

# Morten Mattrup Smedskjær

## List of Publications by Year in descending order

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199  
papers

5,977  
citations

76326

40  
h-index

110387

64  
g-index

201  
all docs

201  
docs citations

201  
times ranked

2847  
citing authors

#	ARTICLE	IF	CITATIONS
1	Beyond the Average: Spatial and Temporal Fluctuations in Oxide Glass-Forming Systems. <i>Chemical Reviews</i> , 2023, 123, 1774-1840.	47.7	14
2	Correlating structure with mechanical properties in lithium borophosphate glasses. <i>International Journal of Applied Glass Science</i> , 2023, 14, 38-51.	2.0	2
3	Statistical mechanical model for the formation of octahedral silicon in phosphosilicate glasses. <i>Journal of the American Ceramic Society</i> , 2022, 105, 1031-1038.	3.8	4
4	Indentation deformation and cracking behavior of hydrated aluminoborate glasses. <i>Journal of the American Ceramic Society</i> , 2022, 105, 1039-1051.	3.8	0
5	Impact of network topology on the thermal and mechanical properties of lithium germanate glasses. <i>Journal of the American Ceramic Society</i> , 2022, 105, 977-989.	3.8	3
6	StatMechGlass: Python based software for composition-structure prediction in oxide glasses using statistical mechanics. <i>SoftwareX</i> , 2022, 17, 100913.	2.6	4
7	Advancing the Mechanical Performance of Glasses: Perspectives and Challenges. <i>Advanced Materials</i> , 2022, 34, e2109029.	21.0	50
8	Oxide glasses under pressure: Recent insights from experiments and simulations. <i>Journal of Applied Physics</i> , 2022, 131, .	2.5	9
9	Mechanical Properties of Oxide Glasses. <i>Reviews in Mineralogy and Geochemistry</i> , 2022, 87, 229-281.	4.8	8
10	Irradiation-induced toughening of calcium aluminoborosilicate glasses. <i>Materials Today Communications</i> , 2022, 31, 103649.	1.9	2
11	Hypersensitivity of the Glass Transition to Pressure History in a Metal-Organic Framework Glass. <i>Chemistry of Materials</i> , 2022, 34, 5030-5038.	6.7	12
12	Resolving the Conflict between Strength and Toughness in Bioactive Silica-Polymer Hybrid Materials. <i>ACS Nano</i> , 2022, 16, 9748-9761.	14.6	7
13	Fracture energy of high-Poisson's ratio oxide glasses. <i>Journal of Applied Physics</i> , 2022, 131, 245105.	2.5	3
14	Exploration of glassy state in Prussian blue analogues. <i>Nature Communications</i> , 2022, 13, .	12.8	21
15	Volume relaxation in a borosilicate glass hot compressed by three different methods. <i>Journal of the American Ceramic Society</i> , 2021, 104, 816-823.	3.8	2
16	Decoupling of indentation modulus and hardness in silicate glasses: Evidence of a shear-to densification-dominated transition. <i>Journal of Non-Crystalline Solids</i> , 2021, 553, 120518.	3.1	6
17	Structural densification of lithium phosphoaluminoborate glasses. <i>Journal of the American Ceramic Society</i> , 2021, 104, 1345-1359.	3.8	7
18	Bond switching is responsible for nanoductility in zeolitic imidazolate framework glasses. <i>Dalton Transactions</i> , 2021, 50, 6126-6132.	3.3	11

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19	Deformation mechanism of a metal-organic framework glass under indentation. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 16923-16931.	2.8	8
20	Structural control of self-healing silica-poly(tetrahydropyran)-poly( $\mu$ -caprolactone) hybrids. <i>Journal of Materials Chemistry B</i> , 2021, 9, 4400-4410.	5.8	4
21	Rigidity theory of glass: Determining the onset temperature of topological constraints by molecular dynamics. <i>Journal of Non-Crystalline Solids</i> , 2021, 554, 120614.	3.1	5
22	Modeling the nanoindentation response of silicate glasses by peridynamic simulations. <i>Journal of the American Ceramic Society</i> , 2021, 104, 3531-3544.	3.8	10
23	Bond Switching in Densified Oxide Glass Enables Record-High Fracture Toughness. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 17753-17765.	8.0	31
24	Thermal conductivity of densified borosilicate glasses. <i>Journal of Non-Crystalline Solids</i> , 2021, 557, 120644.	3.1	9
25	Interatomic potential parameterization using particle swarm optimization: Case study of glassy silica. <i>Journal of Chemical Physics</i> , 2021, 154, 134505.	3.0	8
26	Analytical model of the network topology and rigidity of calcium aluminosilicate glasses. <i>Journal of the American Ceramic Society</i> , 2021, 104, 3947-3962.	3.8	14
27	Predicting the early-stage creep dynamics of gels from their static structure by machine learning. <i>Acta Materialia</i> , 2021, 210, 116817.	7.9	21
28	Indentation Response of Calcium Aluminoborosilicate Glasses Subjected to Humid Aging and Hot Compression. <i>Materials</i> , 2021, 14, 3450.	2.9	1
29	Mechanics, Ionics, and Optics of Metal-Organic Framework and Coordination Polymer Glasses. <i>Nano Letters</i> , 2021, 21, 6382-6390.	9.1	39
30	A glass act. <i>Nature Chemistry</i> , 2021, 13, 723-724.	13.6	4
31	Mechanical properties of hydrated cesium-lithium aluminoborate glasses. <i>Physical Review Materials</i> , 2021, 5, .	2.4	3
32	Radiation effects on structure and mechanical properties of borosilicate glasses. <i>Journal of Nuclear Materials</i> , 2021, 552, 153025.	2.7	23
33	Toughening of soda-lime-silica glass by nanoscale phase separation: Molecular dynamics study. <i>Physical Review Materials</i> , 2021, 5, .	2.4	7
34	Revealing the medium-range structure of glassy silica using force-enhanced atomic refinement. <i>Journal of Non-Crystalline Solids</i> , 2021, 573, 121138.	3.1	7
35	Flexible inorganic-organic hybrids with dual inorganic components. <i>Materials Today Chemistry</i> , 2021, 22, 100584.	3.5	5
36	Predicting Fracture Propensity in Amorphous Alumina from Its Static Structure Using Machine Learning. <i>ACS Nano</i> , 2021, 15, 17705-17716.	14.6	20

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37	Vibrational disorder and densification-induced homogenization of local elasticity in silicate glasses. <i>Scientific Reports</i> , 2021, 11, 24454.	3.3	3
38	Competitive effects of free volume, rigidity, and self-adaptivity on indentation response of silicoaluminoborate glasses. <i>Journal of the American Ceramic Society</i> , 2020, 103, 944-954.	3.8	15
39	Indentation cracking and deformation mechanism of sodium aluminoborosilicate glasses. <i>Journal of the American Ceramic Society</i> , 2020, 103, 1656-1665.	3.8	16
40	Composition and pressure effects on the structure, elastic properties and hardness of aluminoborosilicate glass. <i>Journal of Non-Crystalline Solids</i> , 2020, 530, 119797.	3.1	30
41	Heat conduction in oxide glasses: Balancing diffusons and propagons by network rigidity. <i>Applied Physics Letters</i> , 2020, 117, .	3.3	9
42	Predicting Cation Interactions in Alkali Aluminoborate Glasses using Statistical Mechanics. <i>Journal of Non-Crystalline Solids</i> , 2020, 544, 120099.	3.1	6
43	Relaxation behavior of densified sodium aluminoborate glass. <i>Acta Materialia</i> , 2020, 198, 153-167.	7.9	5
44	Atomic structure of hot compressed borosilicate glasses. <i>Journal of the American Ceramic Society</i> , 2020, 103, 6215-6225.	3.8	13
45	Revealing hidden medium-range order in amorphous materials using topological data analysis. <i>Science Advances</i> , 2020, 6, .	10.3	41
46	Mixed Alkali Effect in Silicate Glass Structure: Viewpoint of <sup>29</sup> Si Nuclear Magnetic Resonance and Statistical Mechanics. <i>Journal of Physical Chemistry B</i> , 2020, 124, 10292-10299.	2.6	9
47	Bauchy <i>et al.</i> Reply. <i>Physical Review Letters</i> , 2020, 124, 199602.	7.8	0
48	Topological model of alkali germanate glasses and exploration of the germanate anomaly. <i>Journal of the American Ceramic Society</i> , 2020, 103, 4224-4233.	3.8	12
49	New insights into the structure of sodium silicate glasses by force-enhanced atomic refinement. <i>Journal of Non-Crystalline Solids</i> , 2020, 536, 120006.	3.1	15
50	Metal-Organic Framework Glasses Possess Higher Thermal Conductivity than Their Crystalline Counterparts. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 18893-18903.	8.0	41
51	Structure Dependence of Poisson's Ratio in Cesium Silicate and Borate Glasses. <i>Materials</i> , 2020, 13, 2837.	2.9	6
52	On the relation between fracture toughness and crack resistance in oxide glasses. <i>Journal of Non-Crystalline Solids</i> , 2020, 534, 119946.	3.1	37
53	Cooling rate effects on the structure of 45S5 bioglass: Insights from experiments and simulations. <i>Journal of Non-Crystalline Solids</i> , 2020, 534, 119952.	3.1	31
54	Observation of indentation-induced shear bands in a metal-organic framework glass. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 10149-10154.	7.1	47

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55	On the equivalence of vapor-deposited and melt-quenched glasses. <i>Journal of Chemical Physics</i> , 2020, 152, 164504.	3.0	7
56	Fracture toughness of a metal-organic framework glass. <i>Nature Communications</i> , 2020, 11, 2593.	12.8	76
57	Achieving ultrahigh crack resistance in glass through humid aging. <i>Physical Review Materials</i> , 2020, 4, .	2.4	9
58	Structural dependence of chemical durability in modified aluminoborate glasses. <i>Journal of the American Ceramic Society</i> , 2019, 102, 1157-1168.	3.8	29
59	Breaking the Limit of Micro-Ductility in Oxide Glasses. <i>Advanced Science</i> , 2019, 6, 1901281.	11.2	38
60	Statistical Mechanical Model of Topological Fluctuations and the Intermediate Phase in Binary Phosphate Glasses. <i>Journal of Physical Chemistry B</i> , 2019, 123, 7640-7648.	2.6	5
61	Revisiting the Dependence of Poisson's Ratio on Liquid Fragility and Atomic Packing Density in Oxide Glasses. <i>Materials</i> , 2019, 12, 2439.	2.9	30
62	Predicting Composition-Structure Relations in Alkali Borosilicate Glasses Using Statistical Mechanics. <i>Frontiers in Materials</i> , 2019, 6, .	2.4	11
63	Predicting the dissolution kinetics of silicate glasses by topology-informed machine learning. <i>Npj Materials Degradation</i> , 2019, 3, .	5.8	59
64	Modifier clustering and avoidance principle in borosilicate glasses: A molecular dynamics study. <i>Journal of Chemical Physics</i> , 2019, 150, 044502.	3.0	16
65	Structure, properties, and fabrication of calcium aluminate-based glasses. <i>International Journal of Applied Glass Science</i> , 2019, 10, 488-501.	2.0	10
66	Predicting the Young's Modulus of Silicate Glasses using High-Throughput Molecular Dynamics Simulations and Machine Learning. <i>Scientific Reports</i> , 2019, 9, 8739.	3.3	86
67	Mechanical property optimization of a zinc borate glass by lanthanum doping. <i>Journal of Non-Crystalline Solids</i> , 2019, 520, 119461.	3.1	20
68	Atomic picture of structural relaxation in silicate glasses. <i>Applied Physics Letters</i> , 2019, 114, .	3.3	26
69	Quantifying the internal stress in over-constrained glasses by molecular dynamics simulations. <i>Journal of Non-Crystalline Solids: X</i> , 2019, 1, 100013.	1.2	9
70	Permanent Densification of Calcium Aluminophosphate Glasses. <i>Frontiers in Materials</i> , 2019, 6, .	2.4	10
71	Prediction of the Young's modulus of silicate glasses by topological constraint theory. <i>Journal of Non-Crystalline Solids</i> , 2019, 514, 15-19.	3.1	38
72	Liquid fragility determination of oxide glasses-formers using temperature-modulated DSC. <i>International Journal of Applied Glass Science</i> , 2019, 10, 321-329.	2.0	5

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73	Luminescence behaviour of Eu <sup>3+</sup> in hot-compressed silicate glasses. <i>Journal of Non-Crystalline Solids: X</i> , 2019, 4, 100041.	1.2	3
74	The role of the network-modifier's field-strength in the chemical durability of aluminoborate glasses. <i>Journal of Non-Crystalline Solids</i> , 2019, 505, 279-285.	3.1	32
75	Elasticity, hardness, and fracture toughness of sodium aluminoborosilicate glasses. <i>Journal of the American Ceramic Society</i> , 2019, 102, 4520-4537.	3.8	27
76	Statistical Mechanical Modeling of Borate Glass Structure and Topology: Prediction of Superstructural Units and Glass Transition Temperature. <i>Journal of Physical Chemistry B</i> , 2019, 123, 1206-1213.	2.6	36
77	Indentation deformation in oxide glasses: Quantification, structural changes, and relation to cracking. <i>Journal of Non-Crystalline Solids: X</i> , 2019, 1, 100007.	1.2	42
78	Boron anomaly in the thermal conductivity of lithium borate glasses. <i>Physical Review Materials</i> , 2019, 3, .	2.4	14
79	Predicting the dissolution kinetics of silicate glasses using machine learning. <i>Journal of Non-Crystalline Solids</i> , 2018, 487, 37-45.	3.1	100
80	The hydrophilic-to-hydrophobic transition in glassy silica is driven by the atomic topology of its surface. <i>Journal of Chemical Physics</i> , 2018, 148, 074503.	3.0	35
81	Time and humidity dependence of indentation cracking in aluminosilicate glasses. <i>Journal of Non-Crystalline Solids</i> , 2018, 491, 64-70.	3.1	21
82	Parametric study of temperature-modulated differential scanning calorimetry for high-temperature oxide glasses with varying fragility. <i>Journal of Non-Crystalline Solids</i> , 2018, 484, 84-94.	3.1	3
83	Structural stability of NaPON glass upon heating in air and nitrogen. <i>Journal of Non-Crystalline Solids</i> , 2018, 482, 137-146.	3.1	6
84	Pressure-induced structural changes in titanophosphate glasses studied by neutron and X-ray total scattering analyses. <i>Journal of Non-Crystalline Solids</i> , 2018, 483, 50-59.	3.1	13
85	A new transferable interatomic potential for molecular dynamics simulations of borosilicate glasses. <i>Journal of Non-Crystalline Solids</i> , 2018, 498, 294-304.	3.1	121
86	Hardness of silicate glasses: Atomic-scale origin of the mixed modifier effect. <i>Journal of Non-Crystalline Solids</i> , 2018, 489, 16-21.	3.1	31
87	Nano-phase separation and structural ordering in silica-rich mixed network former glasses. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 15707-15717.	2.8	12
88	Deformation and cracking behavior of La <sub>2</sub> O <sub>3</sub> -doped oxide glasses with high Poisson's ratio. <i>Journal of Non-Crystalline Solids</i> , 2018, 494, 86-93.	3.1	9
89	Structural Compromise between High Hardness and Crack Resistance in Aluminoborate Glasses. <i>Journal of Physical Chemistry B</i> , 2018, 122, 6287-6295.	2.6	32
90	Competitive effects of modifier charge and size on mechanical and chemical resistance of aluminoborate glasses. <i>Journal of Non-Crystalline Solids</i> , 2018, 499, 264-271.	3.1	5

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91	Predicting Q-Speciation in Binary Phosphate Glasses Using Statistical Mechanics. Journal of Physical Chemistry B, 2018, 122, 7609-7615.	2.6	17
92	Structural impact of nitrogen incorporation on properties of alkali germanophosphate glasses. Journal of the American Ceramic Society, 2018, 101, 5004-5019.	3.8	6
93	Combining high hardness and crack resistance in mixed network glasses through high-temperature densification. Physical Review Materials, 2018, 2, .	2.4	8
94	Effect of nanoscale phase separation on the fracture behavior of glasses: Toward tough, yet transparent glasses. Physical Review Materials, 2018, 2, .	2.4	21
95	Predictive model for the composition dependence of glassy dynamics. Journal of the American Ceramic Society, 2018, 101, 1169-1179.	3.8	16
96	Structural origin of high crack resistance in sodium aluminoborate glasses. Journal of Non-Crystalline Solids, 2017, 460, 54-65.	3.1	69
97	Correlating the Network Topology of Oxide Glasses with their Chemical Durability. Journal of Physical Chemistry B, 2017, 121, 1139-1147.	2.6	52
98	Fragility and configurational heat capacity of calcium aluminosilicate glass-forming liquids. Journal of Non-Crystalline Solids, 2017, 461, 24-34.	3.1	35
99	Topological engineering of glasses using temperature-dependent constraints. MRS Bulletin, 2017, 42, 29-33.	3.5	19
100	Mixed alkali silicophosphate oxynitride glasses: Structure-property relations. Journal of Non-Crystalline Solids, 2017, 462, 51-64.	3.1	15
101	Photoelastic response of permanently densified oxide glasses. Optical Materials, 2017, 67, 155-161.	3.6	5
102	Pressure-driven structural depolymerization of zinc phosphate glass. Journal of Non-Crystalline Solids, 2017, 469, 31-38.	3.1	12
103	Structure of MgO/CaO sodium aluminosilicate glasses: Raman spectroscopy study. Journal of Non-Crystalline Solids, 2017, 470, 145-151.	3.1	43
104	Discovery of Ultra-Crack-Resistant Oxide Glasses with Adaptive Networks. Chemistry of Materials, 2017, 29, 5865-5876.	6.7	113
105	Ion exchange strengthening and thermal expansion of glasses: Common origin and critical role of network connectivity. Journal of Non-Crystalline Solids, 2017, 455, 70-74.	3.1	36
106	Cooling rate effects in sodium silicate glasses: Bridging the gap between molecular dynamics simulations and experiments. Journal of Chemical Physics, 2017, 147, 074501.	3.0	107
107	Thermometer Effect: Origin of the Mixed Alkali Effect in Glass Relaxation. Physical Review Letters, 2017, 119, 095501.	7.8	47
108	Dissolution Kinetics of Hot Compressed Oxide Glasses. Journal of Physical Chemistry B, 2017, 121, 9063-9072.	2.6	33





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127	Universal behavior of changes in elastic moduli of hot compressed oxide glasses. <i>Chemical Physics Letters</i> , 2016, 651, 88-91.	2.6	24
128	Unique effects of thermal and pressure histories on glass hardness: Structural and topological origin. <i>Journal of Chemical Physics</i> , 2015, 143, 164505.	3.0	51
129	Cation Diffusivity and the Mixed Network Former Effect in Borosilicate Glasses. <i>Journal of Physical Chemistry B</i> , 2015, 119, 7106-7115.	2.6	18
130	Effect of divalent cations and SiO <sub>2</sub> on the crystallization behavior of calcium aluminate glasses. <i>Journal of Non-Crystalline Solids</i> , 2015, 413, 20-23.	3.1	8
131	Structure-property relations in calcium aluminate glasses containing different divalent cations and SiO <sub>2</sub> . <i>Journal of Non-Crystalline Solids</i> , 2015, 427, 160-165.	3.1	24
132	Role of elastic deformation in determining the mixed alkaline earth effect of hardness in silicate glasses. <i>Journal of Applied Physics</i> , 2015, 117, .	2.5	13
133	Hardness of Oxynitride Glasses: Topological Origin. <i>Journal of Physical Chemistry B</i> , 2015, 119, 4109-4115.	2.6	26
134	Structure-topology-property correlations of sodium phosphosilicate glasses. <i>Journal of Chemical Physics</i> , 2015, 143, 064510.	3.0	47
135	Indentation deformation mechanism of isostatically compressed mixed alkali aluminosilicate glasses. <i>Journal of Non-Crystalline Solids</i> , 2015, 426, 175-183.	3.1	53
136	Temperature-dependent densification of sodium borosilicate glass. <i>RSC Advances</i> , 2015, 5, 78845-78851.	3.6	23
137	Sub-critical crack growth in silicate glasses: Role of network topology. <i>Applied Physics Letters</i> , 2015, 107, .	3.3	23
138	Topological Model for Boroaluminosilicate Glass Hardness. <i>Frontiers in Materials</i> , 2014, 1, .	2.4	42
139	Indentation size effect and the plastic compressibility of glass. <i>Applied Physics Letters</i> , 2014, 104, .	3.3	18
140	Hardness and incipient plasticity in silicate glasses: Origin of the mixed modifier effect. <i>Applied Physics Letters</i> , 2014, 104, .	3.3	46
141	Effect of Na <sub>2</sub> CO <sub>3</sub> as foaming agent on dynamics and structure of foam glass melts. <i>Journal of Non-Crystalline Solids</i> , 2014, 400, 1-5.	3.1	39
142	Non-conservation of the total alkali concentration in ion-exchanged glass. <i>Journal of Non-Crystalline Solids</i> , 2014, 387, 71-75.	3.1	11
143	Mixed alkaline earth effect in the compressibility of aluminosilicate glasses. <i>Journal of Chemical Physics</i> , 2014, 140, 054511.	3.0	52
144	Composition-Structure-Property Relations of Compressed Borosilicate Glasses. <i>Physical Review Applied</i> , 2014, 2, .	3.8	47

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145	Principles of Pyrex® glass chemistry: structure–property relationships. Applied Physics A: Materials Science and Processing, 2014, 116, 491-504.	2.3	39
146	On the origin of the mixed alkali effect on indentation in silicate glasses. Journal of Non-Crystalline Solids, 2014, 406, 22-26.	3.1	39
147	Pressure-Induced Changes in Interdiffusivity and Compressive Stress in Chemically Strengthened Glass. ACS Applied Materials & Interfaces, 2014, 6, 10436-10444.	8.0	22
148	Alkali diffusivity in alkaline earth sodium boroaluminosilicate glasses. Solid State Ionics, 2014, 263, 95-98.	2.7	14
149	Statistical mechanics of glass. Journal of Non-Crystalline Solids, 2014, 396-397, 41-53.	3.1	96
150	Irreversibility of Pressure Induced Boron Speciation Change in Glass. Scientific Reports, 2014, 4, 3770.	3.3	65
151	Structure and properties of sodium aluminosilicate glasses from molecular dynamics simulations. Journal of Chemical Physics, 2013, 139, 044507.	3.0	127
152	Compositional control of the photoelastic response of silicate glasses. Optical Materials, 2013, 35, 2435-2439.	3.6	14
153	Relaxation kinetics of the mechanical properties of an aluminosilicate glass. Journal of Non-Crystalline Solids, 2013, 362, 40-46.	3.1	24
154	Viscosity and Fragility of Alkaline–Earth Sodium Boroaluminosilicate Liquids. Journal of the American Ceramic Society, 2013, 96, 2831-2838.	3.8	13
155	Liquidus surface of MgO–CaO–Al <sub>2</sub> O <sub>3</sub> –SiO <sub>2</sub> glass-forming systems. Journal of Non-Crystalline Solids, 2013, 363, 39-45.	3.1	19
156	Are the dynamics of a glass embedded in its elastic properties?. Journal of Chemical Physics, 2013, 138, 12A501.	3.0	15
157	Impact of ZnO on the structure and properties of sodium aluminosilicate glasses: Comparison with alkaline earth oxides. Journal of Non-Crystalline Solids, 2013, 381, 58-64.	3.1	41
158	Mixed alkaline earth effect in sodium aluminosilicate glasses. Journal of Non-Crystalline Solids, 2013, 369, 61-68.	3.1	85
159	Elastic and micromechanical properties of isostatically compressed soda–lime–borate glasses. Journal of Non-Crystalline Solids, 2013, 364, 44-52.	3.1	54
160	Microscopic Origins of Compositional Trends in Aluminosilicate Glass Properties. Journal of the American Ceramic Society, 2013, 96, 1436-1443.	3.8	37
161	Environmental effects on fatigue of alkaline earth aluminosilicate glass with varying fictive temperature. Journal of Non-Crystalline Solids, 2013, 379, 161-168.	3.1	16
162	Liquidus Temperature of S <sub>2</sub> O <sub>3</sub> –Al <sub>2</sub> O <sub>3</sub> –SiO <sub>2</sub> Glass-Forming Compositions. International Journal of Applied Glass Science, 2013, 4, 225-230.	3.1	16

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163	Topological Model for the Viscosity of Multicomponent Glass-Forming Liquids. International Journal of Applied Glass Science, 2013, 4, 408-413.	2.0	48
164	Photoelastic response of alkaline earth aluminosilicate glasses. Optics Letters, 2012, 37, 293.	3.3	21
165	Structure of boroaluminosilicate glasses: Impact of $[Al_2O_3]$ content. Journal of Non-Crystalline Solids, 2012, 358, 658-665.	3.2	60
166	Elastic interpretation of the glass transition in aluminosilicate liquids. Physical Review B, 2012, 85, .	3.2	27
167	Influence of aluminum speciation on the stability of aluminosilicate glasses against crystallization. Applied Physics Letters, 2012, 101, 041906.	3.3	30
168	Aging in chalcogenide glasses: Origin and consequences. Journal of Non-Crystalline Solids, 2012, 358, 129-132.	3.1	13
169	Glass-forming ability of soda lime borate liquids. Journal of Non-Crystalline Solids, 2012, 358, 658-665.	3.1	23
170	Relationship between viscous dynamics and the configurational thermal expansion coefficient of glass-forming liquids. Journal of Non-Crystalline Solids, 2012, 358, 648-651.	3.1	7
171	Composition-structure-property relationships in boroaluminosilicate glasses. Journal of Non-Crystalline Solids, 2012, 358, 993-1002.	3.1	98
172	Surface-luminescence from thermally reduced bismuth-doped sodium aluminosilicate glasses. Journal of Non-Crystalline Solids, 2012, 358, 3193-3199.	3.1	17
173	Distinguishability of particles in glass-forming systems. Physica A: Statistical Mechanics and Its Applications, 2012, 391, 5392-5403.	2.6	12
174	Unified physics of stretched exponential relaxation and Weibull fracture statistics. Physica A: Statistical Mechanics and Its Applications, 2012, 391, 6121-6127.	2.6	44
175	Minimalist landscape model of glass relaxation. Physica A: Statistical Mechanics and Its Applications, 2012, 391, 3446-3459.	2.6	22
176	Topological Principles of Borosilicate Glass Chemistry. Journal of Physical Chemistry B, 2011, 115, 12930-12946.	2.6	289
177	Persistent Near Infrared Phosphorescence from Rare Earth Ions Co-doped Strontium Aluminate Phosphors. Journal of the Electrochemical Society, 2011, 158, K17.	2.9	19
178	Tunable photoluminescence induced by thermal reduction in rare earth doped glasses. Journal of Materials Chemistry, 2011, 21, 6614.	6.7	22
179	Universal Preparation of Novel Metal and Semiconductor Nanoparticle-Glass Composites with Excellent Nonlinear Optical Properties. Journal of Physical Chemistry C, 2011, 115, 24598-24604.	3.1	32
180	Near-infrared emission from Eu-Yb doped silicate glasses subjected to thermal reduction. Applied Physics Letters, 2011, 98, .	3.3	41

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181	Sodium diffusion in boroaluminosilicate glasses. <i>Journal of Non-Crystalline Solids</i> , 2011, 357, 3744-3750.	3.1	49
182	Inward and Outward Diffusion of Modifying Ions and its Impact on the Properties of Glasses and Glass-Ceramics. <i>International Journal of Applied Glass Science</i> , 2011, 2, 117-128.	2.0	8
183	Abnormal Luminescence Behavior in Bi-Doped Borosilicate Glasses. <i>Journal of the Electrochemical Society</i> , 2011, 158, G151.	2.9	7
184	Crystallisation behaviour and high-temperature stability of stone wool fibres. <i>Journal of the European Ceramic Society</i> , 2010, 30, 1287-1295.	5.7	30
185	Inward Cationic Diffusion and Percolation Transition in Glass-Ceramics. <i>Journal of the American Ceramic Society</i> , 2010, 93, 2161-2163.	3.8	6
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