

# Jonathan F Stebbins

## List of Publications by Year in descending order

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174  
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11,022  
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16451

64  
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177  
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177  
docs citations

177  
times ranked

4934  
citing authors

#	ARTICLE	IF	CITATIONS
1	NMR evidence for excess non-bridging oxygen in an aluminosilicate glass. <i>Nature</i> , 1997, 390, 60-62.	27.8	449
2	The degree of aluminum avoidance in aluminosilicate glasses. <i>American Mineralogist</i> , 1999, 84, 937-945.	1.9	278
3	Identification of multiple structural species in silicate glasses by <sup>29</sup> Si NMR. <i>Nature</i> , 1987, 330, 465-467.	27.8	245
4	Quantification of five- and six-coordinated aluminum ions in aluminosilicate and fluoride-containing glasses by high-field, high-resolution <sup>27</sup> Al NMR. <i>Journal of Non-Crystalline Solids</i> , 2000, 275, 1-6.	3.1	233
5	Three-Coordinated Boron-11 Chemical Shifts in Borates. <i>Inorganic Chemistry</i> , 2001, 40, 6239-6246.	4.0	222
6	Solid-state NMR study of metastable immiscibility in alkali borosilicate glasses. <i>Journal of Non-Crystalline Solids</i> , 2003, 315, 239-255.	3.1	219
7	Effects of temperature and composition on silicate glass structure and dynamics: <sup>29</sup> Si NMR results. <i>Journal of Non-Crystalline Solids</i> , 1988, 106, 359-369.	3.1	216
8	Nature of Silicon-Boron Mixing in Sodium Borosilicate Glasses: A High-Resolution <sup>11</sup> B and <sup>17</sup> O NMR Study. <i>Journal of Physical Chemistry B</i> , 2003, 107, 10063-10076.	2.6	206
9	Network connectivity in aluminoborosilicate glasses: A high-resolution <sup>11</sup> B, <sup>27</sup> Al and <sup>17</sup> O NMR study. <i>Journal of Non-Crystalline Solids</i> , 2005, 351, 3508-3520.	3.1	202
10	Aluminum coordination and the densification of high-pressure aluminosilicate glasses. <i>American Mineralogist</i> , 2005, 90, 1218-1222.	1.9	201
11	NMR evidence for five-coordinated silicon in a silicate glass at atmospheric pressure. <i>Nature</i> , 1991, 351, 638-639.	27.8	199
12	Al-O-Al and Si-O-Si sites in framework aluminosilicate glasses with Si/Al=1: quantification of framework disorder. <i>Journal of Non-Crystalline Solids</i> , 2000, 270, 260-264.	3.1	187
13	The Structure of Aluminosilicate Glasses: A High-Resolution <sup>17</sup> O and <sup>27</sup> Al MAS and <sup>3</sup> QMAS NMR Study. <i>Journal of Physical Chemistry B</i> , 2000, 104, 4091-4100.	2.6	175
14	The Structural Role of Lanthanum and Yttrium in Aluminosilicate Glasses: A <sup>27</sup> Al and <sup>17</sup> O MAS NMR Study. <i>Journal of Physical Chemistry B</i> , 1998, 102, 10690-10697.	2.6	167
15	Temperature effects on non-bridging oxygen and aluminum coordination number in calcium aluminosilicate glasses and melts. <i>Geochimica Et Cosmochimica Acta</i> , 2008, 72, 910-925.	3.9	163
16	Bonding preferences of non-bridging O atoms: Evidence from <sup>17</sup> O MAS and <sup>3</sup> QMAS NMR on calcium aluminate and low-silica Ca-aluminosilicate glasses. <i>American Mineralogist</i> , 2003, 88, 949-954.	1.9	160
17	Anionic Species Determination in CaSiO <sub>3</sub> Glass Using Two-Dimensional <sup>29</sup> Si NMR. <i>Journal of Physical Chemistry B</i> , 1997, 101, 4004-4008.	2.6	157
18	Effects of temperature on the structures of silicate liquids: <sup>29</sup> Si NMR results. <i>Geochimica Et Cosmochimica Acta</i> , 1988, 52, 2659-2669.	3.9	148

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19	Nature of Cation Mixing and Ordering in Na-Ca Silicate Glasses and Melts. <i>Journal of Physical Chemistry B</i> , 2003, 107, 3141-3148.	2.6	142
20	Fluoride sites in aluminosilicate glasses: High-resolution <sup>19</sup> F NMR results. <i>American Mineralogist</i> , 2000, 85, 863-867.	1.9	139
21	The distribution of sodium ions in aluminosilicate glasses: a high-field Na-23 MAS and 3Q MAS NMR study. <i>Geochimica Et Cosmochimica Acta</i> , 2003, 67, 1699-1709.	3.9	139
22	Temperature Effects on Structure and Dynamics in Borate and Borosilicate Liquids: High-Resolution and High-Temperature NMR Results. <i>Journal of the American Ceramic Society</i> , 1996, 79, 2247-2256.	3.8	125
23	The structure and dynamics of alkali silicate liquids: A view from NMR spectroscopy. <i>Chemical Geology</i> , 1992, 96, 371-385.	3.3	123
24	Cation sites in mixed-alkali oxide glasses: correlations of NMR chemical shift data with site size and bond distance. <i>Solid State Ionics</i> , 1998, 112, 137-141.	2.7	123
25	Correlated structural distributions in silica glass. <i>Physical Review B</i> , 2004, 70, .	3.2	120
26	Al-O-Al oxygen sites in crystalline aluminates and aluminosilicate glasses; high-resolution oxygen-17 NMR results. <i>American Mineralogist</i> , 1999, 84, 983-986.	1.9	117
27	Effects of cation field strength on the structure of aluminoborosilicate glasses: High-resolution <sup>11</sup> B, <sup>27</sup> Al and <sup>23</sup> Na MAS NMR. <i>Journal of Non-Crystalline Solids</i> , 2009, 355, 556-562.	3.1	116
28	Cation ordering at fluoride sites in silicate glasses: a high-resolution <sup>19</sup> F NMR study. <i>Journal of Non-Crystalline Solids</i> , 2000, 262, 1-5.	3.1	114
29	Fluorine sites in calcium and barium oxyfluorides: F-19 NMR on crystalline model compounds and glasses. <i>Journal of Non-Crystalline Solids</i> , 2002, 306, 160-168.	3.1	112
30	Dynamics of the $\alpha$ - $\beta$ phase transitions in quartz and cristobalite as observed by in-situ high temperature <sup>29</sup> Si and <sup>17</sup> O NMR. <i>Physics and Chemistry of Minerals</i> , 1992, 19, 307.	0.8	111
31	Effect of structural transitions on properties of high-pressure silicate melts: <sup>27</sup> Al NMR, glass densities, and melt viscosities. <i>American Mineralogist</i> , 2007, 92, 1093-1104.	1.9	111
32	Multiple- $\pi$ Quantum Magic-Angle Spinning <sup>17</sup> O NMR Studies of Borate, Borosilicate, and Boroaluminate Glasses. <i>Journal of the American Ceramic Society</i> , 1999, 82, 1519-1528.	3.8	110
33	Disorder and the extent of polymerization in calcium silicate and aluminosilicate glasses: O-17 NMR results and quantum chemical molecular orbital calculations. <i>Geochimica Et Cosmochimica Acta</i> , 2006, 70, 4275-4286.	3.9	108
34	Compositional and temperature effects on five-coordinated silicon in ambient pressure silicate glasses. <i>Journal of Non-Crystalline Solids</i> , 1993, 160, 116-125.	3.1	107
35	Non-bridging oxygen sites in barium borosilicate glasses: results from <sup>11</sup> B and <sup>17</sup> O NMR. <i>Journal of Non-Crystalline Solids</i> , 2000, 276, 122-131.	3.1	103
36	Site Preference and Si/B Mixing in Mixed-Alkali Borosilicate Glasses: A High-Resolution <sup>11</sup> B and <sup>17</sup> O NMR Study. <i>Chemistry of Materials</i> , 2003, 15, 3913-3921.	6.7	102

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37	Non-bridging oxygens in borate glasses: characterization by $^{11}\text{B}$ and $^{17}\text{O}$ MAS and 3QMAS NMR. Solid State Nuclear Magnetic Resonance, 2000, 16, 9-19.	2.3	100
38	Ca-Mg and K-Mg mixing around non-bridging O atoms in silicate glasses: An investigation using $^{17}\text{O}$ MAS and 3QMAS NMR. American Mineralogist, 2004, 89, 777-784.	1.9	97
39	Properties of impurity-bearing ferrihydrite I. Effects of Al content and precipitation rate on the structure of 2-line ferrihydrite. Geochimica Et Cosmochimica Acta, 2012, 92, 275-291.	3.9	96
40	Cation clustering and formation of free oxide ions in sodium and potassium lanthanum silicate glasses: nuclear magnetic resonance and Raman spectroscopic findings. Journal of Non-Crystalline Solids, 1999, 243, 146-157.	3.1	94
41	On the structure of borosilicate glasses: a triple-quantum magic-angle spinning $^{17}\text{O}$ nuclear magnetic resonance study. Journal of Non-Crystalline Solids, 1998, 231, 286-290.	3.1	92
42	Temperature and modifier cation field strength effects on aluminoborosilicate glass network structure. Journal of Non-Crystalline Solids, 2013, 362, 73-81.	3.1	91
43	Structure of Cl-containing silicate and aluminosilicate glasses: A $^{35}\text{Cl}$ MAS-NMR study. Geochimica Et Cosmochimica Acta, 2004, 68, 5059-5069.	3.9	89
44	Quench rate and temperature effects on boron coordination in aluminoborosilicate melts. Journal of Non-Crystalline Solids, 2010, 356, 2097-2108.	3.1	89
45	Effects of the degree of polymerization on the structure of sodium silicate and aluminosilicate glasses and melts: An $^{17}\text{O}$ NMR study. Geochimica Et Cosmochimica Acta, 2009, 73, 1109-1119.	3.9	88
46	Cation field strength effects on high pressure aluminosilicate glass structure: Multinuclear NMR and La XAFS results. Geochimica Et Cosmochimica Acta, 2009, 73, 3914-3933.	3.9	88
47	Characterization of quenched high pressure phases in $\text{CaSiO}_3$ system by XRD and $^{29}\text{Si}$ NMR. Geophysical Research Letters, 1991, 18, 463-466.	4.0	83
48	The effect of fictive temperature on Al coordination in high-pressure (10 GPa) sodium aluminosilicate glasses. American Mineralogist, 2005, 90, 1453-1457.	1.9	83
49	Pressure-induced structural changes in a borosilicate glass-forming liquid: boron coordination, non-bridging oxygens, and network ordering. Journal of Non-Crystalline Solids, 2004, 337, 196-200.	3.1	82
50	Site connectivities in sodium aluminoborate glasses: multinuclear and multiple quantum NMR results. Solid State Nuclear Magnetic Resonance, 2005, 27, 37-49.	2.3	82
51	Structure and dynamics of magnesium in silicate melts; a high-temperature $^{25}\text{Mg}$ NMR study. American Mineralogist, 1998, 83, 1022-1029.	1.9	81
52	Vacancy and Cation Distribution in Ytria-Doped Ceria: An $^{89}\text{Y}$ and $^{17}\text{O}$ MAS NMR Study. Chemistry of Materials, 2007, 19, 5742-5747.	6.7	75
53	Nuclear magnetic resonance at high temperature. Chemical Reviews, 1991, 91, 1353-1373.	47.7	74
54	$\text{Ca}^{2+}$ -Mg mixing in aluminosilicate glasses: An investigation using $^{17}\text{O}$ MAS and 3QMAS and $^{27}\text{Al}$ MAS NMR. Journal of Non-Crystalline Solids, 2008, 354, 4644-4653.	3.1	74

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55	Structural response of a highly viscous aluminoborosilicate melt to isotropic and anisotropic compressions. <i>Journal of Chemical Physics</i> , 2009, 131, .	3.0	74
56	Scandium Coordination in Solid Oxides and Stabilized Zirconia: $^{45}\text{Sc}$ NMR. <i>Chemistry of Materials</i> , 2006, 18, 3855-3859.	6.7	73
57	Structural mechanisms of compression and decompression in high-pressure $\text{K}_2\text{Si}_4\text{O}_9$ glasses: an investigation utilizing Raman and NMR spectroscopy of glasses and crystalline materials. <i>Chemical Geology</i> , 2004, 213, 137-151.	3.3	71
58	Non-bridging oxygen and high-coordinated aluminum in metaluminous and peraluminous calcium and potassium aluminosilicate glasses: High-resolution $^{17}\text{O}$ and $^{27}\text{Al}$ MAS NMR results. <i>American Mineralogist</i> , 2011, 96, 841-853.	1.9	71
59	Simultaneous aluminum, silicon, and sodium coordination changes in 6 GPa sodium aluminosilicate glasses. <i>American Mineralogist</i> , 2009, 94, 1205-1215.	1.9	70
60	Non-stoichiometric non-bridging oxygens and five-coordinated aluminum in alkaline earth aluminosilicate glasses: Effect of modifier cation size. <i>Journal of Non-Crystalline Solids</i> , 2012, 358, 1783-1789.	3.1	70
61	Cation Field Strength Effects on Boron Coordination in Binary Borate Glasses. <i>Journal of the American Ceramic Society</i> , 2014, 97, 2794-2801.	3.8	70
62	Cross-Polarization from Quadrupolar Nuclei to Silicon Using Low-Radio-Frequency Amplitudes during Magic-Angle Spinning. <i>Journal of Physical Chemistry B</i> , 1997, 101, 3240-3249.	2.6	69
63	Interactions between network cation coordination and non-bridging oxygen abundance in oxide glasses and melts: Insights from NMR spectroscopy. <i>Chemical Geology</i> , 2013, 346, 34-46.	3.3	67
64	Topological Disorder and Reactivity of Borosilicate Glasses: $^1\text{H}$ Quantum Chemical Calculations and $^{17}\text{O}$ and $^{11}\text{B}$ NMR Study. <i>Journal of Physical Chemistry B</i> , 2001, 105, 12583-12595.	2.6	64
65	Chloride ion sites in silicate and aluminosilicate glasses: A preliminary study by $^{35}\text{Cl}$ solid-state NMR. <i>American Mineralogist</i> , 2002, 87, 359-363.	1.9	64
66	Quench rate and temperature effects on framework ordering in aluminosilicate melts. <i>American Mineralogist</i> , 2006, 91, 753-761.	1.9	64
67	$^{19}\text{F}$ NMR study of the ordering of high field strength cations at fluoride sites in silicate and aluminosilicate glasses. <i>Journal of Non-Crystalline Solids</i> , 2004, 337, 142-149.	3.1	60
68	Challenges in Ceramic Science: A Report from the Workshop on Emerging Research Areas in Ceramic Science. <i>Journal of the American Ceramic Society</i> , 2012, 95, 3699-3712.	3.8	59
69	The effect of fictive temperature on the structure of E-glass: A high resolution, multinuclear NMR study. <i>Journal of Non-Crystalline Solids</i> , 2005, 351, 3571-3578.	3.1	58
70	Tuning the bandgap of $\text{Cs}_2\text{AgBiBr}_6$ through dilute tin alloying. <i>Chemical Science</i> , 2019, 10, 10620-10628.	7.4	58
71	High-temperature $^{23}\text{Na}$ MAS NMR data for albite; comparison to chemical-shift models. <i>American Mineralogist</i> , 1995, 80, 878-884.	1.9	56
72	In situ high temperature $^{27}\text{Al}$ NMR study of structure and dynamics in a calcium aluminosilicate glass and melt. <i>Journal of Non-Crystalline Solids</i> , 2007, 353, 4001-4010.	3.1	53

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73	Raman, Brillouin, and nuclear magnetic resonance spectroscopic studies on shocked borosilicate glass. <i>Journal of Applied Physics</i> , 2011, 109, .	2.5	53
74	Modifier cation (Ba, Ca, La, Y) field strength effects on aluminum and boron coordination in aluminoborosilicate glasses: the roles of fictive temperature and boron content. <i>Applied Physics A: Materials Science and Processing</i> , 2014, 116, 479-490.	2.3	53
75	Temperature effects on the network structure of oxide melts and their consequences for configurational heat capacity. <i>Chemical Geology</i> , 2008, 256, 80-91.	3.3	51
76	Density of Molten Sodium Aluminosilicates. <i>Journal of the American Ceramic Society</i> , 1986, 69, 396-399.	3.8	48
77	Solids and Liquids in the NaF-AlF <sub>3</sub> -Al <sub>2</sub> O <sub>3</sub> System: A High-Temperature NMR Study. <i>Journal of the American Ceramic Society</i> , 1992, 75, 3001-3006.	3.8	45
78	Enhanced resolution and quantitation from 'ultrahigh' field NMR spectroscopy of glasses. <i>Journal of Non-Crystalline Solids</i> , 2001, 293-295, 440-445.	3.1	45
79	Oxygen sites in hydrous aluminosilicate glasses: the role of Al-O-Al and H <sub>2</sub> O. <i>Geochimica Et Cosmochimica Acta</i> , 2002, 66, 291-301.	3.9	42
80	Bond length-bond angle correlation in densified silica—Results from 17O NMR spectroscopy. <i>Journal of Chemical Physics</i> , 2017, 146, .	3.0	42
81	Bonding and dynamical phenomena in MgO: A high temperature 17O and 25Mg NMR study. <i>Physics and Chemistry of Minerals</i> , 1994, 20, 587-593.	0.8	41
82	Chapter 7. DYNAMICS AND STRUCTURE OF SILICATE AND OXIDE MELTS: NUCLEAR MAGNETIC RESONANCE STUDIES. , 1995, , 191-246.		40
83	Aluminosilicate melts and glasses at 1 to 3 GPa: Temperature and pressure effects on recovered structural and density changes. <i>American Mineralogist</i> , 2015, 100, 2298-2307.	1.9	40
84	Oxygen Sites and Network Coordination in Sodium Germanate Glasses and Crystals: A High-Resolution Oxygen-17 and Sodium-23 NMR. <i>Journal of Physical Chemistry B</i> , 2006, 110, 12427-12437.	2.6	39
85	Magic angle spinning NMR observation of sodium site exchange in nepheline at 500 Å C. <i>Physics and Chemistry of Minerals</i> , 1989, 16, 763-766.	0.8	38
86	<sup>29</sup> Si CPMAS NMR investigations of silanol-group minerals and hydrous aluminosilicate glasses. <i>American Mineralogist</i> , 2000, 85, 722-731.	1.9	38
87	Natural hydrous amorphous silica: Quantitation of network speciation and hydroxyl content by <sup>29</sup> Si MAS NMR and vibrational spectroscopy. <i>American Mineralogist</i> , 2012, 97, 203-211.	1.9	38
88	Cation dynamics and premelting in lithium metasilicate (Li <sub>2</sub> SiO <sub>3</sub> ) and sodium metasilicate (Na <sub>2</sub> SiO <sub>3</sub> ); a high-temperature NMR study. <i>American Mineralogist</i> , 1998, 83, 1277-1284.	1.9	37
89	Solid state NMR study of oxygen site exchange and Al-O-Al site concentration in analcime. <i>American Mineralogist</i> , 2000, 85, 1030-1037.	1.9	37
90	Comparison of FAM mixing to single-pulse mixing in 17O 3Q- and 5Q-MAS NMR of oxygen sites in zeolites. <i>Chemical Physics Letters</i> , 2001, 344, 325-332.	2.6	37

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91	Probing the electrical properties of highly-doped Al:ZnO nanowire ensembles. Journal of Applied Physics, 2010, 107, 074312.	2.5	36
92	Microscopic dynamics and viscous flow in a borosilicate glass-forming liquid. Journal of Non-Crystalline Solids, 1998, 224, 80-85.	3.1	35
93	<sup>17</sup> O and <sup>27</sup> Al MAS and <sup>3</sup> QMAS NMR Study of Synthetic and Natural Layer Silicates. Chemistry of Materials, 2003, 15, 2605-2613.	6.7	35
94	Direct observation of multiple oxygen sites in oxide glasses: recent advances from triple-quantum magic-angle spinning nuclear magnetic resonance. Journal of Non-Crystalline Solids, 2001, 293-295, 67-73.	3.1	33
95	Glass structure, melt structure, and dynamics: Some concepts for petrology. American Mineralogist, 2016, 101, 753-768.	1.9	33
96	Aluminum substitution in MgSiO <sub>3</sub> perovskite: Investigation of multiple mechanisms by <sup>27</sup> Al NMR: Figure 1.. American Mineralogist, 2003, 88, 1161-1164.	1.9	32
97	Effects of UV cure on glass structure and fracture properties of nanoporous carbon-doped oxide thin films. Journal of Applied Physics, 2008, 104, 043513.	2.5	32
98	Forsterite, wadsleyite, and ringwoodite (Mg <sub>2</sub> SiO <sub>4</sub> ): <sup>29</sup> Si NMR constraints on structural disorder and effects of paramagnetic impurity ions. American Mineralogist, 2009, 94, 626-629.	1.9	32
99	Structure of Amorphous Tantalum Oxide and Titania-Doped Tantalum: <sup>17</sup> O NMR Results for Sol-Gel and Ion-Beam-Sputtered Materials. Chemistry of Materials, 2011, 23, 3460-3465.	6.7	32
100	Oxide ion speciation in potassium silicate glasses: New limits from <sup>17</sup> O NMR. Journal of Non-Crystalline Solids, 2013, 368, 17-22.	3.1	32
101	Aluminum in Rutile [TiO <sub>2</sub> ]: Characterization by Single-Crystal and Magic-Angle-Spinning Nuclear Magnetic Resonance. Journal of the American Ceramic Society, 1989, 72, 2198-2200.	3.8	31
102	Paramagnetic interactions in the <sup>31</sup> P NMR spectroscopy of rare earth element orthophosphate (REPO <sub>4</sub> ). Tj ETQq0 0.0 rgBT /Overlock 10	1.9	30
103	Estimating accuracy of <sup>17</sup> O NMR measurements in oxide glasses: Constraints and evidence from crystalline and glassy calcium and barium silicates. Journal of Non-Crystalline Solids, 2012, 358, 2999-3006.	3.1	30
104	Composition and pressure effects on the structure, elastic properties and hardness of aluminoborosilicate glass. Journal of Non-Crystalline Solids, 2020, 530, 119797.	3.1	30
105	O atom sites in natural kaolinite and muscovite: <sup>17</sup> O MAS and <sup>3</sup> QMAS NMR study. American Mineralogist, 2003, 88, 493-500.	1.9	29
106	Calcium and Strontium Hexaluminates: <sup>27</sup> Al NMR Evidence that <sup>27</sup> Al Cation Sites Are Four-Coordinated. Journal of Physical Chemistry B, 2004, 108, 3681-3685.	2.6	29
107	Germanosilicate and alkali germanosilicate glass structure: New insights from high-resolution oxygen-17 NMR. Journal of Non-Crystalline Solids, 2007, 353, 2910-2918.	3.1	29
108	Sodium germanate glasses and crystals: NMR constraints on variation in structure with composition. Journal of Non-Crystalline Solids, 2007, 353, 4732-4742.	3.1	29

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109	Aluminum Substitution in Rutile Titanium Dioxide: New Constraints from High-Resolution $^{27}\text{Al}$ NMR. <i>Chemistry of Materials</i> , 2007, 19, 1862-1869.	6.7	29
110	Forsterite, hydrous and anhydrous wadsleyite and ringwoodite ( $\text{Mg}_2\text{SiO}_4$ ): $^{29}\text{Si}$ NMR results for chemical shift anisotropy, spin-lattice relaxation, and mechanism of hydration. <i>American Mineralogist</i> , 2009, 94, 905-915.	1.9	28
111	Constraining $^{17}\text{O}$ and $^{27}\text{Al}$ NMR spectra of high-pressure crystals and glasses: New data for jadeite, pyrope, grossular, and mullite. <i>American Mineralogist</i> , 2007, 92, 210-216.	1.9	27
112	High-temperature in situ $^{11}\text{B}$ NMR study of network dynamics in boron-containing glass-forming liquids. <i>Journal of Non-Crystalline Solids</i> , 2011, 357, 3944-3951.	3.1	27
113	Nuclear Magnetic Resonance Spectroscopy of Silicates and Oxides in Geochemistry and Geophysics. <i>AGU Reference Shelf</i> , 2013, , 303-331.	0.6	27
114	$\text{Sc}_2(\text{WO}_4)_3$ and $\text{Sc}_2(\text{MoO}_4)_3$ and Their Solid Solutions: $^{45}\text{Sc}$ , $^{17}\text{O}$ , and $^{27}\text{Al}$ MAS NMR Results at Ambient and High Temperature. <i>Chemistry of Materials</i> , 2009, 21, 309-315.	6.7	26
115	Anomalous resonances in $^{29}\text{Si}$ and $^{27}\text{Al}$ NMR spectra of pyrope ( $[\text{Mg,Fe}]_3\text{Al}_2\text{Si}_3\text{O}_{12}$ ) garnets: effects of paramagnetic cations. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 6906.	2.8	26
116	Effect of extraframework species on O NMR chemical shifts in zeolite A. <i>Microporous and Mesoporous Materials</i> , 2002, 55, 239-251.	4.4	25
117	High temperature $^{17}\text{O}$ MAS NMR study of calcia, magnesia, scandia and yttria stabilized zirconia. <i>Solid State Ionics</i> , 2007, 178, 1499-1506.	2.7	25
118	Variable-temperature $^{27}\text{Al}$ and $^{29}\text{Si}$ NMR studies of synthetic forsterite and Fe-bearing Dora Maira pyrope garnet: Temperature dependence and mechanisms of paramagnetically shifted peaks. <i>American Mineralogist</i> , 2011, 96, 1090-1099.	1.9	25
119	Cation order-disorder in Fe-bearing pyrope and grossular garnets: A $^{27}\text{Al}$ and $^{29}\text{Si}$ MAS NMR and $^{57}\text{Fe}$ Mossbauer spectroscopy study. <i>American Mineralogist</i> , 2015, 100, 536-547.	1.9	25
120	Structural changes in calcium aluminoborosilicate glasses recovered from pressures of 1.5 to 3 GPa: Interactions of two network species with coordination number increases. <i>Journal of Non-Crystalline Solids</i> , 2017, 478, 50-57.	3.1	25
121	Disordering during melting: An $^{17}\text{O}$ NMR Study of crystalline and glassy $\text{CaTiSiO}_5$ (titanite). <i>American Mineralogist</i> , 2002, 87, 572-579.	1.9	23
122	The Effect of Fictive Temperature on the Structural Environment of Fluorine in Silicate and Aluminosilicate Glasses. <i>Journal of the American Ceramic Society</i> , 2006, 89, 57-64.	3.8	23
123	Aluminum substitution in stishovite and $\text{MgSiO}_3$ perovskite: High-resolution $^{27}\text{Al}$ NMR. <i>American Mineralogist</i> , 2006, 91, 337-343.	1.9	23
124	Phase relations in $\text{Na}_2\text{O}-\text{SiO}_2$ and $\text{K}_2\text{Si}_4\text{O}_9$ systems up to 14 GPa and $^{29}\text{Si}$ NMR study of the new high-pressure phases: implications to the structure of high-pressure silicate glasses. <i>Physics of the Earth and Planetary Interiors</i> , 1998, 107, 9-21.	1.9	22
125	Cation order/disorder behavior and crystal chemistry of pyrope-grossular garnets: An $^{17}\text{O}$ 3QMAS and $^{27}\text{Al}$ MAS NMR spectroscopic study. <i>American Mineralogist</i> , 2008, 93, 134-143.	1.9	22
126	Potassium hydrogen disilicate: A possible model compound for $^{17}\text{O}$ NMR spectra of hydrous silicate glasses. <i>American Mineralogist</i> , 2001, 86, 341-347.	1.9	21



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127	Temperature calibration for high-temperature MAS NMR to 913K: $^{63}\text{Cu}$ MAS NMR of $\text{CuBr}$ and $\text{CuI}$ , and $^{23}\text{Na}$ MAS NMR of $\text{NaNbO}_3$ . <i>Solid State Nuclear Magnetic Resonance</i> , 2011, 40, 45-50.	2.3	21
128	The structure of ion beam sputtered amorphous alumina films and effects of Zn doping: High-resolution $^{27}\text{Al}$ NMR. <i>Journal of Non-Crystalline Solids</i> , 2014, 405, 1-6.	3.1	21
129	Response of complex networks to compression: Ca, La, and Y aluminoborosilicate glasses formed from liquids at 1 to 3 GPa pressures. <i>Journal of Chemical Physics</i> , 2016, 144, 044502.	3.0	21
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