

# Stphane Gin

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

172  
papers

6,392  
citations

47  
h-index

73  
g-index

184  
ext. papers

7,229  
ext. citations

5.2  
avg, IF

6.04  
L-index

#	Paper	IF	Citations
172	Deciphering the non-linear impact of Al on chemical durability of silicate glass. <i>Acta Materialia</i> , <b>2022</b> , 225, 117478	8.4	2
171	Behaviors of sodium and calcium ions at the borosilicate glass-water interface: Gaining new insights through an ab initio molecular dynamics study.. <i>Journal of Chemical Physics</i> , <b>2022</b> , 156, 134501	3.9	0
170	Impact of initial states on the vapor hydration of iodine-bearing borosilicate glass. <i>Journal of Non-Crystalline Solids</i> , <b>2022</b> , 587, 121584	3.9	0
169	Estimating Internal Stress of an Alteration Layer Formed on Corroded Boroaluminosilicate Glass through Spectroscopic Ellipsometry Analysis. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 50470-50480	9.5	0
168	Influence of Magnesium on the Structure of Complex Multicomponent Silicates: Insights from Molecular Simulations and Neutron Scattering Experiments. <i>Journal of Physical Chemistry B</i> , <b>2021</b> , 125, 11761-11776	3.4	0
167	Investigation on boron and iodine behavior during nuclear glass vapor hydration. <i>Npj Materials Degradation</i> , <b>2021</b> , 5,	5.7	4
166	Atomic Insights into the Events Governing the Borosilicate Glass-Water Interface. <i>Journal of Physical Chemistry C</i> , <b>2021</b> , 125, 7919-7931	3.8	6
165	The fate of Si and Fe while nuclear glass alters with steel and clay. <i>Npj Materials Degradation</i> , <b>2021</b> , 5,	5.7	1
164	Impact of magnesium on the structure of aluminoborosilicate glasses: A solid-state NMR and Raman spectroscopy study. <i>Journal of the American Ceramic Society</i> , <b>2021</b> , 104, 4518-4536	3.8	4
163	Predicting the dissolution rate of borosilicate glasses using QSPR analysis based on molecular dynamics simulations. <i>Journal of the American Ceramic Society</i> , <b>2021</b> , 104, 4445-4458	3.8	3
162	A classical molecular dynamics simulation method for the formation of DryGels from boro-aluminosilicate glass structures. <i>Journal of Non-Crystalline Solids</i> , <b>2021</b> , 553, 120513	3.9	0
161	AVM nuclear glass/steel/claystone system altered by Callovian Oxfordian poral water with and without cement-Bentonite grout at 70°C. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , <b>2021</b> , 72, 474-482	1.6	0
160	Network structure in alteration layer of boroaluminosilicate glass formed by aqueous corrosion. <i>Journal of Non-Crystalline Solids</i> , <b>2021</b> , 553, 120494	3.9	5
159	HLW Conditioning and Long-Term Performance <b>2021</b> , 564-576		
158	Nuclear Waste Vitrification <b>2021</b> , 1205-1218		
157	Recent Advances in Corrosion Science Applicable To Disposal of High-Level Nuclear Waste. <i>Chemical Reviews</i> , <b>2021</b> , 121, 12327-12383	68.1	6
156	Aqueous alteration of silicate glass: state of knowledge and perspectives. <i>Npj Materials Degradation</i> , <b>2021</b> , 5,	5.7	7

155	Leaching and Reactivity at the Sodium Aluminosilicate Glass/Water Interface: Insights from a ReaxFF Molecular Dynamics Study. <i>Journal of Physical Chemistry C</i> , <b>2021</b> , 125, 27170-27184	3.8	2
154	Review of corrosion interactions between different materials relevant to disposal of high-level nuclear waste. <i>Npj Materials Degradation</i> , <b>2020</b> , 4,	5.7	6
153	A General Mechanism for Gel Layer Formation on Borosilicate Glass under Aqueous Corrosion. <i>Journal of Physical Chemistry C</i> , <b>2020</b> , 124, 5132-5144	3.8	18
152	Hydrogen bonding interactions of H <sub>2</sub> O and SiOH on a boroaluminosilicate glass corroded in aqueous solution. <i>Npj Materials Degradation</i> , <b>2020</b> , 4,	5.7	29
151	Self-accelerated corrosion of nuclear waste forms at material interfaces. <i>Nature Materials</i> , <b>2020</b> , 19, 3102-3116	3.7	32
150	Effect of decades of corrosion on the microstructure of altered glasses and their radiation stability. <i>Npj Materials Degradation</i> , <b>2020</b> , 4,	5.7	7
149	Can a simple topological-constraints-based model predict the initial dissolution rate of borosilicate and aluminosilicate glasses?. <i>Npj Materials Degradation</i> , <b>2020</b> , 4,	5.7	15
148	Near-field corrosion interactions between glass and corrosion resistant alloys. <i>Npj Materials Degradation</i> , <b>2020</b> , 4,	5.7	6
147	Spectral changes in Si-OD stretching band of porous glass network upon ingress of water. <i>Journal of Non-Crystalline Solids</i> , <b>2020</b> , 527, 119722	3.9	12
146	Reply to: How much does corrosion of nuclear waste matrices matter. <i>Nature Materials</i> , <b>2020</b> , 19, 962-963	3.7	4
145	Insights into the mechanisms controlling the residual corrosion rate of borosilicate glasses. <i>Npj Materials Degradation</i> , <b>2020</b> , 4,	5.7	9
144	Predicting the dissolution kinetics of silicate glasses by topology-informed machine learning. <i>Npj Materials Degradation</i> , <b>2019</b> , 3,	5.7	32
143	Nanoscale imaging of hydrogen and sodium in alteration layers of corroded glass using ToF-SIMS: Is an auxiliary sputtering ion beam necessary?. <i>Surface and Interface Analysis</i> , <b>2019</b> , 51, 219-225	1.5	1
142	Effect of pH on the stability of passivating gel layers formed on International Simple Glass. <i>Journal of Nuclear Materials</i> , <b>2019</b> , 524, 21-38	3.3	16
141	Monte Carlo simulation of the corrosion of irradiated simplified nuclear waste glasses. <i>Journal of Non-Crystalline Solids</i> , <b>2019</b> , 519, 119449	3.9	9
140	ToF-SIMS depth profiling of altered glass. <i>Npj Materials Degradation</i> , <b>2019</b> , 3,	5.7	13
139	Comparing the reactivity of glasses with their crystalline equivalents: The case study of plagioclase feldspar. <i>Geochimica Et Cosmochimica Acta</i> , <b>2019</b> , 254, 122-141	5.5	18
138	Incipient formation of zircon and hafnon during glass alteration at 90°C. <i>Journal of the American Ceramic Society</i> , <b>2019</b> , 102, 3123-3128	3.8	3

137	Influence of composition of nuclear waste glasses on vapor phase hydration. <i>Journal of Nuclear Materials</i> , <b>2019</b> , 525, 53-71	3-3	12
136	Quantitative Structure-Property Relationship (QSPR) Analysis of ZrO-Containing Soda-Lime Borosilicate Glasses. <i>Journal of Physical Chemistry B</i> , <b>2019</b> , 123, 1412-1422	3-4	27
135	Molecular dynamics simulation of ballistic effects in simplified nuclear waste glasses. <i>Journal of Non-Crystalline Solids</i> , <b>2019</b> , 505, 188-201	3-9	12
134	Influence of iron on the alteration of the SON68 nuclear glass in the Callovo-Oxfordian groundwater. <i>Applied Geochemistry</i> , <b>2019</b> , 100, 268-278	3-5	4
133	Zirconium local environment in simplified nuclear glasses altered in basic, neutral or acidic conditions: Evidence of a double-layered gel. <i>Journal of Non-Crystalline Solids</i> , <b>2019</b> , 503-504, 268-278	3-9	6
132	Effect of clayey groundwater on the dissolution rate of SON68 simulated nuclear waste glass at 70 °C. <i>Journal of Nuclear Materials</i> , <b>2018</b> , 503, 279-289	3-3	10
131	Chemical durability of peraluminous glasses for nuclear waste conditioning. <i>Npj Materials Degradation</i> , <b>2018</b> , 2,	5-7	18
130	Structure of International Simple Glass and properties of passivating layer formed in circumneutral pH conditions. <i>Npj Materials Degradation</i> , <b>2018</b> , 2,	5-7	73
129	A comparative review of the aqueous corrosion of glasses, crystalline ceramics, and metals. <i>Npj Materials Degradation</i> , <b>2018</b> , 2,	5-7	96
128	The effect of magnesium on the local structure and initial dissolution rate of simplified UK Magnox waste glasses. <i>Journal of Non-Crystalline Solids</i> , <b>2018</b> , 497, 82-92	3-9	14
127	Molecular Dynamics Simulation of Water Confinement in Disordered Aluminosilicate Subnanopores. <i>Scientific Reports</i> , <b>2018</b> , 8, 3761	4-9	13
126	Molecular Dynamics Simulations of Water Structure and Diffusion in a 1 nm Diameter Silica Nanopore as a Function of Surface Charge and Alkali Metal Counterion Identity. <i>Journal of Physical Chemistry C</i> , <b>2018</b> , 122, 17764-17776	3-8	35
125	Heavy ion radiation ageing impact on long-term glass alteration behavior. <i>Journal of Nuclear Materials</i> , <b>2018</b> , 510, 168-177	3-3	13
124	Spectroscopic ellipsometry study of thickness and porosity of the alteration layer formed on international simple glass surface in aqueous corrosion conditions. <i>Npj Materials Degradation</i> , <b>2018</b> , 2,	5-7	35
123	Alteration of synthetic basaltic glass in silica saturated conditions: Analogy with nuclear glass. <i>Applied Geochemistry</i> , <b>2018</b> , 97, 19-31	3-5	13
122	Impact of alkali on the passivation of silicate glass. <i>Npj Materials Degradation</i> , <b>2018</b> , 2,	5-7	33
121	Effect of thermally induced structural disorder on the chemical durability of International Simple Glass. <i>Npj Materials Degradation</i> , <b>2018</b> , 2,	5-7	18
120	Modeling glass corrosion with GRAAL. <i>Npj Materials Degradation</i> , <b>2018</b> , 2,	5-7	18

119	Application of GRAAL model to the resumption of International Simple Glass alteration. <i>Npj Materials Degradation</i> , <b>2018</b> , 2,	5.7	12
118	Mechanisms involved in the increase of borosilicate glass alteration by interaction with the Callovian-Oxfordian clayey fraction. <i>Applied Geochemistry</i> , <b>2018</b> , 98, 206-220	3.5	5
117	Dynamics of self-reorganization explains passivation of silicate glasses. <i>Nature Communications</i> , <b>2018</b> , 9, 2169	17.4	74
116	Atom-Probe Tomography, TEM and ToF-SIMS study of borosilicate glass alteration rim: A multiscale approach to investigating rate-limiting mechanisms. <i>Geochimica Et Cosmochimica Acta</i> , <b>2017</b> , 202, 57-76	5.5	77
115	Influence of zeolite precipitation on borosilicate glass alteration under hyperalkaline conditions. <i>Journal of Nuclear Materials</i> , <b>2017</b> , 491, 67-82	3.3	16
114	Reactive Surface of Glass Particles Under Aqueous Corrosion. <i>Procedia Earth and Planetary Science</i> , <b>2017</b> , 17, 257-260		3
113	Modeling Resumption of Glass Alteration Due to Zeolites Precipitation. <i>Procedia Earth and Planetary Science</i> , <b>2017</b> , 17, 340-343		9
112	Silicon isotope ratio measurements by inductively coupled plasma tandem mass spectrometry for alteration studies of nuclear waste glasses. <i>Analytica Chimica Acta</i> , <b>2017</b> , 954, 68-76	6.6	12
111	Various effects of magnetite on international simple glass (ISG) dissolution: implications for the long-term durability of nuclear glasses. <i>Npj Materials Degradation</i> , <b>2017</b> , 1,	5.7	43
110	Radionuclides containment in nuclear glasses: an overview. <i>Radiochimica Acta</i> , <b>2017</b> , 105, 927-959	1.9	75
109	Contribution of zeolite-seeded experiments to the understanding of resumption of glass alteration. <i>Npj Materials Degradation</i> , <b>2017</b> , 1,	5.7	36
108	SON68 glass alteration under Si-rich solutions at low temperature (3500 °C): kinetics, secondary phases and isotopic exchange studies. <i>RSC Advances</i> , <b>2016</b> , 6, 72616-72633	3.7	12
107	The controversial role of inter-diffusion in glass alteration. <i>Chemical Geology</i> , <b>2016</b> , 440, 115-123	4.2	61
106	Structure and Chemical Durability of Lead Crystal Glass. <i>Environmental Science &amp; Technology</i> , <b>2016</b> , 50, 11549-11558	10.3	19
105	Mineralogy and thermodynamic properties of magnesium phyllosilicates formed during the alteration of a simplified nuclear glass. <i>Journal of Nuclear Materials</i> , <b>2016</b> , 475, 255-265	3.3	13
104	Waste Glasses <b>2016</b> , 414-444		1
103	Effect of natural and synthetic iron corrosion products on silicate glass alteration processes. <i>Geochimica Et Cosmochimica Acta</i> , <b>2016</b> , 172, 287-305	5.5	31
102	Glass dissolution rate measurement and calculation revisited. <i>Journal of Nuclear Materials</i> , <b>2016</b> , 476, 140-154	3.3	53

101	Reactive transport processes occurring during nuclear glass alteration in presence of magnetite. <i>Applied Geochemistry</i> , <b>2015</b> , 58, 26-37	3.5	20
100	Origin and consequences of silicate glass passivation by surface layers. <i>Nature Communications</i> , <b>2015</b> , 6, 6360	17.4	175
99	Archeological slag from Glinet: An example of silicate glass altered in an anoxic iron-rich environment. <i>Chemical Geology</i> , <b>2015</b> , 413, 28-43	4.2	16
98	Glass Corrosion in the Presence of Iron-Bearing Materials and Potential Corrosion Suppressors. <i>Materials Research Society Symposia Proceedings</i> , <b>2015</b> , 1744, 139-144		7
97	Long-term alteration of basaltic glass: Mechanisms and rates. <i>Geochimica Et Cosmochimica Acta</i> , <b>2015</b> , 154, 28-48	5.5	56
96	The fate of silicon during glass corrosion under alkaline conditions: A mechanistic and kinetic study with the International Simple Glass. <i>Geochimica Et Cosmochimica Acta</i> , <b>2015</b> , 151, 68-85	5.5	136
95	Resumption of nuclear glass alteration: State of the art. <i>Journal of Nuclear Materials</i> , <b>2014</b> , 448, 348-363	3.3	104
94	Investigation of local environment around rare earths (La and Eu) by fluorescence line narrowing during borosilicate glass alteration. <i>Journal of Luminescence</i> , <b>2014</b> , 145, 213-218	3.8	10
93	Low-temperature lithium diffusion in simulated high-level boroaluminosilicate nuclear waste glasses. <i>Journal of Non-Crystalline Solids</i> , <b>2014</b> , 405, 83-90	3.9	15
92	Development of an Experimental Design to Investigate the Effects of R7T7 Glass Composition on the Residual Rate of Alteration <b>2014</b> , 7, 193-201		8
91	Resumption of Alteration at High Temperature and pH: Rates Measurements and Comparison with Initial Rates <b>2014</b> , 7, 202-208		29
90	Open Scientific Questions about Nuclear Glass Corrosion <b>2014</b> , 7, 163-171		64
89	Antagonist effects of calcium on borosilicate glass alteration. <i>Journal of Nuclear Materials</i> , <b>2013</b> , 441, 402-410	3.3	58
88	Contribution of atom-probe tomography to a better understanding of glass alteration mechanisms: Application to a nuclear glass specimen altered 25years in a granitic environment. <i>Chemical Geology</i> , <b>2013</b> , 349-350, 99-109	4.2	93
87	Topography of borosilicate glass reacting interface under aqueous corrosion. <i>Chemical Physics Letters</i> , <b>2013</b> , 588, 180-183	2.5	3
86	Influence of lanthanum on borosilicate glass structure: A multinuclear MAS and MQMAS NMR investigation. <i>Journal of Non-Crystalline Solids</i> , <b>2013</b> , 376, 189-198	3.9	46
85	An enhanced resolution of the structural environment of zirconium in borosilicate glasses. <i>Journal of Non-Crystalline Solids</i> , <b>2013</b> , 381, 40-47	3.9	24
84	SON68 glass dissolution driven by magnesium silicate precipitation. <i>Journal of Nuclear Materials</i> , <b>2013</b> , 442, 17-28	3.3	30

83	Current Understanding and Remaining Challenges in Modeling Long-Term Degradation of Borosilicate Nuclear Waste Glasses. <i>International Journal of Applied Glass Science</i> , <b>2013</b> , 4, 283-294	1.8	165
82	Dynamics of Water Confined in Gel Formed During Glass Alteration at a Picosecond Scale. <i>Procedia Earth and Planetary Science</i> , <b>2013</b> , 7, 733-737		5
81	Effect of iron metal and siderite on the durability of simulated archeological glassy material. <i>Corrosion Science</i> , <b>2013</b> , 76, 403-414	6.8	31
80	An international initiative on long-term behavior of high-level nuclear waste glass. <i>Materials Today</i> , <b>2013</b> , 16, 243-248	21.8	315
79	HLW glass dissolution in the presence of magnesium carbonate: Diffusion cell experiment and coupled modeling of diffusion and geochemical interactions. <i>Journal of Nuclear Materials</i> , <b>2013</b> , 443, 507-521	3.3	24
78	SON68 Glass Alteration Enhanced by Magnetite. <i>Procedia Earth and Planetary Science</i> , <b>2013</b> , 7, 300-303		15
77	Effect of Zeolite Formation on Borosilicate Glass Dissolution Kinetics. <i>Procedia Earth and Planetary Science</i> , <b>2013</b> , 7, 264-267		21
76	Impact of iron on nuclear glass alteration in geological repository conditions: A multiscale approach. <i>Applied Geochemistry</i> , <b>2013</b> , 31, 159-170	3.5	40
75	Dolomite effect on borosilicate glass alteration. <i>Applied Geochemistry</i> , <b>2013</b> , 33, 237-251	3.5	31
74	Silicate glass alteration enhanced by iron: origin and long-term implications. <i>Environmental Science &amp; Technology</i> , <b>2013</b> , 47, 750-6	10.3	44
73	Glass-Iron-Clay interactions in a radioactive waste geological disposal: a multiscale approach. <i>Materials Research Society Symposia Proceedings</i> , <b>2013</b> , 1518, 185-190		7
72	New Insight into the Residual Rate of Borosilicate Glasses: Effect of S/V and Glass Composition. <i>International Journal of Applied Glass Science</i> , <b>2013</b> , 4, 371-382	1.8	62
71	Chemical Durability of Lanthanum-Enriched Borosilicate Glass. <i>International Journal of Applied Glass Science</i> , <b>2013</b> , 4, 383-394	1.8	19
70	Leaching of Nuclear Waste Glass in Cement Pore Water: Effect of Calcium in Solution <b>2013</b> , 161-168		1
69	Long-term Behavior Science: The cornerstone approach for reliably assessing the long-term performance of nuclear waste. <i>Journal of Nuclear Materials</i> , <b>2012</b> , 420, 182-192	3.3	88
68	Borosilicate glass alteration driven by magnesium carbonates. <i>Journal of Nuclear Materials</i> , <b>2012</b> , 420, 347-361	3.3	35
67	Effect of clayey groundwater on the dissolution rate of the simulated nuclear waste glass SON68. <i>Journal of Nuclear Materials</i> , <b>2012</b> , 420, 508-518	3.3	63
66	Effect of leaching-driven flow on the alteration kinetics of an ideal crack in SON68 glass. <i>Journal of Nuclear Materials</i> , <b>2012</b> , 426, 160-172	3.3	10



65	The dual effect of Mg on the long-term alteration rate of AVM nuclear waste glasses. <i>Journal of Nuclear Materials</i> , <b>2012</b> , 427, 297-310	3.3	46
64	Forward dissolution rate of silicate glasses of nuclear interest in clay-equilibrated groundwater. <i>Chemical Geology</i> , <b>2012</b> , 330-331, 207-217	4.2	60
63	Effect of composition on the short-term and long-term dissolution rates of ten borosilicate glasses of increasing complexity from 3 to 30 oxides. <i>Journal of Non-Crystalline Solids</i> , <b>2012</b> , 358, 2559-2570	3.9	149
62	Impact of soda-lime borosilicate glass composition on water penetration and water structure at the first time of alteration. <i>Journal of Non-Crystalline Solids</i> , <b>2012</b> , 358, 2951-2960	3.9	25
61	Vapor hydration of SON68 glass from 90°C to 200°C: A kinetic study and corrosion products investigation. <i>Journal of Non-Crystalline Solids</i> , <b>2012</b> , 358, 2894-2905	3.9	47
60	Impact of Pore Size and Pore Surface Composition on the Dynamics of Confined Water in Highly Ordered Porous Silica. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 7021-7028	3.8	53
59	Waste Glass <b>2012</b> , 451-483		16
58	Why Do Certain Glasses with a High Dissolution Rate Undergo a Low Degree of Corrosion?. <i>Journal of Physical Chemistry C</i> , <b>2011</b> , 115, 5846-5855	3.8	75
57	Nuclear Glass Durability: New Insight into Alteration Layer Properties. <i>Journal of Physical Chemistry C</i> , <b>2011</b> , 115, 18696-18706	3.8	105
56	Glass/clay interactions in a radioactive waste geological disposal: An integrated laboratory-scale experiment. <i>Applied Geochemistry</i> , <b>2011</b> , 26, 65-79	3.5	58
55	Semi-stochastic generator (FraGMA) of 2D fractured media by mechanistic analogy: Application to reactive transport in a fractured package of vitrified nuclear waste. <i>Computational Materials Science</i> , <b>2011</b> , 50, 1387-1398	3.2	8
54	The use of natural and archeological analogues for understanding the long-term behavior of nuclear glasses. <i>Comptes Rendus - Geoscience</i> , <b>2011</b> , 343, 237-245	1.4	47
53	Glass/water interphase reactivity with calcium rich solutions. <i>Geochimica Et Cosmochimica Acta</i> , <b>2011</b> , 75, 4125-4139	5.5	85
52	A 25-year laboratory experiment on French SON68 nuclear glass leached in a granitic environment: First investigations. <i>Journal of Nuclear Materials</i> , <b>2011</b> , 408, 73-89	3.3	37
51	First investigations of the influence of IVB elements (Ti, Zr, and Hf) on the chemical durability of soda-lime borosilicate glasses. <i>Journal of Non-Crystalline Solids</i> , <b>2010</b> , 356, 2315-2322	3.9	42
50	Long-term modeling of alteration-transport coupling: Application to a fractured Roman glass. <i>Geochimica Et Cosmochimica Acta</i> , <b>2010</b> , 74, 2291-2315	5.5	59
49	Composition effects on synthetic glass alteration mechanisms: Part 1. Experiments. <i>Chemical Geology</i> , <b>2010</b> , 279, 106-119	4.2	49
48	Structural identification of a trioctahedral smectite formed by the aqueous alteration of a nuclear glass. <i>Applied Clay Science</i> , <b>2010</b> , 49, 135-141	5.2	26



47	Archaeological analogs and the future of nuclear waste glass. <i>Journal of Nuclear Materials</i> , <b>2010</b> , 406, 365-370	3-3	31
46	Analytic implementation of the GRAAL model: Application to a R7T7-type glass package in a geological disposal environment. <i>Journal of Nuclear Materials</i> , <b>2010</b> , 404, 178-202	3-3	25
45	Use of Archaeological Glass to Predict the Long-Term Behavior of HLW. <i>Materials Research Society Symposia Proceedings</i> , <b>2009</b> , 1193, 417		2
44	Application of the GRAAL model to leaching experiments with SON68 nuclear glass in initially pure water. <i>Journal of Nuclear Materials</i> , <b>2009</b> , 392, 552-567	3-3	76
43	Mass Transfer Phenomena in Nuclear Waste Packages. <i>Advances in Transport Phenomena</i> , <b>2009</b> , 31-133		2
42	Insight into silicate-glass corrosion mechanisms. <i>Nature Materials</i> , <b>2008</b> , 7, 978-83	27	333
41	Investigation of gel porosity clogging during glass leaching. <i>Journal of Non-Crystalline Solids</i> , <b>2008</b> , 354, 4952-4958	3-9	65
40	A fractured roman glass block altered for 1800 years in seawater: Analogy with nuclear waste glass in a deep geological repository. <i>Geochimica Et Cosmochimica Acta</i> , <b>2008</b> , 72, 5372-5385	5-5	58
39	Theoretical consideration on the application of the Aagaard-Helgeson rate law to the dissolution of silicate minerals and glasses. <i>Chemical Geology</i> , <b>2008</b> , 255, 14-24	4-2	55
38	Single Idealized Cracks: A Tool for Understanding Fractured Glass Block Leaching. <i>Materials Research Society Symposia Proceedings</i> , <b>2008</b> , 1107, 1		1
37	SON68 nuclear glass dissolution kinetics: Current state of knowledge and basis of the new GRAAL model. <i>Journal of Nuclear Materials</i> , <b>2008</b> , 380, 8-21	3-3	273
36	Solid state diffusion during nuclear glass residual alteration in solution. <i>Journal of Nuclear Materials</i> , <b>2007</b> , 362, 466-473	3-3	74
35	Alteration kinetics of the glass-ceramic zirconolite and role of the alteration film [Comparison with the SON68 glass. <i>Journal of Nuclear Materials</i> , <b>2007</b> , 366, 277-287	3-3	24
34	Water penetration mechanisms in nuclear glasses by X-ray and neutron reflectometry. <i>Journal of Non-Crystalline Solids</i> , <b>2007</b> , 353, 2221-2230	3-9	52
33	Modelling The Alteration of Son-68 Glass with Nearfield Materials. <i>Materials Research Society Symposia Proceedings</i> , <b>2006</b> , 932, 1		3
32	Long-Term Behavior of Embiez Archaeological Glass: Results after 1800 Years of Alteration in a Marine Environment. <i>Materials Research Society Symposia Proceedings</i> , <b>2006</b> , 932, 1		3
31	Chemical durability of high-level waste glass in repository environment: main conclusions and remaining uncertainties from the GLASTAB and GLAMOR projects. <i>Materials Research Society Symposia Proceedings</i> , <b>2006</b> , 932, 1		5
30	Son68 Glass Dissolution Kinetics at High Reaction Progress: Mechanisms Accounting For The Residual Alteration Rate. <i>Materials Research Society Symposia Proceedings</i> , <b>2006</b> , 932, 1		20

29	Hydrogen-sodium interdiffusion in borosilicate glasses investigated from first principles. <i>Journal of Non-Crystalline Solids</i> , <b>2006</b> , 352, 3147-3152	3.9	74
28	Protective properties and dissolution ability of the gel formed during nuclear glass alteration. <i>Journal of Nuclear Materials</i> , <b>2005</b> , 342, 26-34	3.3	54
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