochemistry*, **2021**, 89, 334-336 1.2 6
- 70 Preparation and characterization of  $\text{Na}_3\text{BO}_3$ - $\text{Na}_2\text{SO}_4$  glass electrolytes with  $\text{Na}^+$  ion conductivity prepared by a mechanical milling techniquePeer review under responsibility of The Ceramic Society of Japan and the Korean Ceramic Society.View all notes. *Journal of Asian Ceramic Societies*, **2016**, 4, 6-10 2.4 6
- 69 Mechanochemical Synthesis of Na-Sb Alloy Negative Electrodes and Their Application to All-solid-state Sodium Batteries. *Electrochemistry*, **2019**, 87, 289-293 1.2 5
- 68 Liquid-phase step-by-step growth of an iron cyanide coordination framework on  $\text{LiCoO}_2$  particle surfaces. *Dalton Transactions*, **2015**, 44, 15279-85 4.3 5
- 67 Reaction uniformity visualized by Raman imaging in the composite electrode layers of all-solid-state lithium batteries. *Physical Chemistry Chemical Physics*, **2020**, 22, 13271-13276 3.6 5
- 66 High-rate operation of sulfur/mesoporous activated carbon composite electrode for all-solid-state lithium-sulfur batteries. *Journal of the Ceramic Society of Japan*, **2020**, 128, 233-237 1 5
- 65 Synthesis of monodispersed lithium silicate particles using the sol-gel method. *Journal of Sol-Gel Science and Technology*, **2013**, 65, 41-45 2.3 5
- 64 Preparation of Composites with  $\text{LiCoPO}_4$  Electrode and  $\text{LiTi}_2(\text{PO}_4)_3$  Electrolyte for Bulk-type All-solid-state Lithium Batteries. *Electrochemistry*, **2015**, 83, 898-901 1.2 5
- 63 Electrochemical performance of all-solid-state lithium secondary batteries using  $\text{Li}_4\text{Ti}_5\text{O}_{12}$  electrode and  $\text{Li}_2\text{S-P}_2\text{S}_5$  solid electrolytes. *Journal of Materials Research*, **2010**, 25, 1548-1553 2.5 5

62	Cycle Performance of All-solid-state In/LiCoO <sub>2</sub> Batteries with Li <sub>2</sub> S-P <sub>2</sub> S <sub>5</sub> Glass-ceramic Electrolytes. <i>Electrochemistry</i> , <b>2003</b> , 71, 1196-1200	1.2	5
61	Effects of Electric Field on the Formation of Titania Nanocrystals on SiO <sub>2</sub> -TiO <sub>2</sub> Gel Coatings during Hot Water Treatment. <i>Journal of the Ceramic Society of Japan</i> , <b>2005</b> , 113, 333-335		5
60	Preparation and Proton Conductivity of Surfactant-Templated Mesoporous Silica Gels Impregnated with Protonic Acids. <i>Journal of the American Ceramic Society</i> , <b>2000</b> , 83, 3004-3008	3.8	5
59	Preparation and Characterization of Amorphous Based Solid Electrolytes.. <i>Journal of the Ceramic Society of Japan</i> , <b>2001</b> , 109, 809-814		5
58	Preparation of CdS-doped Glasses from Gels Containing Diethyldithiocarbamatocadmium. <i>Journal of the American Ceramic Society</i> , <b>1995</b> , 78, 1668-1672	3.8	5
57	Transformation-Range Viscosities and Thermal Properties of AgI-Based Superionic Glasses. <i>Journal of the Ceramic Society of Japan</i> , <b>1994</b> , 102, 84-87		5
56	Liquid-phase synthesis of Li <sub>3</sub> PS <sub>4</sub> solid electrolyte using ethylenediamine. <i>Journal of Sol-Gel Science and Technology</i> , 1	2.3	5
55	Amorphous Na <sub>2</sub> TiS <sub>3</sub> as an Active Material for All-solid-state Sodium Batteries. <i>Chemistry Letters</i> , <b>2019</b> , 48, 288-290	1.7	5
54	Visualizing Local Electrical Properties of Composite Electrodes in Sulfide All-Solid-State Batteries by Scanning Probe Microscopy. <i>Journal of Physical Chemistry C</i> , <b>2021</b> , 125, 2841-2849	3.8	5
53	Sodium thiophosphate electrolyte thin films prepared by pulsed laser deposition for bulk-type all-solid-state sodium rechargeable batteries. <i>Journal of the Ceramic Society of Japan</i> , <b>2018</b> , 126, 475-481		5
52	Sulfide Electrolyte Suppressing Side Reactions in Composite Positive Electrodes for All-Solid-State Lithium Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 29228-29234	9.5	4
51	Mechanochemical synthesis of cubic rocksalt Na <sub>2</sub> TiS <sub>3</sub> as novel active materials for all-solid-state sodium secondary batteries. <i>Journal of the Ceramic Society of Japan</i> , <b>2019</b> , 127, 514-517	1	4
50	Thio-oxynitride phosphate glass electrolytes prepared by mechanical milling. <i>Journal of Materials Research</i> , <b>2015</b> , 30, 2940-2948	2.5	4
49	Chemical Bonding of Li Ions in Li <sub>7</sub> P <sub>3</sub> S <sub>11</sub> Crystal. <i>Journal of the Physical Society of Japan</i> , <b>2010</b> , 79, 65-68	1.5	4
48	Fabrication of convex-shaped polybenzylsilsesquioxane micropatterns by the electrophoretic sol-gel deposition process using indium tin oxide substrates with a hydrophobic-hydrophilic-patterned surface. <i>Journal of Sol-Gel Science and Technology</i> , <b>2007</b> , 43, 85-91	2.3	4
47	Preparation of superconducting fine particles in the Bi-(Pb)-Ca-Sr-Cu-O system using the spray-pyrolysis method. <i>Journal of Materials Science: Materials in Electronics</i> , <b>1990</b> , 1, 46-48	2.1	4
46	Preparation of Amorphous Films in the Systems Li <sub>2</sub> O-SiO <sub>2</sub> and Li <sub>2</sub> O-B <sub>2</sub> O <sub>3</sub> -SiO <sub>2</sub> by RF-Sputtering and Their Ionic Conductivity. <i>Journal of the Ceramic Association Japan</i> , <b>1987</b> , 95, 145-147		4
45	Molecular dynamics study of Li <sub>2</sub> O-SiO <sub>2</sub> melts and glasses.. <i>Transactions of the Iron and Steel Institute of Japan</i> , <b>1988</b> , 28, 852-859		4



44	Solid Electrolyte with Oxidation Tolerance Provides a High-Capacity Li <sub>2</sub> S-Based Positive Electrode for All-Solid-State Li/S Batteries. <i>Advanced Functional Materials</i> , 2106174	15.6	4
43	Fast Cationic and Anionic Redox Reactions in Li <sub>2</sub> RuO <sub>3</sub> -Li <sub>2</sub> SO <sub>4</sub> Positive Electrode Materials. <i>ACS Applied Energy Materials</i> , <b>2019</b> , 2, 1594-1599	6.1	3
42	Application of Protonic Acid-Doped Silica Gels to Electric Double-Layer Capacitors. <i>Journal of Sol-Gel Science and Technology</i> , <b>2000</b> , 19, 581-584	2.3	3
41	Preparation of Novel Lithium-Ion Conductors Composed of LiSCN - AlCl <sub>3</sub> and Silica Particles. <i>Journal of the Electrochemical Society</i> , <b>1999</b> , 146, 3539-3542	3.9	3
40	Electrochromic cell using salt-doped silica gel films as a solid electrolyte. <i>Journal of Materials Science Letters</i> , <b>1995</b> , 14, 783-783		3
39	Metal Dopants in Bi-Pb-Ca-Sr-Cu-O High-Tc Superconductor Thick Films Prepared by Melt Solidification. <i>Journal of the American Ceramic Society</i> , <b>1992</b> , 75, 231-233	3.8	3
38	High Temperature Raman Spectra of Li <sub>2</sub> O-P <sub>2</sub> O <sub>5</sub> Melts with Large Amounts of Li <sub>2</sub> O. <i>Journal of the Ceramic Society of Japan</i> , <b>1990</b> , 98, 108-109		3
37	Critical current density of Bi-Pb-Ca-Sr-Cu-O high Tc superconductors via rapidly quenched glass precursors. <i>Applied Physics Letters</i> , <b>1990</b> , 57, 2940-2941	3.4	3
36	Characteristics of a Li <sub>3</sub> BS <sub>3</sub> Thioborate Glass Electrolyte Obtained via a Mechanochemical Process. <i>ACS Applied Energy Materials</i> ,	6.1	3
35	Preparation of sodium-ion-conductive Na <sub>3</sub> SbS <sub>4</sub> Cl <sub>x</sub> solid electrolytes. <i>Journal of the Ceramic Society of Japan</i> , <b>2020</b> , 128, 641-647	1	3
34	Sulfur-Based Composite Electrode with Interconnected Mesoporous Carbon for All-Solid-State Lithium-Sulfur Batteries. <i>Energy Technology</i> , <b>2019</b> , 7, 1980393	3.5	3
33	Comparison of Sulfur Cathode Reactions between a Concentrated Liquid Electrolyte System and a Solid-State Electrolyte System by Soft X-Ray Absorption Spectroscopy. <i>ACS Applied Energy Materials</i> , <b>2021</b> , 4, 186-193	6.1	3
32	Preparation and characterization of sodium-ion conductive Na <sub>3</sub> BS <sub>3</sub> glass and glass-ceramic electrolytes. <i>Materials Advances</i> , <b>2021</b> , 2, 1676-1682	3.3	3
31	Preparation of an Amorphous 80LiCoO <sub>2</sub> -20Li <sub>2</sub> SO <sub>4</sub> Thin Film Electrode by Pulsed Laser Deposition. <i>Electrochemistry</i> , <b>2018</b> , 86, 246-249	1.2	2
30	Preparation of needle-like .ALPHA.-Fe <sub>2</sub> O <sub>3</sub> particles and influences of their morphology on the electrochemical behavior in all-solid-state lithium batteries. <i>Journal of the Ceramic Society of Japan</i> , <b>2010</b> , 118, 326-328	1	2
29	Variation of Microenvironment around Auramine O Molecules Doped in Silica Prepared from Tetramethoxysilane. <i>Journal of Sol-Gel Science and Technology</i> , <b>1997</b> , 10, 13-17	2.3	2
28	DEVELOPMENT OF LITHIUM ION CONDUCTING OXYSULFIDE GLASSES <b>2000</b> ,		2
27	Crystallization of .ALPHA.-AgI from Melt and Glass in the AgI-Ag <sub>2</sub> O-B <sub>2</sub> O <sub>3</sub> System.. <i>Journal of the Ceramic Society of Japan</i> , <b>2001</b> , 109, 757-760		2



26	Crystallization of TiO <sub>2</sub> in Sol-Gel Derived SiO <sub>2</sub> -TiO <sub>2</sub> System: Formation of TiO <sub>2</sub> (B) Nanocrystallites. <i>Materials Research Society Symposia Proceedings</i> , <b>1999</b> , 580, 213		2
25	Structure of Alkali-Dititanate Glasses. <i>Materials Transactions, JIM</i> , <b>1995</b> , 36, 828-834		2
24	Structural Investigation of a Rapidly Quenched 20Li <sub>4</sub> SiO <sub>4</sub> ·80Li <sub>2</sub> WO <sub>4</sub> Glass. <i>Journal of the American Ceramic Society</i> , <b>1989</b> , 72, 1524-1526	3.8	2
23	Microstructure and Charge/Discharge Mechanism of a Li <sub>3</sub> CuS <sub>2</sub> Positive Electrode Material for All-Solid-State Lithium-Ion Batteries. <i>ACS Applied Energy Materials</i> , <b>2021</b> , 4, 6290-6295	6.1	2
22	In situ observation of the deterioration process of sulfide-based solid electrolytes using airtight and air-flow TEM systems. <i>Microscopy (Oxford, England)</i> , <b>2021</b> , 70, 519-525	1.3	2
21	Structures and conductivities of stable and metastable LiGaS solid electrolytes.. <i>RSC Advances</i> , <b>2021</b> , 11, 25211-25216	3.7	2
20	High Rate Capability from a Graphite Anode through Surface Modification with Lithium Iodide for All-Solid-State Batteries. <i>ACS Applied Energy Materials</i> , <b>2022</b> , 5, 667-673	6.1	2
19	Soft mechanochemical synthesis and electrochemical behavior of LiVMoO <sub>6</sub> for all-solid-state lithium batteries. <i>Journal of Materials Science</i> , <b>2016</b> , 51, 3574-3584	4.3	1
18	Growth Mechanism of Large Monodispersed Silica Particles Prepared from Tetraethoxysilane in the Presence of Sodium Dodecyl Sulfate. <i>Journal of Sol-Gel Science and Technology</i> , <b>1997</b> , 9, 25-31	2.3	1
17	Microstructure of AgI-frozen composites in the AgI- Ag <sub>2</sub> O-B <sub>2</sub> O <sub>3</sub> system after heat treatment. <i>Journal of Materials Science Letters</i> , <b>1997</b> , 16, 1012-1016		1
16	Cathode Properties of Amorphous 66.7V <sub>2</sub> O <sub>5</sub> ·33.3FeOOH Powders Obtained by Mechanical Milling Technique. <i>Electrochemistry</i> , <b>2003</b> , 71, 1036-1038	1.2	1
15	Photoredox behavior of methylviologen doped in silica gel matrices. <i>Journal of Materials Chemistry</i> , <b>2000</b> , 10, 2765-2768		1
14	Influences of Preparation Conditions of Sols on Hardening Behaviors of Silica Gel Films for Micro-Patterning.. <i>Journal of the Ceramic Society of Japan</i> , <b>2000</b> , 108, 604-606		1
13	Electrical Conductivity and Determination of Mobile Ion Species in the Glasses of the System ZrF <sub>4</sub> -BaF <sub>2</sub> -LiF. <i>Journal of the Ceramic Society of Japan</i> , <b>1989</b> , 97, 1109-1115		1
12	Solid electrolytes Na <sub>10+x</sub> Sn <sub>1+x</sub> P <sub>2</sub> S <sub>12</sub> prepared via a mechanochemical process. <i>Journal of the Ceramic Society of Japan</i> , <b>2021</b> , 129, 323-328	1	1
11	Glassy oxide electrolytes in the system Li <sub>4</sub> SiO <sub>4</sub> ·Li <sub>2</sub> SO <sub>4</sub> with excellent formability. <i>Journal of the Ceramic Society of Japan</i> , <b>2021</b> , 129, 458-463	1	1
10	Solution-based sequential modification of LiCoO <sub>2</sub> particle surfaces with iron(II) oxalate nanolayers. <i>CrystEngComm</i> , <b>2017</b> , 19, 4175-4181	3.3	0
9	Characterizing the Structural Change of Na <sub>3</sub> PS <sub>4</sub> Solid Electrolytes in a Humid N <sub>2</sub> Atmosphere. <i>Journal of Physical Chemistry C</i> , <b>2022</b> , 126, 7383-7389	3.8	0

8      LithiumSulfur Battery Electrolytes **2017**, 149-194

7      Ion-exchange Synthesis of  $\text{Li}_2\text{NaPS}_4$  from  $\text{Na}_3\text{PS}_4$ . *Chemistry Letters*, **2019**, 48, 863-865      1.7

6      Characterization of quasi-solid electrolytes based on  $\text{Li}_3\text{PS}_4$  glass with organic carbonate additives. *Journal of the Ceramic Society of Japan*, **2020**, 128, 653-655      1

5      Development of Next Generation Battery Materials by Mechanochemical Process. *Journal of the Society of Powder Technology, Japan*, **2019**, 56, 452-458      0.3

4      Preparation of Fine Particles of Superconducting Oxide by Aerosol Reactor [Translated] *KONA Powder and Particle Journal*, **1990**, 8, 4-11      3.4

3      Sulfide-glass Electrolytes for All-solid-state Batteries **2021**, 1125-1134

2      Mechanochemical synthesis of amorphous  $\text{MoS}_{x/3}$  ( $x = 3, 4, 5, 6$ , and 7) electrode for all-solid-state sodium battery. *Journal of the Ceramic Society of Japan*, **2022**, 130, 308-312      1

1      Crystalline precursor derived from  $\text{Li}_3\text{PS}_4$  and ethylenediamine for ionic conductors. *Journal of Sol-Gel Science and Technology*, **2021**, 1, 1-10      2.3