

# Masami Kanzaki

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3189778/publications.pdf>

Version: 2024-02-01

75

papers

2,617

citations

172207

29

h-index

189595

50

g-index

78

all docs

78

docs citations

78

times ranked

2027

citing authors

#	ARTICLE	IF	CITATIONS
1	Raman spectroscopic study of pressure-induced phase transitions in tridymite modifications. <i>Journal of Mineralogical and Petrological Sciences</i> , 2021, , .	0.4	1
2	CO<sub>2</sub> distribution in CO<sub>2</sub>/sub<sub>2</sub>rich melanophlogite from Fortunillo, Tuscany, Italy. <i>Journal of Mineralogical and Petrological Sciences</i> , 2020, 115, 471-478.	0.4	2
3	Phase transitions of tridymite MC: A low frequency Raman spectroscopic study. <i>Journal of Mineralogical and Petrological Sciences</i> , 2020, 115, 296-301.	0.4	1
4	High-temperature Raman spectroscopic study of CO<sub>2</sub> containing melanophlogite. <i>Journal of Mineralogical and Petrological Sciences</i> , 2019, 114, 122-129.	0.4	6
5	Raman spectra of tridymite modifications: MC, MX<sub>1</sub>, and PO<sub>10</sub>. <i>Journal of Mineralogical and Petrological Sciences</i> , 2019, 114, 214-218.	0.4	5
6	Carbonate speciation in depolymerized and polymerized (alumino)silicate glasses: Constraints from <sup>13</sup> C MAS and static NMR measurements and ab initio calculations. <i>Chemical Geology</i> , 2018, 479, 151-165.	1.4	11
7	Pressure-induced phase transitions of Zn<sub>2</sub>SiO<sub>4</sub> III and IV studied using in-situ Raman spectroscopy. <i>Journal of Mineralogical and Petrological Sciences</i> , 2018, 113, 263-267.	0.4	0
8	Temperature-induced phase transition of AlPO<sub>4</sub> moganite studied by in-situ Raman spectroscopy. <i>Journal of Mineralogical and Petrological Sciences</i> , 2018, 113, 126-134.	0.4	3
9	Crystal structures of Zn<sub>2</sub>GeO<sub>4</sub> cubic/tetragonal spinel and Zn<sub>2</sub>SiO<sub>4</sub> modified spinel phases. <i>Journal of Mineralogical and Petrological Sciences</i> , 2018, 113, 41-46.	0.4	8
10	Hydrogen incorporation mechanisms in forsterite: New insights from <sup>1</sup> H and <sup>29</sup> Si NMR spectroscopy and first-principles calculation. <i>American Mineralogist</i> , 2017, 102, 519-536.	0.9	25
11	Crystal structures of two oxygen-deficient perovskite phases in the CaSiO<sub>3</sub>-CaAlO<sub>2.5</sub> join. <i>Physics and Chemistry of Minerals</i> , 2017, 44, 717-733.	0.3	3
12	Protoenstatite in MgSiO<sub>3</sub> samples prepared by conventional solid state reaction. <i>Journal of Mineralogical and Petrological Sciences</i> , 2017, 112, 359-364.	0.4	11
13	Hydrogen distribution in chondrodite: a first-principles calculation. <i>Journal of Mineralogical and Petrological Sciences</i> , 2016, 111, 425-430.	0.4	2
14	In situ structural changes of amorphous diopside (CaMgSi<sub>2</sub>O<sub>6</sub>) up to 20 GPa: A Raman and O K-edge X-ray Raman spectroscopic study. <i>Geochimica Et Cosmochimica Acta</i> , 2016, 178, 41-61.	1.6	26
15	Cation distribution in Mg-Zn olivine solid solution: a <sup>29</sup>Si MAS NMR and first-principles calculation study. <i>Journal of Mineralogical and Petrological Sciences</i> , 2016, 111, 292-296.	0.4	9
16	Phase diagram and thermodynamic properties of AlPO<sub>4</sub> based on first-principles calculations and the quasiharmonic approximation. <i>Physics and Chemistry of Minerals</i> , 2015, 42, 15-27.	0.3	4
17	Crystal structures of Zn<sub>2</sub>SiO<sub>4</sub> III and IV synthesized at 6.5-8 GPa and 1,273 K. <i>Physics and Chemistry of Minerals</i> , 2013, 40, 467-478.	0.3	9
18	Characterization of Crystalline and Amorphous Silicates Quenched from High Pressure by <sup>29</sup> Si MAS NMR Spectroscopy. <i>Geophysical Monograph Series</i> , 2013, , 89-100.	0.1	7

#	ARTICLE	IF	CITATIONS
19	Separation of supercritical slab-fluids to form aqueous fluid and melt components in subduction zone magmatism. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 18695-18700.	3.3	88
20	Structural Characterization of Moganite-Type AlPO <sub>4</sub> by NMR and Powder X-ray Diffraction. <i>Inorganic Chemistry</i> , 2012, 51, 6164-6172.	1.9	19
21	Distinct <sup>29</sup> Si MAS NMR Peaks from Si-Al Permutation on Neighboring T Sites of Unequal Si-O-T Angles: Direct Evidence from <sup>1</sup> J-Resolved Experiment on K-Cymrite (KAlSi <sub>3</sub> O <sub>8</sub> H <sub>2</sub> O). <i>Journal of Physical Chemistry C</i> , 2012, 116, 10714-10722.	1.5	7
22	Measurements of density distribution around Vickers indentation on commercial aluminoborosilicate and soda-lime silicate glasses by using micro Raman spectroscopy. <i>Journal of Non-Crystalline Solids</i> , 2012, 358, 3473-3480.	1.5	26
23	Raman and NMR spectroscopic characterization of high-pressure K-cymrite (KAl <sub>3</sub> O <sub>8</sub> H <sub>2</sub> O) and its anhydrous form (kokchetavite). <i>Journal of Mineralogical and Petrological Sciences</i> , 2012, 107, 114-119.	0.4	26
24	Structures of two new high-pressure forms of AlPO <sub>4</sub> by X-ray powder diffraction and NMR spectroscopy. <i>Acta Crystallographica Section B: Structural Science</i> , 2011, 67, 30-40.	1.8	12
25	Synthesis and characterization of strontium-calcium phosphate $\beta$ -Ca <sub>3</sub> Si <sub>x</sub> PO <sub>4</sub> <sub>2</sub> (0 < x < 2). <i>Materials Chemistry and Physics</i> , 2010, 120, 348-350.	2.0	9
26	Crystal structure of a new high-pressure polymorph of topaz-OH. <i>American Mineralogist</i> , 2010, 95, 1349-1352.	0.9	18
27	Unique crystal chemistry of two polymorphs of topaz-OH: A multi-nuclear NMR and Raman study. <i>American Mineralogist</i> , 2010, 95, 1276-1293.	0.9	19
28	Structural Transformations and Anomalous Viscosity in the $B_{2}O_{3}-Al_{2}O_{3}-SiO_{2}$ System under High Pressure. <i>Physical Review Letters</i> , 2010, 105, 115701.	2.9	48
29	X-ray Raman scattering for structural investigation of silica/silicate minerals. <i>Physics and Chemistry of Minerals</i> , 2009, 36, 171-181.	0.3	19
30	Proton Distributions and Hydrogen Bonding in Crystalline and Glassy Hydrous Silicates and Related Inorganic Materials: Insights from High-Resolution Solid-state Nuclear Magnetic Resonance Spectroscopy. <i>Journal of the American Ceramic Society</i> , 2009, 92, 2803-2830.	1.9	85
31	Pressure-induced phase transitions of AX <sub>2</sub> -type iron pnictides: an ab initio study. <i>Journal of Physics Condensed Matter</i> , 2009, 21, 185403.	0.7	17
32	Viscosity Behavior Spanning Four Orders of Magnitude in As-S Melts under High Pressure. <i>Physical Review Letters</i> , 2009, 102, 115901.	2.9	20
33	Structural study of FeP <sub>2</sub> at high pressure. <i>High Pressure Research</i> , 2009, 29, 235-244.	0.4	15
34	Si-Al distribution in high-pressure CaAl <sub>4</sub> Si <sub>2</sub> O <sub>11</sub> phase: A <sup>29</sup> Si and <sup>27</sup> Al NMR study. <i>American Mineralogist</i> , 2009, 94, 1739-1742.	0.9	13
35	Structure of hydrous aluminosilicate glasses along the diopside-anorthite join: A comprehensive one- and two-dimensional <sup>1</sup> H and <sup>27</sup> Al NMR study. <i>Geochimica Et Cosmochimica Acta</i> , 2008, 72, 2331-2348.	1.6	72
36	Dense hydrous magnesium silicates, phase D, and superhydrous B: New structural constraints from one- and two-dimensional <sup>29</sup> Si and <sup>1</sup> H NMR. <i>American Mineralogist</i> , 2008, 93, 1099-1111.	0.9	31

#	ARTICLE	IF	CITATIONS
37	Coordination environment of silicon in silica glass up to 74 GPa: An x-ray Raman scattering study at the silicon $\text{L}$ and $\text{Al}$ sites. <i>Physical Review B</i> , 2008, 78, .	1.1	38
38	Elastic wave velocities and Raman shift of MORB glass at high pressures — Comment. <i>Journal of Mineralogical and Petrological Sciences</i> , 2008, 103, 427-428.	0.4	1
39	High-Pressure $\text{Al}(\text{OH})_3$ and $\text{AlOOH}$ Phases and Isostructural Hydroxides/Oxyhydroxides: New Structural Insights from High-Resolution $^1\text{H}$ and $^{27}\text{Al}$ NMR. <i>Journal of Physical Chemistry B</i> , 2007, 111, 13156-13166.	1.2	74
40	Second critical endpoint in the peridotite-H <sub>2</sub> O system. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	96
41	Nonviscous Metallic Liquid Se. <i>Physical Review Letters</i> , 2007, 99, 245901.	2.9	23
42	Al coordination and water speciation in hydrous aluminosilicate glasses: Direct evidence from high-resolution heteronuclear $^1\text{H}$ - $^{27}\text{Al}$ correlation NMR. <i>Solid State Nuclear Magnetic Resonance</i> , 2007, 31, 10-27.	1.5	51
43	Cation order and hydrogen bonding of high-pressure phases in the $\text{Al}_2\text{O}_3\text{-SiO}_2\text{-H}_2\text{O}$ system: An NMR and Raman study. <i>American Mineralogist</i> , 2006, 91, 850-861.	0.9	43
44	Depolymerization effect of water in aluminosilicate glasses: Direct evidence from $^1\text{H}$ - $^{27}\text{Al}$ heteronuclear correlation NMR. <i>American Mineralogist</i> , 2006, 91, 1922-1926.	0.9	52
45	Determination of the second critical end point in silicate-H <sub>2</sub> O systems using high-pressure and high-temperature X-ray radiography. <i>Geochimica Et Cosmochimica Acta</i> , 2004, 68, 5189-5195.	1.6	41
46	Dissolution mechanisms of water in depolymerized silicate melts: Constraints from $^1\text{H}$ and $^{29}\text{Si}$ NMR spectroscopy and ab initio calculations. <i>Geochimica Et Cosmochimica Acta</i> , 2004, 68, 5027-5057.	1.6	133
47	Structure and properties of silicate melts and fluids. <i>Geochimica Et Cosmochimica Acta</i> , 2004, 68, 5011.	1.6	1
48	Sulfur speciation and network structural changes in sodium silicate glasses: Constraints from NMR and Raman spectroscopy. <i>Geochimica Et Cosmochimica Acta</i> , 2004, 68, 5081-5101.	1.6	59
49	Post-spinel transition in $\text{Mg}_2\text{SiO}_4$ determined by high $T$ in situ X-ray diffractometry. <i>Physics of the Earth and Planetary Interiors</i> , 2003, 136, 11-24.	0.7	210
50	Materials Science and Seismological Approaches to Understanding Seismogenic Processes: Investigation of Critical Behavior in Basalt-H <sub>2</sub> O System Using High-pressure and High-temperature X-ray Radiography. <i>Journal of Geography (Chigaku Zasshi)</i> , 2003, 112, 970-978.	0.1	2
51	In situ Observation of ilmenite-perovskite phase transition in $\text{MgSiO}_3$ using synchrotron radiation. <i>Geophysical Research Letters</i> , 2001, 28, 835-838.	1.5	83
52	Ab initio Calculation of the $^{17}\text{O}$ and $^1\text{H}$ NMR Parameters for Various OH Groups: Implications to the Speciation and Dynamics of Dissolved Water in Silicate Glasses. <i>Journal of Physical Chemistry B</i> , 2001, 105, 3422-3434.	1.2	48
53	$^{29}\text{Si}$ magic-angle-spinning nuclear-magnetic-resonance study of spinel-type $\text{Si}_3\text{N}_4$ . <i>Applied Physics Letters</i> , 2001, 78, 3050-3051.	1.5	34
54	An ab initio calculation of $^{17}\text{O}$ and $^{29}\text{Si}$ NMR parameters for $\text{SiO}_2$ polymorphs. <i>Solid State Nuclear Magnetic Resonance</i> , 2000, 16, 245-259.	1.5	50

#	ARTICLE	IF	CITATIONS
55	NMR Characteristics of Possible Oxygen Sites in Aluminosilicate Glasses and Melts: An ab Initio Study. Journal of Physical Chemistry B, 1999, 103, 10816-10830.	1.2	54
56	Crystal chemical characteristics of $\tilde{\text{I}}\pm\text{-CaSi}_2\text{O}_5$ , a new high pressure calcium silicate with five-coordinated silicon synthesized at $1500\text{ \AA}^\circ\text{C}$ and 10 GPa. Physics and Chemistry of Minerals, 1998, 25, 429-433.	0.3	19
57	Correlations between $^{29}\text{Si}$ , $^{17}\text{O}$ and $^1\text{H}$ NMR properties and local structures in silicates: an ab initio calculation. Physics and Chemistry of Minerals, 1998, 26, 14-30.	0.3	59
58	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. Physics of the Earth and Planetary Interiors, 1998, 107, 9-21.	0.7	22
59	Molecular Dynamic Simulation and Electrical Properties of $\text{Ba}_2\text{In}_2\text{O}_5$ . Materials Research Society Symposia Proceedings, 1997, 496, 193.	0.1	1
60	Ab Initio $^{27}\text{Al}$ NMR Chemical Shift Calculation for the Clusters of $\text{Al}(\text{OH})_4$ , $\text{Al}(\text{OH})_5$ , $\text{Al}(\text{OH})_6$ . Journal of the Ceramic Society of Japan, 1997, 105, 91-92.	1.3	7
61	Activation energies of $\text{H}_2\text{O}$ and $\text{H}_2$ diffusions in silica glass: Semi-empirical molecular orbital study.. Journal of the Mineralogical Society of Japan, 1997, 19, 13-19.	1.0	3
62	Molecular dynamics simulation of oxygen ion diffusion in $\text{Ba}_2\text{In}_2\text{O}_5$ . Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1996, 41, 46-49.	1.7	6
63	Ab initio calculation of $^{29}\text{Si}$ NMR chemical shifts for the clusters of $\text{Si}(\text{OH})_4$ , $\text{Si}(\text{OH})_5$ - and $\text{Si}(\text{OH})_6$ -2-. Journal of the Mineralogical Society of Japan, 1996, 18, 1-8.	1.0	6
64	A Molecular Dynamics Simulation of An Infinite-Layer Compound $\text{ACuO}_{2-\delta}$ ( $\text{A}=\text{Sr}, \text{K}$ ) $T_{\text{f}}=1000\text{ K}$ $\text{P}_{\text{O}_2}=10^{-3}\text{ Pa}$		
65	A $^{29}\text{Si}$ MAS NMR study of sub-Tg amorphization of stishovite at ambient pressure. Physics and Chemistry of Minerals, 1993, 19, 480.	0.3	19
66	Calculated powder X-ray patterns of phase B, anhydrous B and superhydrous B: re-assessment of previous studies.. Journal of the Mineralogical Society of Japan, 1993, 16, 278-285.	1.0	16
67	Stability of hydrous magnesium silicates in the mantle transition zone. Physics of the Earth and Planetary Interiors, 1991, 66, 307-312.	0.7	152
68	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.	1.5	83
69	Dehydration of brucite ( $\text{Mg(OH)}_2$ ) at high pressures detected by differential thermal analysis. Geophysical Research Letters, 1991, 18, 2189-2192.	1.5	19
70	Local Structure and Chemical Shifts for Six-Coordinated Silicon in High-Pressure Mantle Phases. Science, 1991, 251, 294-298.	6.0	67
71	Ortho/clinoenstatite transition. Physics and Chemistry of Minerals, 1991, 17, 726.	0.3	53
72	Melting of Silica up to 7 GPa. Journal of the American Ceramic Society, 1990, 73, 3706-3707.	1.9	49

#	ARTICLE	IF	CITATIONS
73	Elasticity of a majorite–pyrope solid solution. <i>Geophysical Research Letters</i> , 1990, 17, 1989-1992.	1.5	38
74	Silicon Coordination and Speciation Changes in a Silicate Liquid at High Pressures. <i>Science</i> , 1989, 245, 962-964.	6.0	150
75	Ultrahigh-pressure phase relations in the system $Mg_4Si_4O_{12}$ – $Mg_3Al_2Si_3O_{12}$ . <i>Physics of the Earth and Planetary Interiors</i> , 1987, 49, 168-175.	0.7	75