

Takayuki Komatsu

List of Publications by Year in descending order

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papers

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docs citations

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times ranked

3184
citing authors

#	ARTICLE	IF	CITATIONS
1	Classification of Simple Oxides: A Polarizability Approach. Journal of Solid State Chemistry, 2002, 163, 100-112.	2.9	362
2	Electronic polarizability, optical basicity and non-linear optical properties of oxide glasses. Journal of Non-Crystalline Solids, 1999, 249, 160-179.	3.1	355
3	Updated definition of glass-ceramics. Journal of Non-Crystalline Solids, 2018, 501, 3-10.	3.1	248
4	Optical properties of transparent glass-ceramics in K_2O - Nb_2O_5 - TeO_2 glasses. Journal of Non-Crystalline Solids, 1995, 189, 16-24.	3.1	200
5	Classification of oxide glasses: A polarizability approach. Journal of Solid State Chemistry, 2005, 178, 831-846.	2.9	176
6	High-Tc Superconducting Glass Ceramics Based on the Bi-Ca-Sr-Cu-O System. Japanese Journal of Applied Physics, 1988, 27, L550-L552.	1.5	150
7	Properties and crystallization behaviors of TeO_2 - $LiNbO_3$ glasses. Journal of Non-Crystalline Solids, 1991, 135, 105-113.	3.1	142
8	Large second-order optical nonlinearities of fresnoite-type crystals in transparent surface-crystallized glasses. Journal of Applied Physics, 2004, 95, 3503-3508.	2.5	125
9	Effect of Interionic Interaction on the Electronic Polarizability, Optical Basicity and Binding Energy of Simple Oxides.. Journal of the Ceramic Society of Japan, 1999, 107, 1012-1018.	1.3	119
10	Design and control of crystallization in oxide glasses. Journal of Non-Crystalline Solids, 2015, 428, 156-175.	3.1	118
11	Electronic polarizability, optical basicity and XPS spectra of Sb_2O_3 - B_2O_3 glasses. Journal of Non-Crystalline Solids, 2000, 272, 1-13.	3.1	106
12	Technique for writing of nonlinear optical single-crystal lines in glass. Applied Physics Letters, 2003, 83, 2796-2798.	3.3	104
13	Transition metal atom heat processing for writing of crystal lines in glass. Applied Physics Letters, 2006, 88, 231105.	3.3	99
14	Fabrication of $Na^{2+}/Fe^{2+}/O^{7-}$ glass-ceramics for sodium ion battery. Journal of the Ceramic Society of Japan, 2012, 120, 344-346.	1.1	88
15	Optical second order nonlinearity of transparent $Ba_2TiGe_2O_8$ crystallized glasses. Applied Physics Letters, 2002, 81, 223-225.	3.3	86
16	Transparent tellurite-based glass-ceramics with second harmonic generation. Journal of Non-Crystalline Solids, 1996, 208, 303-307.	3.1	85
17	YAG laser-induced crystalline dot patterning in samarium tellurite glasses. Journal of Non-Crystalline Solids, 2001, 289, 228-232.	3.1	85
18	Correlation among electronegativity, cation polarizability, optical basicity and single bond strength of simple oxides. Journal of Solid State Chemistry, 2012, 196, 574-578.	2.9	84

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19	Enhanced second harmonic generation at surface in transparent nanocrystalline TeO ₂ -based glass ceramics. Applied Physics Letters, 2000, 77, 2118-2120.	3.3	83
20	Nonlinear optical crystal-line writing in glass by yttrium aluminum garnet laser irradiation. Applied Physics Letters, 2003, 82, 892-894.	3.3	80
21	Second-order optical nonlinear and luminescent properties of Ba ₂ TiSi ₂ O ₈ nanocrystallized glass. Applied Physics Letters, 2005, 86, 091110.	3.3	78
22	Nonlinear-optic and ferroelectric behavior of lithium borate–strontium bismuth tantalate glass–ceramic composite. Applied Physics Letters, 2001, 78, 4019-4021.	3.3	75
23	Approach to thermal properties and electronic polarizability from average single bond strength in ZnO–Bi ₂ O ₃ –B ₂ O ₃ glasses. Journal of Solid State Chemistry, 2010, 183, 3078-3085.	2.9	74
24	Interionic Interactions, Electronic Polarizability and Optical Basicity of Oxide Glasses.. Journal of the Ceramic Society of Japan, 2000, 108, 330-338.	1.3	66
25	Polarizability, Optical Basicity and O 1s Binding Energy of Simple Oxides.. Journal of the Ceramic Society of Japan, 1999, 107, 21-26.	1.3	58
26	Mössbauer analysis of Fe ion state in lithium iron phosphate glasses and their glass-ceramics with olivine-type LiFePO ₄ crystals. Solid State Communications, 2008, 146, 273-277.	1.9	57
27	Crystallization of LiNbO ₃ in tellurite glasses. Journal of Non-Crystalline Solids, 1993, 162, 201-204.	3.1	55
28	Application of fragility concept to metallic glass formers. Journal of Non-Crystalline Solids, 1995, 185, 199-202.	3.1	55
29	Triclinic Na ₂ Fe _{1+2P} 2O ₇ /C glass-ceramics with high current density performance for sodium ion battery. Journal of Power Sources, 2013, 227, 31-34.	7.8	53
30	Crystallization behavior of sodium iron phosphate glass Na ₂ Fe _{1+0.5P} 2O ₇ for sodium ion batteries. Journal of Non-Crystalline Solids, 2014, 404, 26-31.	3.1	53
31	Electrical conductivity of Na ₂ Nb ₂ O ₅ P ₂ O ₅ glass and fabrication of glass–ceramic composites with NASICON type Na ₃ Zr ₂ Si ₂ PO ₁₂ . Solid State Ionics, 2015, 269, 19-23.	2.7	53
32	Structure and non-linear optical properties of BaO–TiO ₂ –SiO ₂ glass containing Ba ₂ TiSi ₂ O ₈ crystal. Journal of Non-Crystalline Solids, 2007, 353, 2258-2262.	3.1	52
33	Performance of Lithium-Ion Battery with Tin-Phosphate Glass Anode and Its Characteristics. Journal of the Electrochemical Society, 2013, 160, A1725-A1730.	2.9	51
34	Preferential growth orientation of laser-patterned LiNbO ₃ crystals in lithium niobium silicate glass. Journal of Solid State Chemistry, 2011, 184, 411-418.	2.9	47
35	Electronic Ion Polarizability, Optical Basicity and Metal (or Nonmetal) Binding Energy of Simple Oxides.. Journal of the Ceramic Society of Japan, 1999, 107, 879-886.	1.3	46
36	Creation of Ferroelectric, Single-Crystal Architecture in Sm _{0.5} La _{0.5} BGeO ₅ Glass. Journal of the American Ceramic Society, 2008, 91, 110-114.	3.8	46

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37	Writing of two-dimensional crystal curved lines at the surface of $\text{Sm}_2\text{O}_3\text{-Bi}_2\text{O}_3\text{-B}_2\text{O}_3$ glass by samarium atom heat processing. <i>Solid State Communications</i> , 2005, 136, 273-277.	1.9	45
38	Fabrication of $\text{Eu:SrAl}_2\text{O}_4$ -based glass ceramics using Frozen sorbet method. <i>Journal of the Ceramic Society of Japan</i> , 2011, 119, 609-615.	1.1	45
39	Cathode properties of sodium iron phosphate glass for sodium ion batteries. <i>Journal of Non-Crystalline Solids</i> , 2016, 450, 109-115.	3.1	45
40	Large second-order optical nonlinearity in $30\text{BaO}\text{-}15\text{TiO}_2\text{-}55\text{GeO}_2$ surface crystallized glass with strong orientation. <i>Journal of Applied Physics</i> , 2006, 100, 023526.	2.5	44
41	Optical Active Nano-Glass-Ceramics. <i>International Journal of Applied Glass Science</i> , 2013, 4, 125-135.	2.0	44
42	High-Tc superconducting glass-ceramics. <i>Thermochimica Acta</i> , 1991, 174, 131-151.	2.7	43
43	Patterning of two-dimensional planar lithium niobate architectures on glass surface by laser scanning. <i>Optics Express</i> , 2010, 18, 8019.	3.4	43
44	Fabrication of olivine-type $\text{LiMnFe}_2\text{PO}_4$ crystals via the glass-ceramic route and their lithium ion battery performance. <i>Ceramics International</i> , 2010, 36, 1137-1141.	4.8	42
45	Laser patterning and characterization of optical active crystals in glasses. <i>Journal of Asian Ceramic Societies</i> , 2013, 1, 9-16.	2.3	42
46	Enhanced rate capabilities in a glass-ceramic-derived sodium all-solid-state battery. <i>Scientific Reports</i> , 2020, 10, 9453.	3.3	41
47	Lithium ion conductive glass-ceramics with $\text{Li}_3\text{Fe}_2(\text{PO}_4)_3$ and YAG laser-induced local crystallization in lithium iron phosphate glasses. <i>Solid State Ionics</i> , 2008, 179, 508-515.	2.7	39
48	Synthesis, Ferroelectric and Electrooptic Properties of Transparent Crystallized Glasses with $\text{Sr}_x\text{Ba}_{1-x}\text{Nb}_2\text{O}_6$ Nanocrystals. <i>Journal of the American Ceramic Society</i> , 2009, 92, 2924-2930.	3.8	39
49	Pressureless all-solid-state sodium ion battery consisting of sodium iron pyrophosphate glass-ceramic cathode and Al_2O_3 alumina solid electrolyte composite. <i>Journal of the American Ceramic Society</i> , 2019, 102, 6658-6667.	3.8	39
50	Laser patterning and growth mechanism of orientation designed crystals in oxide glasses: A review. <i>Journal of Solid State Chemistry</i> , 2019, 275, 210-222.	2.9	39
51	Synthesis of Sm^{3+} -doped strontium barium niobate crystals in glass by samarium atom heat processing. <i>Journal of Solid State Chemistry</i> , 2005, 178, 3507-3513.	2.9	38
52	A fast synthesis of $\text{Li}_3\text{V}_2(\text{PO}_4)_3$ crystals via glass-ceramic processing and their battery performance. <i>Journal of Power Sources</i> , 2011, 196, 9618-9624.	7.8	37
53	Prominent Nanocrystallization of $25\text{K}_2\text{O}\text{-}25\text{Nb}_2\text{O}_5\text{-}50\text{GeO}_2$ Glass. <i>Journal of the American Ceramic Society</i> , 2004, 87, 113-118.	3.8	36
54	Patterning of <i>c</i> -axis-oriented $\text{Ba}_2\text{Ti}_2\text{O}_8$ (<i>X</i> = Si, Ge) crystal lines in glass by laser irradiation and their second-order optical nonlinearities. <i>Journal of Materials Research</i> , 2008, 23, 885-888.	2.6	35

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55	Superconducting properties of glass-ceramics in the Bi—,Sr—,Ca—,Cu—,O system. Journal of Non-Crystalline Solids, 1989, 113, 274-281.	3.1	34
56	Transparent Surface and Bulk Crystallized Glasses with Lanthanide Tellurite Nanocrystals.. Journal of the Ceramic Society of Japan, 2001, 109, 466-469.	1.3	34
57	Spatially selected synthesis of LaF ₃ and Er ³⁺ -doped CaF ₂ crystals in oxyfluoride glasses by laser-induced crystallization. Journal of Solid State Chemistry, 2008, 181, 1176-1183.	2.9	33
58	Optical basicity and chemical bonding of Bi ₂ O ₃ containing glasses. Journal of Non-Crystalline Solids, 2013, 382, 18-23.	3.1	33
59	Unusual Elastic and Mechanical Behaviors of Copper Phosphate Glasses with Different Copper Valence States. Journal of the American Ceramic Society, 2001, 84, 2401-2408.	3.8	32
60	Heat Capacity Changes at the Glass Transition in Mixed Alkali Tellurite Glasses. Journal of the American Ceramic Society, 1997, 80, 1327-1332.	3.8	32
61	Fabrication of TiO ₂ nanocrystallized glass. Applied Physics Letters, 2007, 90, 081907.	3.3	32
62	Selective Synthesis of Lithium Ion-Conductive Li ₂ LiVOPO ₄ Crystals via Glass-Ceramic Processing. Journal of the American Ceramic Society, 2008, 91, 3920-3925.	3.8	32
63	Special Issue Ceramics Integration. Optical Nonlinear Crystalline Dot and Line Patterning in Samarium Bismuth Borate Glasses by YAG Laser Irradiation.. Journal of the Ceramic Society of Japan, 2002, 110, 398-402.	1.3	31
64	Tin-phosphate glass anode for sodium ion batteries. APL Materials, 2013, 1, .	5.1	31
65	Preparation and Optical Properties of Transparent TeO ₂ -Based Glasses Containing BaTiO ₃ Crystals. Journal of the Ceramic Society of Japan, 1993, 101, 48-52.	1.3	30
66	Effect of Heat-Treatment Temperature on Optical Properties of Ba ₂ TiSi ₂ O ₈ Nanocrystallized Glasses. Journal of the Ceramic Society of Japan, 2005, 113, 419-423.	1.3	30
67	Self-powdering and nonlinear optical domain structures in ferroelastic Gd ₂ (MoO ₄) ₃ crystals formed in glass. Journal of Solid State Chemistry, 2009, 182, 2269-2273.	2.9	29
68	Crystal growth behavior in CuO-doped lithium disilicate glasses by continuous-wave fiber laser irradiation. Journal of the Ceramic Society of Japan, 2008, 116, 1314-1318.	1.1	28
69	Two-Dimensional Mapping of Er ³⁺ Photoluminescence in CaF ₂ Crystal Lines Patterned by Lasers in Oxyfluoride Glass. Journal of the American Ceramic Society, 2009, 92, 825-829.	3.8	28
70	Morphology and photoluminescence properties of Er ³⁺ -doped CaF ₂ nanocrystals patterned by laser irradiation in oxyfluoride glasses. Journal of Fluorine Chemistry, 2013, 145, 81-87.	1.7	28
71	Densification Energy during Nanoindentation of Silica Glass. Journal of the American Ceramic Society, 2002, 85, 3102-3104.	3.8	27
72	Formation of nonlinear optical KSm(PO ₃) ₄ crystals in phosphate glasses by YAG laser irradiation. Solid State Sciences, 2004, 6, 1013-1018.	3.2	27

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73	Synthesis of nanocrystals in KNb(Ge,Si)O ₅ glasses and chemical etching of nanocrystallized glass fibers. Journal of Solid State Chemistry, 2006, 179, 1821-1829.	2.9	27
74	Writing of crystal lines and its optical properties of rare-earth ion (Er ³⁺ and Sm ³⁺) doped lithium niobate crystal on glass surface formed by laser irradiation. Optical Materials, 2008, 31, 315-319.	3.6	27
75	Synthesis and Li ⁺ ion conductivity of Li ₂ O-Nb ₂ O ₅ -P ₂ O ₅ glasses and glass-ceramics. Materials Research Bulletin, 2010, 45, 1443-1448.	5.2	27
76	Fabrication of LiFePO ₄ /carbon composites by glass powder crystallization processing and their battery performance. Journal of Non-Crystalline Solids, 2010, 356, 3032-3036.	3.1	27
77	Elastic properties and Vickers hardness of optically transparent glass-ceramics with fersnoite Ba ₂ TiSi ₂ O ₈ nanocrystals. Materials Research Bulletin, 2011, 46, 922-928.	5.2	27
78	Birefringence imaging and orientation of laser patterned λ^2 -BaB ₂ O ₄ crystals with bending and curved shapes in glass. Journal of Solid State Chemistry, 2013, 207, 6-12.	2.9	27
79	Preparation and Properties of Superconducting Glass Ceramics Based on the Bi-Sr-Ca-Cu-O System. Journal of the Ceramic Society of Japan, 1989, 97, 251-255.	1.3	26
80	Second-harmonic generation in transparent surface crystallized glasses in the BaO-B ₂ O ₃ -TeO ₂ system. Applied Physics Letters, 2004, 85, 3405-3407.	3.3	26
81	Origin of periodic domain structure in Er ³⁺ -doped λ^2 -(Sm,Gd) ₂ (MoO ₄) ₃ crystal lines patterned by laser irradiations in glasses. Journal of Solid State Chemistry, 2010, 183, 909-914.	2.9	26
82	Thermo-Optic Properties and Electronic Polarizability in Alkali Tellurite Glasses. Journal of the American Ceramic Society, 2010, 93, 3223-3229.	3.8	26
83	Enhancement of second harmonic intensity in thermally poled ferroelectric nanocrystallized glasses in the BaO-TiO ₂ -SiO ₂ system. Solid State Communications, 2006, 140, 299-303.	1.9	25
84	Electronic polarizability and interaction parameter of gadolinium tungsten borate glasses with high WO ₃ content. Journal of Solid State Chemistry, 2014, 220, 191-197.	2.9	25
85	Synthesis and morphology of metal Sn particles in SnO-P ₂ O ₅ glasses and their battery anode performance. Journal of Non-Crystalline Solids, 2014, 402, 153-159.	3.1	25
86	Structural role of Nb ₂ O ₅ in glass-forming ability, electronic polarizability and nanocrystallization in glasses: A review. Journal of Non-Crystalline Solids, 2022, 581, 121414.	3.1	25
87	Incorporation of LiNbO ₃ crystals into tellurite glasses. Journal of Materials Science, 1996, 31, 2159-2164.	3.7	24
88	Temperature Dependence of Vickers Hardness for TeO ₂ -Based and Soda-Lime Silicate Glasses.. Journal of the Ceramic Society of Japan, 1999, 107, 1140-1145.	1.3	24
89	Transparent nonlinear optical crystallized glass fibers with highly oriented Ba ₂ TiGe ₂ O ₈ crystals. Journal of Applied Physics, 2008, 103, .	2.5	24
90	Crystalline Phases and YAG Laser-Induced Crystallization in Sm ₂ O ₃ -Bi ₂ O ₃ -B ₂ O ₃ Glasses. Journal of the American Ceramic Society, 2005, 88, 989-992.	3.8	23

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91	Patterning and morphology of nonlinear optical $Gd_xBi_{1-x}BO_3$ crystals in CuO-doped glass by YAG laser irradiation. <i>Applied Physics A: Materials Science and Processing</i> , 2007, 89, 981-986.	2.3	23
92	Synthesis and Na ⁺ Ion Conductivity of Stoichiometric $Na_3Zr_2Si_2PO_{12}$ by Liquid-Phase Sintering with $NaPO_3$ Glass. <i>Materials</i> , 2021, 14, 3790.	2.9	23
93	Formation and electronic state of DO ₃ -type ordered structure in sputtered Fe ₂ Si thin films. <i>Journal of Applied Physics</i> , 1992, 71, 2368-2374.	2.5	22
94	Ferroelectric Properties and Second Harmonic Intensities of Stillwellite-Type (La,Ln)BGeO ₅ Crystallized Glasses. <i>Japanese Journal of Applied Physics</i> , 2002, 41, 3771-3777.	1.5	22
95	Electronic polarizability and its temperature dependence of Bi_2O_3 - B_2O_3 glasses. <i>Journal of Non-Crystalline Solids</i> , 2010, 356, 2310-2314.	3.1	22
96	Laser patterning and morphology of two-dimensional planar ferroelastic rare-earth molybdate crystals on the glass surface. <i>Materials Chemistry and Physics</i> , 2011, 125, 377-381.	4.0	22
97	Morphology and dispersion state of $Ba_2TiSi_2O_8$ nanocrystals in transparent glass-ceramics and their nanoindentation behavior. <i>Journal of Non-Crystalline Solids</i> , 2012, 358, 1863-1869.	3.1	22
98	Laser patterning of oriented $LiNbO_3$ crystal particle arrays in NiO-doped lithium niobium silicate glasses. <i>International Journal of Applied Glass Science</i> , 2018, 9, 518-529.	2.0	22
99	Fabrication of Transparent Tellurite Glasses Containing Potassium Niobate Crystals by an Incorporation Method. <i>Journal of the American Ceramic Society</i> , 1993, 76, 2923-2926.	3.8	21
100	Line patterning of (Sr,Ba)Nb ₂ O ₆ crystals in borate glasses by transition metal atom heat processing. <i>Journal of Solid State Chemistry</i> , 2007, 180, 2541-2549.	2.9	21
101	Writing of crystal line patterns in glass by laser irradiation. <i>Journal of Non-Crystalline Solids</i> , 2008, 354, 468-471.	3.1	21
102	Kinetics of Enthalpy Relaxation at the Glass Transition in Ternary Tellurite Glasses. <i>Journal of the American Ceramic Society</i> , 2000, 83, 1192-1198.	3.8	20
103	Synthesis and nonlinear optical properties of $BaTi(BO_3)_2$ and $Ba_3Ti_3O_6(BO_3)_2$ crystals in glasses with high TiO ₂ contents. <i>Journal of Solid State Chemistry</i> , 2005, 178, 2067-2076.	2.9	20
104	Chemically Etched Sharpened Tip of Transparent Crystallized Glass Fibers with Nonlinear Optical $Ba_2TiSi_2O_8$ Nanocrystals. <i>Journal of the Ceramic Society of Japan</i> , 2007, 115, 374-378.	1.3	20
105	Formation and laser patterning of perovskite-type KNbO ₃ crystals in aluminoborate glasses. <i>Optical Materials</i> , 2011, 33, 267-274.	3.6	20
106	Magnetism of \hat{I}^2 - $Gd_{2/3}(MoO_4)_3$ and photoluminescence of \hat{I}^2 - $Eu_{2/3}(MoO_4)_3$ crystallized in rare-earth molybdenum borate glasses. <i>Journal of the Ceramic Society of Japan</i> , 2013, 121, 230-235.	1.1	20
107	Morphology and orientation of \hat{I}^2 - $Ba_2B_2O_4$ crystals patterned by laser in the inside of samarium barium borate glass. <i>Journal of Solid State Chemistry</i> , 2015, 221, 145-151.	2.9	20
108	Interface Reactions between Silicon Dioxide-Lead Oxide Glass and Manganese Zinc Ferrite. <i>Journal of the American Ceramic Society</i> , 1989, 72, 1351-1354.	3.8	19

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109	Two-dimensional Raman imaging for periodic domain structures in laser-patterned ferroelastic $\lambda\text{-}(\text{Sm,Gd})_2(\text{MoO}_4)_3$ crystal lines in glass. <i>Optical Materials</i> , 2010, 32, 443-447.	3.6	19
110	Fluorine deficient layer at the surface of transparent glass-ceramics with CaF_2 nanocrystals. <i>Journal of Physics and Chemistry of Solids</i> , 2012, 73, 683-687.	4.0	19
111	Unique crystallization behavior of sodium manganese pyrophosphate $\text{Na}_2\text{Mn}_2\text{O}_7$ glass and its electrochemical properties. <i>Journal of Asian Ceramic Societies</i> , 2017, 5, 209-215.	2.3	19
112	Features of electronic polarizability and approach to unique properties in tellurite glasses. <i>International Journal of Applied Glass Science</i> , 2020, 11, 253-271.	2.0	18
113	Kinetics of Nonisothermal Crystallization of $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_x$ Glasses with Different Copper Valence States. <i>Journal of the American Ceramic Society</i> , 1993, 76, 2795-2800.	3.8	17
114	Patterning of Ferroelectric $\lambda\text{-Gd}_2(\text{MoO}_4)_3$ Crystal Lines on the Glass Surface by Transition Metal Atom Heat Processing. <i>Journal of the Ceramic Society of Japan</i> , 2007, 115, 582-587.	1.1	17
115	Synthesis and morphology of $\lambda\text{-RE}_2/3\text{Nb}_2\text{O}_6$ nanocrystals with tungsten bronze structure in $\text{RE}_2\text{O}_3\text{-BaO-Nb}_2\text{O}_5\text{-B}_2\text{O}_3$ glasses (RE: Sm, Eu, Gd, Dy, Er). <i>Journal of Solid State Chemistry</i> , 2012, 196, 384-390.	2.9	17
116	Synthesis and laser patterning of ferroelastic $\lambda\text{-RE}_2(\text{MoO}_4)_3$ crystals (RE: Sm, Gd, Tb, Dy) in rare-earth molybdenum borate glasses. <i>Materials Chemistry and Physics</i> , 2012, 133, 118-125.	4.0	17
117	Synthesis and photocatalytic properties of $\lambda\text{-ZnWO}_4$ nanocrystals in tungsten zinc borate glasses. <i>Journal of Asian Ceramic Societies</i> , 2014, 2, 253-257.	2.3	17
118	Structure of $\text{MoO}_3\text{-WO}_3\text{-La}_2\text{O}_3\text{-B}_2\text{O}_3$ glasses and crystallization of $\text{LaMo}_x\text{W}_x\text{BO}_6$ solid solutions. <i>Journal of Non-Crystalline Solids</i> , 2015, 429, 171-177.	3.1	17
119	A review: A new insight for electronic polarizability and chemical bond strength in Bi_2O_3 -based glasses. <i>Journal of Non-Crystalline Solids</i> , 2020, 550, 120365.	3.1	17
120	Fabrication of $(\text{K, Na})\text{NbO}_3$ glass-ceramics and crystal line patterning on glass surface. <i>Optical Materials</i> , 2011, 33, 1203-1209.	3.6	16
121	Correlation between thermal expansion coefficient and interionic interaction parameter in $\text{ZnO-Bi}_2\text{O}_3\text{-O}_3$ glasses. <i>Journal of the Ceramic Society of Japan</i> , 2018, 126, 8-15.		16
122	Decoupling between Enthalpy Relaxation and Viscous Flow and Its Structural Origin in Fragile Oxide Glass-Forming Liquids. <i>Journal of the American Ceramic Society</i> , 2002, 85, 193-199.	3.8	15
123	Average single bond strength and optical basicity of $\text{Na}_2\text{O-GeO}_2$ glasses. <i>Journal of the Ceramic Society of Japan</i> , 2009, 117, 1105-1111.	1.1	15
124	Unique crystal growth with crystal axis rotation in multi-ferroic $\lambda\text{-}(\text{Sm,Gd})_2(\text{MoO}_4)_3$ narrow lines patterned by lasers in glass. <i>Journal of Physics and Chemistry of Solids</i> , 2014, 75, 954-958.	4.0	15
125	TEM analysis for crystal structure of metastable BiBO_3 (II) phase formed in glass by laser-induced crystallization. <i>Journal of the European Ceramic Society</i> , 2015, 35, 2541-2546.	5.7	15
126	Long afterglow in hexagonal $\text{SrAl}_2\text{O}_4\text{:Eu}^{2+}, \text{Dy}^{3+}$ synthesized by crystallization of glass and solidification of supercooled melts. <i>Journal of Luminescence</i> , 2016, 177, 286-289.	3.1	15

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127	Origin of Intrinsic Second-Harmonic Generation in Crystallized GeO ₂ -SiO ₂ Glass Films. Japanese Journal of Applied Physics, 2003, 42, 7326-7330.	1.5	14
128	Laser patterning and enhanced red photoluminescence of Er ³⁺ /Yb ³⁺ co-doped CaF ₂ crystal dots and lines in oxyfluoride glasses. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2010, 171, 25-30.	3.5	14
129	Formation mechanism of LiFePO ₄ in crystallization of lithium iron phosphate glass particles. Journal of the Ceramic Society of Japan, 2012, 120, 193-198.	1.1	14
130	Coexistence of nano-scale phase separation and micro-scale surface crystallization in Gd ₂ O ₃ -WO ₃ -B ₂ O ₃ glasses. Journal of Non-Crystalline Solids, 2013, 381, 17-22.	3.1	14
131	Nucleation and Crystal Growth in Laser-Patterned Lines in Glasses. Frontiers in Materials, 2016, 3, .	2.4	14
132	Crystallization behavior and electrochemical properties of Na ₂ FeyMn _{1-y} P ₂ O ₇ glass. Journal of Non-Crystalline Solids, 2018, 501, 153-158.	3.1	14
133	Crystallization of the Na ₂ FexNi _{1-x} P ₂ O ₇ Glass and Ability of Cathode for Sodium-Ion Batteries. Frontiers in Materials, 2020, 7, .	2.4	14
134	Superconducting Coupling Nature at Grain Boundaries in Bi ₂ Sr ₂ CaCu ₂ O _x Glass-Ceramics. Journal of the American Ceramic Society, 1990, 73, 3569-3574.	3.8	13
135	Morphology design of highly oriented nonlinear optical Ba ₂ TiSi ₂ O ₈ crystals at the glass surface by crystallization in reduced atmosphere. Optical Materials, 2009, 32, 35-41.	3.6	13
136	Laser Patterning of ZnO Crystals on the Surface of Borosilicate Glass. Journal of the American Ceramic Society, 2010, 93, 658-661.	3.8	13
137	Electrochemical performance as cathode of lithium iron silicate, borate and phosphate glasses with different Fe ²⁺ fractions. Journal of Non-Crystalline Solids, 2016, 436, 51-57.	3.1	13
138	Formation of bismuth metal in bismuth borate glass by reductive heat treatment and its electrochemical property as anode in lithium ion battery. Journal of the Ceramic Society of Japan, 2018, 126, 820-825.	1.1	13
139	Crystallization data-driven proposal on distribution model of composition fluctuations in structure of oxide glasses. Journal of Solid State Chemistry, 2020, 288, 121379.	2.9	13
140	Temperature dependence of refractive index and electronic polarizability of KNbGeO ₅ glass and its nanocrystallized glasses. Journal of Applied Physics, 2009, 105, .	2.5	12
141	Crystallization and photoluminescence properties of RE ₂ (WO ₄) ₃ (RE: Gd, Eu) in rare-earth tungsten borate glasses. Optical Materials, 2013, 35, 998-1003.	3.6	12
142	Nano-crystallization and highly oriented crystal line patterning of Sm ³⁺ -doped Bi ₂ GeO ₅ and Bi ₄ Ge ₃ O ₁₂ in bismuth germanate-based glasses. Journal of Non-Crystalline Solids, 2017, 459, 116-122.	3.1	12
143	Electronic polarizability in silicate glasses by comparison of experimental and theoretical optical basicities. International Journal of Applied Glass Science, 2021, 12, 424-442.	2.0	12
144	Superconducting Properties of Barium-Doped (Bi,Pb) ₂ Sr ₂ Ca ₂ Cu ₃ O _x Glass-Ceramics. Journal of the American Ceramic Society, 1992, 75, 1864-1869.	3.8	11

#	ARTICLE	IF	CITATIONS
145	Nanocrystalline patterning of K ₃ Li ₂ Nb ₅ O ₁₅ on TeO ₂ glasses by an excimer laser. Journal of Crystal Growth, 2007, 304, 270-274.	1.5	11
146	YAG laser-induced structural modification in transition metal ion containing 40K ₂ O·40Nb ₂ O ₅ ·20SiO ₂ glasses. Materials Research Bulletin, 2008, 43, 2592-2598.	5.2	11
147	Effects of WO ₃ substitution on crystallization behavior and laser patterning in Gd ₂ O ₃ ·MoO ₃ ·B ₂ O ₃ glasses. Journal of Non-Crystalline Solids, 2014, 383, 86-90.	3.1	11
148	Self-organized homo-epitaxial growth in nonlinear optical BaAlBO ₃ F ₂ crystal crossing lines patterned by laser in glass. Optical Materials, 2015, 49, 182-189.	3.6	11
149	Surface crystallization tendency of Na ₂ Si ₂ FeP ₂ O ₇ glass. Journal of the Ceramic Society of Japan, 2018, 126, 563-567.	1.1	11
150	New Transparent Crystallized Glasses with Optical Nonlinear LiBGeO ₄ Crystals.. Journal of the Ceramic Society of Japan, 2002, 110, 22-26.	1.3	10
151	Spatially selected crystallization in glass by YAG laser irradiation. Journal of Non-Crystalline Solids, 2004, 345-346, 127-131.	3.1	10
152	Micro-architecture of nonlinear optical Ba ₂ TiGe ₂ O ₈ crystal dots and lines on the surface of laser-induced crystallized glasses by chemical etching. Applied Surface Science, 2008, 255, 3126-3131.	6.1	10
153	Self-organized periodic domain structure for second harmonic generations in ferroelastic $\text{Pb}^{2+}(\text{Sm,Gd})_2(\text{MoO}_4)_3$ crystal lines on glass surfaces. Applied Physics Letters, 2009, 94, 041915.	3.3	10
154	Formation and its mechanism of copper metal layers at surface by annealing in reduced atmosphere in CuO·Li ₂ O·Nb ₂ O ₅ ·SiO ₂ glass. Solid State Ionics, 2009, 180, 1457-1462.	2.7	10
155	Laser patterning and magnetic properties of perovskite-type $\text{La}_{0.7}\text{Sr}_{0.3}\text{BaB}_2\text{O}_4$ crystals. Solid State Communications, 2009, 149, 1795-1798.	1.9	10
156	Spinel-type crystals based on LiFeSiO ₄ with high electrical conductivity for lithium ion battery formed by melt-quenching method. Journal of the Ceramic Society of Japan, 2012, 120, 93-97.	1.1	10
157	Effect of Al ₂ O ₃ addition on the formation of perovskite-type NaNbO ₃ nanocrystals in silicate-based glasses. Journal of Non-Crystalline Solids, 2012, 358, 1523-1529.	3.1	10
158	Direct Laser Patterning of BaB_2O_4 Crystals with High Orientation in the Inside of Glass Fiber. Journal of the American Ceramic Society, 2013, 96, 1339-1341.	3.8	10
159	Vitrification of maricite NaFePO ₄ crystal by laser irradiation and enhanced sodium ion battery performance. Journal of Alloys and Compounds, 2021, 885, 160928.	5.5	10
160	Dual layered surface crystallization of 30BaO·15TiO ₂ ·55GeO ₂ glass by stepwise heat treatment. Journal of Applied Physics, 2007, 101, 123505.	2.5	9
161	Microfabrication of U-shaped Grooves on the Surface of BaTi ₂ GeO ₂ Glass by YAG Laser Irradiation and Selective Chemical Etching. Journal of the American Ceramic Society, 2008, 91, 2170-2175.	3.8	9
162	Crystallization Behavior of Lithium Iron Phosphate Glass Powders in Different Atmospheres. Journal of the American Ceramic Society, 2011, 94, 2890-2895.	3.8	9

#	ARTICLE	IF	CITATIONS
163	Formation Behavior and High Electrical Conductivity of Metastable Lithium Iron Silicate Crystals in Rapid Quenching of $\text{Li}_2\text{O}-\text{Fe}_2\text{O}_3$ Melts. <i>Journal of the American Ceramic Society</i> , 2014, 97, 835-842.	3.8	9
164	Laser Patterning of Non-Linear Optical $\text{Bi}_2\text{ZnB}_2\text{O}_7$ Crystal Lines in Glass. <i>Frontiers in Materials</i> , 2015, 2, .	2.4	9
165	Formation of Langasite-Type Crystals in Corresponding Glasses and Their Second-Order Optical Nonlinearities. <i>Journal of the Ceramic Society of Japan</i> , 2004, 112, 61-64.	1.3	8
166	Surface crystallization and second-order optical non-linearity in $\text{Gd}_2\text{O}_3-\text{Bi}_2\text{O}_3-\text{B}_2\text{O}_3$ glasses. <i>Science and Technology of Advanced Materials</i> , 2005, 6, 138-142.	6.1	8
167	Fabrication of Optical Waveguide in Glass by Laser-Induced Crystallization. <i>Advanced Materials Research</i> , 2006, 11-12, 197-200.	0.3	8
168	Unique thermal conductivity, Young's modulus and local structure of $72\text{SnO}-28\text{P}_2\text{O}_5$ glass. <i>Journal of the Ceramic Society of Japan</i> , 2016, 124, 606-612.	1.1	8
169	Interface reactions between SiO_2-PbO glass and Ni-Zn ferrite. <i>Journal of Materials Science</i> , 1990, 25, 2857-2860.	3.7	7
170	Interface reactions between $\text{SiO}_2-\text{PbO}-\text{MO}$ ternary systems and manganese zinc ferrites. <i>Journal of Applied Physics</i> , 1992, 71, 1992-1999.	2.5	7
171	Fiber Drawing of LiNbO_3 -Doped Mixed Alkali Tellurite Glasses. <i>Journal of the Ceramic Society of Japan</i> , 1995, 103, 1073-1076.	1.3	7
172	Synthesis and characterization of rare-earth doped $\text{SrBi}_2\text{Nb}_2\text{O}_9$ phase in lithium borate based nanocrystallized glasses. <i>Journal of Solid State Chemistry</i> , 2009, 182, 1538-1544.	2.9	7
173	Optical characteristics of nanocrystallized glass fiber with second-order optical nonlinearity. <i>Journal of the Ceramic Society of Japan</i> , 2009, 117, 143-146.	1.1	7
174	Self-powdering phenomenon of $\text{RE}_2\text{O}_3-\text{MoO}_3$ formed in crystallization of glasses and its mechanism (RE: Gd, Sm, Dy). <i>Journal of the Ceramic Society of Japan</i> , 2014, 122, 777-783.	1.1	7
175	Dielectric properties of glass-ceramics with $\text{Ba}_1-x\text{Y}_2x/3\text{Nb}_2\text{O}_6$ nanocrystals and laser patterning of highly oriented crystal lines. <i>Journal of Non-Crystalline Solids</i> , 2016, 452, 74-81.	3.1	7
176	Phase selective crystallization of $\text{Na}_2\text{Mn}_{0.9}\text{Fe}_{0.1}\text{P}_2\text{O}_7$ glass by laser irradiation. <i>International Journal of Applied Glass Science</i> , 2020, 11, 112-119.	2.0	7
177	Laser-induced modification and external pressureless joining $\text{Na}_2\text{FeP}_2\text{O}_7$ on solid electrolyte. <i>International Journal of Ceramic Engineering & Science</i> , 2020, 2, 332-341.	1.2	7
178	Formation of highly dispersed tin nanoparticles in amorphous silicates for sodium ion battery anode. <i>Journal of Physics and Chemistry of Solids</i> , 2022, 161, 110377.	4.0	7
179	A new model for the formation of high- T_c phase in superconductive $(\text{Bi}, \text{Pb})_2\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_x$ glass-ceramics. <i>Journal of Materials Science: Materials in Electronics</i> , 1996, 7, 261.	2.2	6
180	Formation and Thermal Stability of High- T_c Phase in Te-Doped Bi-Based Superconducting Glass-Ceramics. <i>Journal of the Ceramic Society of Japan</i> , 1997, 105, 279-283.	1.3	6

#	ARTICLE	IF	CITATIONS
181	Effect of AlN addition on spatial uniform distribution of Er ³⁺ -doped CaF ₂ nanocrystals in oxyfluoride glass-ceramics. Journal of the Ceramic Society of Japan, 2013, 121, 457-459.	1.1	6
182	Photoluminescence features of new Eu ³⁺ -doped Gd ₄ Mo ₇ O ₂₇ phosphors synthesized using glass crystallization technique. Journal of Asian Ceramic Societies, 2018, 6, 314-321.	2.3	6
183	Surface crystallization and gas bubble formation during conventional heat treatment in Na ₂ MnP ₂ O ₇ glass. Journal of Non-Crystalline Solids, 2019, 510, 36-41.	3.1	6
184	Fabrication of Transparent Tellurite-based Glass-Ceramics with Graded Optical Nonlinearity. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 1998, 62, 1055-1062.	0.4	5
185	Correlation between the temperature of molten state and the SH intensity of 30BaO 15TiO ₂ 55GeO ₂ crystallized glass. Journal of the Ceramic Society of Japan, 2009, 117, 671-674.	1.1	5
186	Characterization of BaTiO ₃ crystals formed in aluminosilicate glasses and their laser patterning. Journal of the Ceramic Society of Japan, 2013, 121, 583-588.	1.1	5
187	Electrochemical performance of composites of spinel-type LiFe ¹⁺ ⁻ xMnxSiO ₄ nanocrystals and glassy phase synthesized by quenching of melts. Journal of the Ceramic Society of Japan, 2015, 123, 26-32.	1.1	5
188	Formation of nonlinear optical Na ₂ TeW ₂ O ₉ crystals and laser irradiation in tungsten tellurite glasses. Journal of Asian Ceramic Societies, 2017, 5, 489-493.	2.3	5
189	Nanoscale composition fluctuations and crystallization process: Case study in Li ₂ O-SiO ₂ -based glasses. International Journal of Applied Glass Science, 2022, 13, 591-609.	2.0	5
190	Formation and decomposition of DO ₃ ordered structure in sputtered Fe-Al magnetic thin films. Journal of Applied Physics, 1993, 74, 766-768.	2.5	4
191	Comprehensive study of crystallization and phase formation in (La,Gd)BGeO ₅ glass. Journal of the Ceramic Society of Japan, 2008, 116, 1108-1114.	1.1	4
192	Crystallization behavior of λ -Gd ₂ (MoO ₄) ₃ and Gd ₄ Mo ₇ O ₂₇ in composition designed Gd ₂ O ₃ -MoO ₃ -B ₂ O ₃ glasses. Journal of Non-Crystalline Solids, 2018, 498, 437-442.	3.1	4
193	Simultaneous surface and bulk crystallization of Bi _{1.5} ZnNb _{1.5} O ₇ type pyrochlores and related crystals in glasses. International Journal of Applied Glass Science, 2018, 9, 296-304.	2.0	4
194	Control of self-powdering phenomenon in ferroelastic λ -Gd ₂ (MoO ₄) ₃ crystallization in boro-tellurite glasses. Journal of Non-Crystalline Solids, 2018, 501, 85-92.	3.1	4
195	Structural origin of high-density Gd ₂ O ₃ -MoO ₃ -B ₂ O ₃ glass and low-density λ -Gd ₂ (MoO ₄) ₃ crystal: a study conducted using high-energy x-ray diffraction and EXAFS at high temperatures. Journal of Physics Condensed Matter, 2020, 32, 055705.	1.8	4
196	Stress-induced crystal axis spiral rotation in multiferroic λ -Gd ₂ (MoO ₄) ₃ observed only in glass crystallization. International Journal of Applied Glass Science, 2021, 12, 46-64.	2.0	4
197	Reply to "Comment on "Densification Energy during Nanoindentation of Silica Glass". Journal of the American Ceramic Society, 2003, 86, 2239-2240.	3.8	3
198	Temperature Dependence of Second-Harmonic Intensity and Raman Shift in Langasite-Type Phases. Journal of the Ceramic Society of Japan, 2005, 113, 692-695.	1.3	3

#	ARTICLE	IF	CITATIONS
199	Formation of Nano-Particle Structures Induced by Ultraviolet Laser Irradiations in KNbO ₃ -TeO ₂ Glass. Journal of the Ceramic Society of Japan, 2006, 114, 293-295.	1.3	3
200	Synthesis and laser patterning of Bi-doped Y ₃ Fe ₅ O ₁₂ crystals in germanosilicate glasses. Journal of Physics and Chemistry of Solids, 2010, 71, 906-912.	4.0	3
201	Enhanced thermal stability and crystallization of nonlinear optical RExBi _{2-x} ZnB ₂ O ₇ in RE ₂ O ₃ -added bismuth zinc borate glasses (RE: Eu, Gd, Er). Journal of Non-Crystalline Solids, 2021, 559, 120684.	3.1	3
202	Effect of Ga-Addition on the Glass-Forming Ability and Superconducting Properties of Bi-Sr-Ca-Cu-O System. Journal of the Ceramic Society of Japan, 1997, 105, 265-268.	1.3	2
203	Deformation during Vickers nanoindentation in highly oriented nonlinear optical Ba ₂ TiGe ₂ O ₈ crystalline layers at glass surface. Journal of the Ceramic Society of Japan, 2008, 116, 859-863.	1.1	2
204	Laser-Induced Line Patterning of Nonlinear Optical .BETA.-SmxGd _{2-x} (MoO ₄) ₃ Molybdate Crystals in Glass. Funtai Oyobi Fummtsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2008, 55, 205-210.	0.2	2
205	Formation of transparent glass-ceramics including thermodynamically metastable cubic phase in Na_{sub>2}/sub>Mn_{sub>0.5}/sub>Fe_{sub>0.5}/sub>SiO_{sub>4}/sub>1.1 glass. Journal of the Ceramic Society of Japan, 2018, 126, 421-423.		2
206	Crystallization Behaviors with Pre-Treatments of Thermal Annealing and Ultraviolet Laser Irradiation in Ge-Doped SiO ₂ Glass Fiber Preforms.. Journal of the Ceramic Society of Japan, 2003, 111, 8-10.	1.3	1
207	Creation of locally selective mirror surface on 40BaOâ€“40TiO ₂ â€“20B ₂ O ₃ glass by XeCl pulse laser irradiation. Journal of Materials Research, 2007, 22, 1270-1274.	2.6	1
208	Group optical basicity of sodium borate and sodium silicate glasses. Journal of Commonwealth Law and Legal Education, 2016, 57, 285-290.	0.5	1
209	Formation Mechanism of Bi-Based High-TcSuperconductors in the Melt-Quenching Method. Molecular Crystals and Liquid Crystals Incorporating Nonlinear Optics, 1990, 184, 75-79.	0.3	0
210	Characteristic Grain Orientations on Surface of Bi_{sub>2}/sub>Sr_{sub>2}/sub>CaCu_{sub>2}/sub>O_{sub>8}/sub> Superconducting Glass-Ceramics and Fibers. Journal of the Ceramic Society of Japan, 1995, 103, 767-771.		
211	Changes in Saturation Magnetic Moment of Mn-Zn and Ni-Zn Ferrites in Relation with Interface Reactions between Oxide Glasses and Ferrites. Journal of the Ceramic Society of Japan, 1997, 105, 731-733.	1.3	0
212	Fabrication of Crystallized Glasses with Nanocrystal Orientation by Heat Treatment in External Fields. Hosokawa Powder Technology Foundation ANNUAL REPORT, 2006, 14, 158-162.	0.0	0