StÃ©phane Gin

List of Publications by Year
in descending order

179 papers	8,102 citations	31902 53 h-index	58464 82 g-index
184 all docs	184 docs citations	184 times ranked	2504 citing authors

#	Article	IF	Citations
1	Effects of Al:Si and (Al+Na):Si ratios on the static corrosion of sodiumâ€boroaluminosilicate glasses. International Journal of Applied Glass Science, 2022, 13, 94-111.	1.0	10
2	Deciphering the non-linear impact of Al on chemical durability of silicate glass. Acta Materialia, 2022, 225, 117478.	3.8	17
3	Behaviors of sodium and calcium ions at the borosilicate glassâ€“water interface: Gaining new insights through an <i>ab initio</i> molecular dynamics study. Journal of Chemical Physics, 2022, 156, 134501.	1.2	14
4	Impact of initial states on the vapor hydration of iodine-bearing borosilicate glass. Journal of Non-Crystalline Solids, 2022, 587, 121584.	1.5	2
5	A comparative study of the dissolution mechanisms of amorphous and crystalline feldspars at acidic pH conditions. Npj Materials Degradation, 2022, 6, .	2.6	7
6	Impact of aqueous solution pH on network structure of corrosionâ€induced surface layers of boroaluminosilicate glass. Journal of the American Ceramic Society, 2022, 105, 6581-6592.	1.9	2
7	Development of potentials for molecular dynamics simulations of dry and hydrated calcium aluminosilicate glasses by force matching and refinement. Journal of Non-Crystalline Solids, 2022, 592, 121746.	1.5	4
8	Long-term interactive corrosion between International Simple Glass and stainless steel. Npj Materials Degradation, 2022, 6, .	2.6	0
9	Effects of irradiation on the mechanisms controlling the residual rate of an alumino-borosilicate glass. Npj Materials Degradation, 2022, 6, .	2.6	4
10	Structure--property relationship and chemical durability of magnesium-containing borosilicate glasses with insight from topological constraints. Npj Materials Degradation, 2022, 6, .	2.6	3
11	A classical molecular dynamics simulation method for the formation of â€œdryâ€•gels from boro-aluminosilicate glass structures. Journal of Non-Crystalline Solids, 2021, 553, 120513.	1.5	3
12	AVM nuclear glass/steel/claystone system altered by Callovoâ€“Oxfordian poral water with and without cementâ€“bentonite grout at 70Â°C. Materials and Corrosion - Werkstoffe Und Korrosion, 2021, 72, 474-482.	0.8	3
13	Network structure in alteration layer of boroaluminosilicate glass formed by aqueous corrosion. Journal of Non-Crystalline Solids, 2021, 553, 120494.	1.5	12
14	HLW Conditioning and Long-Term Performance. , 2021, , 564-576.		1
15	Investigation on boron and iodine behavior during nuclear glass vapor hydration. Npj Materials Degradation, 2021, 5, .	2.6	7
16	Atomic Insights into the Events Governing the Borosilicate Glassâ€“Water Interface. Journal of Physical Chemistry C, 2021, 125, 7919-7931.	1.5	20
17	The fate of Si and Fe while nuclear glass alters with steel and clay. Npj Materials Degradation, 2021, 5, .	2.6	5
18	Impact of magnesium on the structure of aluminoborosilicate glasses: A solidâ€state NMR and Raman spectroscopy study. Journal of the American Ceramic Society, 2021, 104, 4518-4536.	1.9	26

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19	Predicting the dissolution rate of borosilicate glasses using QSPR analysis based on molecular dynamics simulations. Journal of the American Ceramic Society, 2021, 104, 4445-4458.	1.9	18
20	Recent Advances in Corrosion Science Applicable To Disposal of High-Level Nuclear Waste. Chemical Reviews, 2021, 121, 12327-12383.	23.0	52
21	Aqueous alteration of silicate glass: state of knowledge and perspectives. Npj Materials Degradation, 2021, 5, .	2.6	56
22	Estimating Internal Stress of an Alteration Layer Formed on Corroded Boroaluminosilicate Glass through Spectroscopic Ellipsometry Analysis. ACS Applied Materials & Interfaces, 2021, 13, 50470-50480.	4.0	2
23	Influence of Magnesium on the Structure of Complex Multicomponent Silicates: Insights from Molecular Simulations and Neutron Scattering Experiments. Journal of Physical Chemistry B, 2021, 125, 11761-11776.	1.2	9
24	Leaching and Reactivity at the Sodium Aluminosilicate Glassâ€"Water Interface: Insights from a ReaxFF Molecular Dynamics Study. Journal of Physical Chemistry C, 2021, 125, 27170-27184.	1.5	21
25	Spectral changes in Siâ€"Oâ€"Si stretching band of porous glass network upon ingress of water. Journal of Non-Crystalline Solids, 2020, 527, 119722.	1.5	30
26	Reply to: How much does corrosion of nuclear waste matrices matter. Nature Materials, 2020, 19, 962-963.	13.3	7
27	Insights into the mechanisms controlling the residual corrosion rate of borosilicate glasses. Npj Materials Degradation, 2020, 4, .	2.6	26
28	Review of corrosion interactions between different materials relevant to disposal of high-level nuclear waste. Npj Materials Degradation, 2020, 4, .	2.6	20
29	A General Mechanism for Gel Layer Formation on Borosilicate Glass under Aqueous Corrosion. Journal of Physical Chemistry C, 2020, 124, 5132-5144.	1.5	43
30	Hydrogen bonding interactions of H2O and SiOH on a boroaluminosilicate glass corroded in aqueous solution. Npj Materials Degradation, 2020, 4, .	2.6	64
31	Self-accelerated corrosion of nuclear waste forms at material interfaces. Nature Materials, 2020, 19, 310-316.	13.3	61
32	Effect of decades of corrosion on the microstructure of altered glasses and their radiation stability. Npj Materials Degradation, 2020, 4, .	2.6	13
33	Can a simple topological-constraints-based model predict the initial dissolution rate of borosilicate and aluminosilicate glasses?. Npj Materials Degradation, 2020, 4, .	2.6	26
34	Near-field corrosion interactions between glass and corrosion resistant alloys. Npj Materials Degradation, 2020, 4, .	2.6	15
35	Influence of composition of nuclear waste glasses on vapor phase hydration. Journal of Nuclear Materials, 2019, 525, 53-71.	1.3	20
36	Predicting the dissolution kinetics of silicate glasses by topology-informed machine learning. Npj Materials Degradation, 2019, 3, .	2.6	59

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37	Nanoscale imaging of hydrogen and sodium in alteration layers of corroded glass using ToFâ€SIMS: Is an auxiliary sputtering ion beam necessary?. Surface and Interface Analysis, 2019, 51, 219-225.	0.8	3
38	Effect of pH on the stability of passivating gel layers formed on International Simple Glass. Journal of Nuclear Materials, 2019, 524, 21-38.	1.3	25
39	Monte Carlo simulation of the corrosion of irradiated simplified nuclear waste glasses. Journal of Non-Crystalline Solids, 2019, 519, 119449.	1.5	13
40	ToF-SIMS depth profiling of altered glass. Npj Materials Degradation, 2019, 3, .	2.6	22
41	Comparing the reactivity of glasses with their crystalline equivalents: The case study of plagioclase feldspar. Geochimica Et Cosmochimica Acta, 2019, 254, 122-141.	1.6	27
42	Incipient formation of zircon and hafnon during glass alteration at 90Â°C. Journal of the American Ceramic Society, 2019, 102, 3123-3128.	1.9	3
43	Quantitative Structureâ€"Property Relationship (QSPR) Analysis of ZrO₂-Containing Soda-Lime Borosilicate Glasses. Journal of Physical Chemistry B, 2019, 123, 1412-1422.	1.2	41
44	Molecular dynamics simulation of ballistic effects in simplified nuclear waste glasses. Journal of Non-Crystalline Solids, 2019, 505, 188-201.	1.5	16
45	Influence of iron on the alteration of the SON68 nuclear glass in the Callovo-Oxfordian groundwater. Applied Geochemistry, 2019, 100, 268-278.	1.4	7
46	Zirconium local environment in simplified nuclear glasses altered in basic, neutral or acidic conditions: Evidence of a double-layered gel. Journal of Non-Crystalline Solids, 2019, 503-504, 268-278.	1.5	11
47	Effect of clayey groundwater on the dissolution rate of SON68 simulated nuclear waste glass at 70â€¯Â°C. Journal of Nuclear Materials, 2018, 503, 279-289.	1.3	16
48	Chemical durability of peraluminous glasses for nuclear waste conditioning. Npj Materials Degradation, 2018, 2, .	2.6	25
49	Structure of International Simple Glass and properties of passivating layer formed in circumneutral pH conditions. Npj Materials Degradation, 2018, 2, .	2.6	91
50	A comparative review of the aqueous corrosion of glasses, crystalline ceramics, and metals. Npj Materials Degradation, 2018, 2, .	2.6	150
51	The effect of magnesium on the local structure and initial dissolution rate of simplified UK Magnox waste glasses. Journal of Non-Crystalline Solids, 2018, 497, 82-92.	1.5	18
52	Molecular Dynamics Simulation of Water Confinement in Disordered Aluminosilicate Subnanopores. Scientific Reports, 2018, 8, 3761.	1.6	17
53	Simplifying a solution to a complex puzzle. Npj Materials Degradation, 2018, 2, .	2.6	6
54	Impact of alkali on the passivation of silicate glass. Npj Materials Degradation, 2018, 2, .	2.6	42

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55	Effect of thermally induced structural disorder on the chemical durability of International Simple Glass. Npj Materials Degradation, 2018, 2, .	2.6	37
56	Modeling glass corrosion with GRAAL. Npj Materials Degradation, 2018, 2, .	2.6	23
57	Application of GRAAL model to the resumption of International Simple Glass alteration. Npj Materials Degradation, 2018, 2, .	2.6	13
58	Mechanisms involved in the increase of borosilicate glass alteration by interaction with the Callovian-Oxfordian clayey fraction. Applied Geochemistry, 2018, 98, 206-220.	1.4	5
59	Dynamics of self-reorganization explains passivation of silicate glasses. Nature Communications, 2018, 9, 2169.	5.8	94
60	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. Journal of Physical Chemistry C, 2018, 122, 17764-17776.	1.5	47
61	Heavy ion radiation ageing impact on long-term glass alteration behavior. Journal of Nuclear Materials, 2018, 510, 168-177.	1.3	22
62	Spectroscopic ellipsometry study of thickness and porosity of the alteration layer formed on international simple glass surface in aqueous corrosion conditions. Npj Materials Degradation, 2018, 2, .	2.6	44
63	Alteration of synthetic basaltic glass in silica saturated conditions: Analogy with nuclear glass. Applied Geochemistry, 2018, 97, 19-31.	1.4	17
64	Atom-Probe Tomography, TEM and ToF-SIMS study of borosilicate glass alteration rim: A multiscale approach to investigating rate-limiting mechanisms. Geochimica Et Cosmochimica Acta, 2017, 202, 57-76.	1.6	88
65	Influence of zeolite precipitation on borosilicate glass alteration under hyperalkaline conditions. Journal of Nuclear Materials, 2017, 491, 67-82.	1.3	20
66	Reactive Surface of Glass Particles Under Aqueous Corrosion. Procedia Earth and Planetary Science, 2017, 17, 257-260.	0.6	3
67	Modeling Resumption of Glass Alteration Due to Zeolites Precipitation. Procedia Earth and Planetary Science, 2017, 17, 340-343.	0.6	10
68	Silicon isotope ratio measurements by inductively coupled plasma tandem mass spectrometry for alteration studies of nuclear waste glasses. Analytica Chimica Acta, 2017, 954, 68-76.	2.6	14
69	Material degradation foreseen in the very long term: the case of glasses and ferrous metals. Npj Materials Degradation, 2017, 1, .	2.6	8
70	Various effects of magnetite on international simple glass (ISG) dissolution: implications for the long-term durability of nuclear glasses. Npj Materials Degradation, 2017, 1, .	2.6	57
71	Radionuclides containment in nuclear glasses: an overview. Radiochimica Acta, 2017, 105, 927-959.	0.5	126
72	Contribution of zeolite-seeded experiments to the understanding of resumption of glass alteration. Npj Materials Degradation, 2017, 1, .	2.6	47

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73	Waste Glasses. , 2016, , 414-444.		1
74	Effect of natural and synthetic iron corrosion products on silicate glass alteration processes. Geochimica Et Cosmochimica Acta, 2016, 172, 287-305.	1.6	40
75	Glass dissolution rate measurement and calculation revisited. Journal of Nuclear Materials, 2016, 476, 140-154.	1.3	69
76	SON68 glass alteration under Si-rich solutions at low temperature (35â€"90 Â°C): kinetics, secondary phases and isotopic exchange studies. RSC Advances, 2016, 6, 72616-72633.	1.7	20
77	The controversial role of inter-diffusion in glass alteration. Chemical Geology, 2016, 440, 115-123.	1.4	80
78	Structure and Chemical Durability of Lead Crystal Glass. Environmental Science & Technology, 2016, 50, 11549-11558.	4.6	24
79	Mineralogy and thermodynamic properties of magnesium phyllosilicates formed during the alteration of a simplified nuclear glass. Journal of Nuclear Materials, 2016, 475, 255-265.	1.3	16
80	Glass Corrosion in the Presence of Iron-Bearing Materials and Potential Corrosion Suppressors. Materials Research Society Symposia Proceedings, 2015, 1744, 139-144.	0.1	7
81	Long-term alteration of basaltic glass: Mechanisms and rates. Geochimica Et Cosmochimica Acta, 2015, 154, 28-48.	1.6	67
82	The fate of silicon during glass corrosion under alkaline conditions: A mechanistic and kinetic study with the International Simple Glass. Geochimica Et Cosmochimica Acta, 2015, 151, 68-85.	1.6	165
83	Reactive transport processes occurring during nuclear glass alteration in presence of magnetite. Applied Geochemistry, 2015, 58, 26-37.	1.4	20
84	Origin and consequences of silicate glass passivation by surface layers. Nature Communications, 2015, 6, 6360.	5.8	219
85	Archeological slag from Glinet: An example of silicate glass altered in an anoxic iron-rich environment. Chemical Geology, 2015, 413, 28-43.	1.4	18
86	Development of an Experimental Design to Investigate the Effects of R7T7 Glass Composition on the Residual Rate of Alteration. , 2014, 7, 193-201.		11
87	Resumption of Alteration at High Temperature and pH: Rates Measurements and Comparison with Initial Rates. , 2014, 7, 202-208.		34
88	Open Scientific Questions about Nuclear Glass Corrosion. , 2014, 7, 163-171.		73
89	Resumption of nuclear glass alteration: State of the art. Journal of Nuclear Materials, 2014, 448, 348-363.	1.3	124
90	Investigation of local environment around rare earths (La and Eu) by fluorescence line narrowing during borosilicate glass alteration. Journal of Luminescence, 2014, 145, 213-218.	1.5	11

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91	Low-temperature lithium diffusion in simulated high-level boroaluminosilicate nuclear waste glasses. Journal of Non-Crystalline Solids, 2014, 405, 83-90.	1.5	18
92	Antagonist effects of calcium on borosilicate glass alteration. Journal of Nuclear Materials, 2013, 441, 402-410.	1.3	67
93	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. Chemical Geology, 2013, 349-350, 99-109.	1.4	105
94	Topography of borosilicate glass reacting interface under aqueous corrosion. Chemical Physics Letters, 2013, 588, 180-183.	1.2	5
95	Influence of lanthanum on borosilicate glass structure: A multinuclear MAS and MQMAS NMR investigation. Journal of Non-Crystalline Solids, 2013, 376, 189-198.	1.5	57
96	An enhanced resolution of the structural environment of zirconium in borosilicate glasses. Journal of Non-Crystalline Solids, 2013, 381, 40-47.	1.5	31
97	SON68 glass dissolution driven by magnesium silicate precipitation. Journal of Nuclear Materials, 2013, 442, 17-28.	1.3	35
98	Current Understanding and Remaining Challenges in Modeling Longâ€Term Degradation of Borosilicate Nuclear Waste Glasses. International Journal of Applied Glass Science, 2013, 4, 283-294.	1.0	208
99	Dynamics of Water Confined in Gel Formed During Glass Alteration at a Picosecond Scale. Procedia Earth and Planetary Science, 2013, 7, 733-737.	0.6	5
100	Effect of iron metal and siderite on the durability of simulated archeological glassy material. Corrosion Science, 2013, 76, 403-414.	3.0	42
101	An international initiative on long-term behavior of high-level nuclear waste glass. Materials Today, 2013, 16, 243-248.	8.3	417
102	HLW glass dissolution in the presence of magnesium carbonate: Diffusion cell experiment and coupled modeling of diffusion and geochemical interactions. Journal of Nuclear Materials, 2013, 443, 507-521.	1.3	29
103	SON68 Glass Alteration Enhanced by Magnetite. Procedia Earth and Planetary Science, 2013, 7, 300-303.	0.6	16
104	Effect of Zeolite Formation on Borosilicate Glass Dissolution Kinetics. Procedia Earth and Planetary Science, 2013, 7, 264-267.	0.6	23
105	Impact of iron on nuclear glass alteration in geological repository conditions: A multiscale approach. Applied Geochemistry, 2013, 31, 159-170.	1.4	45
106	Dolomite effect on borosilicate glass alteration. Applied Geochemistry, 2013, 33, 237-251.	1.4	32
107	Silicate Glass Alteration Enhanced by Iron: Origin and Long-Term Implications. Environmental Science & Technology, 2013, 47, 750-756.	4.6	56
108	Glass-Iron-Clay interactions in a radioactive waste geological disposal: a multiscale approach. Materials Research Society Symposia Proceedings, 2013, 1518, 185-190.	0.1	7

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109	New Insight into the Residual Rate of Borosilicate Glasses: Effect of <scp>S</scp>/<scp>V</scp> and Glass Composition. International Journal of Applied Glass Science, 2013, 4, 371-382.	1.0	76
110	Chemical Durability of Lanthanumâ€Enriched Borosilicate Glass. International Journal of Applied Glass Science, 2013, 4, 383-394.	1.0	23
111	Leaching of Nuclear Waste Glass in Cement Pore Water: Effect of Calcium in Solution. , 2013, , 161-168.		1
112	Waste Glass. , 2012, , 451-483.		20
113	Ubiquitous presence of laminae in altered layers of glass artefacts. , 2012, , .		0
114	Forward dissolution rate of silicate glasses of nuclear interest in clay-equilibrated groundwater. Chemical Geology, 2012, 330-331, 207-217.	1.4	67
115	Effect of composition on the short-term and long-term dissolution rates of ten borosilicate glasses of increasing complexity from 3 to 30 oxides. Journal of Non-Crystalline Solids, 2012, 358, 2559-2570.	1.5	174
116	Impact of soda-lime borosilicate glass composition on water penetration and water structure at the first time of alteration. Journal of Non-Crystalline Solids, 2012, 358, 2951-2960.	1.5	27
117	Vapor hydration of SON68 glass from 90Â°C to 200Â°C: A kinetic study and corrosion products investigation. Journal of Non-Crystalline Solids, 2012, 358, 2894-2905.	1.5	57
118	Impact of Pore Size and Pore Surface Composition on the Dynamics of Confined Water in Highly Ordered Porous Silica. Journal of Physical Chemistry C, 2012, 116, 7021-7028.	1.5	59
119	Long-term Behavior Science: The cornerstone approach for reliably assessing the long-term performance of nuclear waste. Journal of Nuclear Materials, 2012, 420, 182-192.	1.3	94
120	Borosilicate glass alteration driven by magnesium carbonates. Journal of Nuclear Materials, 2012, 420, 347-361.	1.3	44
121	Effect of clayey groundwater on the dissolution rate of the simulated nuclear waste glass SON68. Journal of Nuclear Materials, 2012, 420, 508-518.	1.3	70
122	Effect of leaching-driven flow on the alteration kinetics of an ideal crack in SON68 glass. Journal of Nuclear Materials, 2012, 426, 160-172.	1.3	10
123	The dual effect of Mg on the long-term alteration rate of AVM nuclear waste glasses. Journal of Nuclear Materials, 2012, 427, 297-310.	1.3	57
124	Why Do Certain Glasses with a High Dissolution Rate Undergo a Low Degree of Corrosion?. Journal of Physical Chemistry C, 2011, 115, 5846-5855.	1.5	79
125	Nuclear Glass Durability: New Insight into Alteration Layer Properties. Journal of Physical Chemistry C, 2011, 115, 18696-18706.	1.5	116
126	Glassâ€“ironâ€“clay interactions in a radioactive waste geological disposal: An integrated laboratory-scale experiment. Applied Geochemistry, 2011, 26, 65-79.	1.4	66

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127	Semi-stochastic generator (FraGMA) of 2D fractured media by mechanistic analogy â€“ Application to reactive transport in a fractured package of vitrified nuclear waste. Computational Materials Science, 2011, 50, 1387-1398.	1.4	8
128	The use of natural and archeological analogues for understanding the long-term behavior of nuclear glasses. Comptes Rendus - Geoscience, 2011, 343, 237-245.	0.4	56
129	Glassâ€“water interphase reactivity with calcium rich solutions. Geochimica Et Cosmochimica Acta, 2011, 75, 4125-4139.	1.6	93
130	A 25-year laboratory experiment on French SON68 nuclear glass leached in a granitic environment â€“ First investigations. Journal of Nuclear Materials, 2011, 408, 73-89.	1.3	47
131	Archaeological analogs and the future of nuclear waste glass. Journal of Nuclear Materials, 2010, 406, 365-370.	1.3	38
132	Analytic implementation of the GRAAL model: Application to a R7T7-type glass package in a geological disposal environment. Journal of Nuclear Materials, 2010, 404, 178-202.	1.3	28
133	First investigations of the influence of IVB elements (Ti, Zr, and Hf) on the chemical durability of soda-lime borosilicate glasses. Journal of Non-Crystalline Solids, 2010, 356, 2315-2322.	1.5	46
134	Long-term modeling of alteration-transport coupling: Application to a fractured Roman glass. Geochimica Et Cosmochimica Acta, 2010, 74, 2291-2315.	1.6	69
135	Composition effects on synthetic glass alteration mechanisms: Part 1. Experiments. Chemical Geology, 2010, 279, 106-119.	1.4	54
136	Structural identification of a trioctahedral smectite formed by the aqueous alteration of a nuclear glass. Applied Clay Science, 2010, 49, 135-141.	2.6	29
137	Use of Archaeological Glass to Predict the Long-Term Behavior of HLW. Materials Research Society Symposia Proceedings, 2009, 1193, 417.	0.1	3
138	Application of the GRAAL model to leaching experiments with SON68 nuclear glass in initially pure water. Journal of Nuclear Materials, 2009, 392, 552-567.	1.3	86
139	Mass Transfer Phenomena in Nuclear Waste Packages. Advances in Transport Phenomena, 2009, , 31-133.	0.5	4
140	SON68 nuclear glass dissolution kinetics: Current state of knowledge and basis of the new GRAAL model. Journal of Nuclear Materials, 2008, 380, 8-21.	1.3	314
141	Insight into silicate-glass corrosion mechanisms. Nature Materials, 2008, 7, 978-983.	13.3	402
142	Investigation of gel porosity clogging during glass leaching. Journal of Non-Crystalline Solids, 2008, 354, 4952-4958.	1.5	75
143	A fractured roman glass block altered for 1800 years in seawater: Analogy with nuclear waste glass in a deep geological repository. Geochimica Et Cosmochimica Acta, 2008, 72, 5372-5385.	1.6	75
144	Theoretical consideration on the application of the Aagaardâ€“Helgeson rate law to the dissolution of silicate minerals and glasses. Chemical Geology, 2008, 255, 14-24.	1.4	58

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145	Single Idealized Cracks: A Tool for Understanding Fractured Glass Block Leaching. Materials Research Society Symposia Proceedings, 2008, 1107, 1.	0.1	1
146	Water penetration mechanisms in nuclear glasses by X-ray and neutron reflectometry. Journal of Non-Crystalline Solids, 2007, 353, 2221-2230.	1.5	54
147	Solid state diffusion during nuclear glass residual alteration in solution. Journal of Nuclear Materials, 2007, 362, 466-473.	1.3	80
148	Alteration kinetics of the glass-ceramic zirconolite and role of the alteration film â€" Comparison with the SON68 glass. Journal of Nuclear Materials, 2007, 366, 277-287.	1.3	32
149	Use of natural and archaeological analogs to validate long-term behaviour of HLW glass in geological disposal conditions. , 2007, , .		0
150	Hydrogenâ€"sodium interdiffusion in borosilicate glasses investigated from first principles. Journal of Non-Crystalline Solids, 2006, 352, 3147-3152.	1.5	91
151	Modelling The Alteration of Son-68 Glass with Nearfield Materials. Materials Research Society Symposia Proceedings, 2006, 932, 1.	0.1	3
152	Long-Term Behavior of Embiez Archaeological Glass: Results after 1800 Years of Alteration in a Marine Environment. Materials Research Society Symposia Proceedings, 2006, 932, 1.	0.1	3
153	Chemical durability of high-level waste glass in repository environment: main conclusions and remaining uncertainties from the GLASTAB and GLAMOR projects. Materials Research Society Symposia Proceedings, 2006, 932, 1.	0.1	8
154	Son68 Glass Dissolution Kinetics at High Reaction Progress: Mechanisms Accounting for The Residual Alteration Rate. Materials Research Society Symposia Proceedings, 2006, 932, 1.	0.1	24
155	Protective properties and dissolution ability of the gel formed during nuclear glass alteration. Journal of Nuclear Materials, 2005, 342, 26-34.	1.3	65
156	The effect of composition on the leaching of three nuclear waste glasses: R7T7, AVM and VRZ. Journal of Nuclear Materials, 2005, 346, 194-207.	1.3	106
157	Compositional Effects on the Long-Term Durability of Nuclear Waste Glasses: A Statistical Approach. Materials Research Society Symposia Proceedings, 2004, 824, 240.	0.1	27
158	Long-term behavior of R7T7-type nuclear glass: Current state of knowledge and outlook. Materials Research Society Symposia Proceedings, 2004, 824, 258.	0.1	21
159	Role of neoformed phases on the mechanisms controlling the resumption of SON68 glass alteration in alkaline media. Journal of Nuclear Materials, 2004, 324, 152-164.	1.3	114
160	Morphological evolution of alteration layers formed during nuclear glass alteration: new evidence of a gel as a diffusive barrier. Journal of Nuclear Materials, 2004, 326, 9-18.	1.3	84
161	Study of gel development during SON68 glass alteration using atomic force microscopy. Comparison with two simplified glasses. Journal of Nuclear Materials, 2003, 317, 83-92.	1.3	27
162	X-ray reflectometry characterization of SON 68 glass alteration films. Journal of Non-Crystalline Solids, 2003, 325, 113-123.	1.5	22

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163	Nuclear Glass Alteration in Clay: Assessment of the Effect of Direct Contact between the Materials through Experimental and Modeling Approach. Materials Research Society Symposia Proceedings, 2003, 807, 636.	0.1	5
164	Affinity Rate Law Failure to Describe Sodium Borosilicate Glass Alteration Kinetics. Materials Research Society Symposia Proceedings, 2003, 807, 19.	0.1	1
165	SON68 Glass Dissolution Kinetics at High Reaction Progress: Experimental Evidence of the Residual Rate. Materials Research Society Symposia Proceedings, 2002, 757, II5.9.1.	0.1	9
166	French SON 68 nuclear glass alteration mechanisms on contact with clay media. Applied Geochemistry, 2001, 16, 861-881.	1.4	54
167	SON 68 nuclear glass alteration kinetics between pH 7 and pH 11.5. Journal of Nuclear Materials, 2001, 295, 83-96.	1.3	105
168	Role and properties of the gel formed during nuclear glass alteration: importance of gel formation conditions. Journal of Nuclear Materials, 2001, 298, 1-10.	1.3	92
169	Present understanding of R7T7 glass alteration kinetics and their impact on long-term behavior modeling. Journal of Nuclear Materials, 2001, 298, 27-36.	1.3	112
170	17O 3Q-MAS NMR characterization of a sodium aluminoborosilicate glass and its alteration gel. Chemical Physics Letters, 2001, 341, 23-28.	1.2	52
171	Protective Effect of the Alteration Gel: A Key Mechanism in the Long-Term Behavior of Nuclear Waste Glass. Materials Research Society Symposia Proceedings, 2000, 663, 1.	0.1	31
172	Apparent Solubility Limit of Nuclear Glass. Materials Research Society Symposia Proceedings, 2000, 663, 1.	0.1	12
173	Alteration kinetics of a simplified nuclear glass in an aqueous medium: effects of solution chemistry and of protective gel properties on diminishing the alteration rate. Journal of Nuclear Materials, 2000, 280, 216-229.	1.3	114
174	Use of orthophosphate complexing agents to investigate mechanisms limiting the alteration kinetics of French SON 68 nuclear glass. Applied Geochemistry, 2000, 15, 1505-1525.	1.4	22
175	Borosilicate Nuclear Waste Glass Alteration Kinetics: Chemical Inhibition and Affinity Control. Materials Research Society Symposia Proceedings, 1997, 506, 63.	0.1	30
176	Control of R7T7 Nuclear Glass Alteration Kinetics Under Saturation Conditions. Materials Research Society Symposia Proceedings, 1995, 412, 189.	0.1	21
177	Experimental investigation of aqueous corrosion of R7T7 nuclear glass at 90Â°C in the presence of organic species. Applied Geochemistry, 1994, 9, 255-269.	1.4	36
178	Experimental alteration of R7T7 glass in salt brines at 90Â°C and 150Â°C. Applied Clay Science, 1992, 7, 87-96.	2.6	1
179	Deciphering the Non-Linear Impact of Al on Chemical Durability of Silicate Glass. SSRN Electronic Journal, 0, , .	0.4	1