## George R Rossman

List of Publications by Year in descending order

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248 papers 14,297 citations

61 h-index 25787 108 g-index

253 all docs

253 docs citations

times ranked

253

8270 citing authors

#	Article	IF	CITATIONS
1	Water in Earth's Mantle: The Role of Nominally Anhydrous Minerals. Science, 1992, 255, 1391-1397.	12.6	882
2	Mantle-derived fluids in diamond micro-inclusions. Nature, 1988, 335, 784-789.	27.8	452
3	An IR absorption calibration for water in minerals. American Mineralogist, 1997, 82, 1111-1115.	1.9	413
4	Quantitative analysis of trace OH in garnet and pyroxenes. American Mineralogist, 1995, 80, 465-474.	1.9	402
5	Hydroxide in olivine: A quantitative determination of the absolute amount and calibration of the IR spectrum. Journal of Geophysical Research, 2003, $108$ , .	3.3	383
6	Water in minerals? A peak in the infrared. Journal of Geophysical Research, 1984, 89, 4059-4071.	3.3	353
7	Lunar apatite with terrestrial volatile abundances. Nature, 2010, 466, 466-469.	27.8	258
8	Desert Varnish: The Importance of Clay Minerals. Science, 1977, 196, 1446-1448.	12.6	253
9	Discovery of bridgmanite, the most abundant mineral in Earth, in a shocked meteorite. Science, 2014, 346, 1100-1102.	12.6	243
10	Hydrogen speciation in synthetic quartz. Physics and Chemistry of Minerals, 1984, 11, 204-212.	0.8	226
11	Theoretical estimates of equilibrium Fe-isotope fractionations from vibrational spectroscopy. Geochimica Et Cosmochimica Acta, 2001, 65, 2487-2497.	3.9	223
12	The natural occurrence of hydroxide in olivine. Physics and Chemistry of Minerals, 1987, 14, 461-472.	0.8	218
13	Principles of quantitative absorbance measurements in anisotropic crystals. Physics and Chemistry of Minerals, 1996, 23, 319.	0.8	213
14	Incorporation of hydroxyl in upper-mantle clinopyroxenes. Nature, 1991, 351, 732-735.	27.8	200
15	Characterization of hydrous species in minerals by high-speed proton MAS-NMR. Journal of the American Chemical Society, 1988, 110, 1367-1375.	13.7	196
16	Hydrogen incorporation in olivine from 2-12 GPa. American Mineralogist, 2006, 91, 285-294.	1.9	194
17	Abundance and Partitioning of OH in a High-pressure Magmatic System: Megacrysts from the Monastery Kimberlite, South Africa. Journal of Petrology, 2004, 45, 1539-1564.	2.8	187
18	lce-VII inclusions in diamonds: Evidence for aqueous fluid in Earth's deep mantle. Science, 2018, 359, 1136-1139.	12.6	166

#	Article	IF	CITATIONS
19	Theoretical estimates of equilibrium chromium-isotope fractionations. Chemical Geology, 2004, 205, 99-114.	3.3	165
20	The manganese- and iron-oxide mineralogy of desert varnish. Chemical Geology, 1979, 25, 79-94.	<b>3.</b> 3	163
21	Fibrous nanoinclusions in massive rose quartz: The origin of rose coloration. American Mineralogist, 2001, 86, 466-472.	1.9	158
22	Trapping an Iron(VI) Water-Splitting Intermediate in Nonaqueous Media. Joule, 2018, 2, 747-763.	24.0	157
23	Studies of OH in nominally anhydrous minerals. Physics and Chemistry of Minerals, 1996, 23, 299.	0.8	152
24	Mixed valence of iron in minerals with cation clusters. Physics and Chemistry of Minerals, 1984, 11, 37-51.	0.8	149
25	Theoretical estimates of equilibrium chlorine-isotope fractionations. Geochimica Et Cosmochimica Acta, 2003, 67, 3267-3281.	3.9	143
26	The distribution of hydroxyl in garnets from the subcontinental mantle of southern Africa. Contributions To Mineralogy and Petrology, 1992, 111, 161-178.	3.1	138
27	The concentration and speciation of hydrogen in feldspars using FTIR and <sup>1</sup> H MAS NMR spectroscopy. American Mineralogist, 2003, 88, 901-911.	1.9	127
28	Direct measurement of hydroxyl in the lunar regolith and the origin of lunar surface water. Nature Geoscience, 2012, 5, 779-782.	12.9	120
29	Planar OH-bearing defects in mantle olivine. Nature, 1987, 328, 143-145.	27.8	111
30	Electronic structure of oxo-bridge iron(III) dimers. Journal of the American Chemical Society, 1972, 94, 2683-2690.	13.7	109
31	Origin of the yellow color of complex nickel oxides. Journal of Solid State Chemistry, 1981, 39, 277-287.	2.9	109
32	Tistarite, Ti2O3, a new refractory mineral from the Allende meteorite. American Mineralogist, 2009, 94, 841-844.	1.9	101
33	Analysis of hydrogen in olivine by SIMS: Evaluation of standards and protocol. American Mineralogist, 2011, 96, 1725-1741.	1.9	98
34	A survey of hydrous species and concentrations in igneous feldspars. American Mineralogist, 2004, 89, 586-600.	1.9	95
35	Analytical Methods for Measuring Water in Nominally Anhydrous Minerals. Reviews in Mineralogy and Geochemistry, 2006, 62, 1-28.	4.8	92
36	Field Effect Optoelectronic Modulation of Quantum-Confined Carriers in Black Phosphorus. Nano Letters, 2017, 17, 78-84.	9.1	89

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37	Water content of mantle garnets. Geology, 1984, 12, 720.	4.4	85
38	Archean mantle heterogeneity and the origin of diamondiferous eclogites, Siberia; evidence from stable isotopes and hydroxyl in garnet. American Mineralogist, 1995, 80, 799-809.	1.9	85
39	Spectroscopic and magnetic properties of heptacyanomolybdate(III). Evidence for pentagonal-bipyramidal and monocapped trigonal-prismatic structures. Inorganic Chemistry, 1973, 12, 824-829.	4.0	83
40	The intensity of amphibole OH bands in the infrared absorption spectrum. Physics and Chemistry of Minerals, 1991, 18, 64.	0.8	82
41	An Update on Color in Gems. Part 1: Introduction and Colors Caused by Dispersed Metal Ions. Gems & Gemology, 1987, 23, 126-139.	0.6	82
42	Magnetic behavior and infrared spectra of jarosite, basic iron sulfate, and their chromate analogs. Journal of Solid State Chemistry, 1975, 13, 1-13.	2.9	81
43	Ahrensite, $\hat{I}^3$ -Fe2SiO4, a new shock-metamorphic mineral from the Tissint meteorite: Implications for the Tissint shock event on Mars. Geochimica Et Cosmochimica Acta, 2016, 184, 240-256.	3.9	81
44	Tissintite, (Ca, Na, â−¡)AlSi2O6, a highly-defective, shock-induced, high-pressure clinopyroxene in the Tissint martian meteorite. Earth and Planetary Science Letters, 2015, 422, 194-205.	4.4	79
45	Fe2+-Fe3+ interactions in tourmaline. Physics and Chemistry of Minerals, 1987, 14, 163-171.	0.8	78
46	Case hardening of sandstone. Geology, 1982, 10, 520.	4.4	77
47	Determination of Fe3+ and Fe2+ concentrations in feldspar by optical absorption and EPR spectroscopy. Physics and Chemistry of Minerals, 1984, 11, 213-224.	0.8	76
48	Chelates of .betadiketones. VI. Synthesis and characterization of dimeric dialkoxo-bridged iron(III) complexes with acetylacetone and 2,2,6,6-tetramethylheptane-3,5-dione (HDPM). Inorganic Chemistry, 1972, 11, 990-994.	4.0	75
49	Submicrometer fluid inclusions in turbid-diamond coats. Earth and Planetary Science Letters, 1991, 105, 1-12.	4.4	74
50	Quantitative polarized infrared analysis of trace OH in populations of randomly oriented mineral grains. American Mineralogist, 2006, 91, 278-284.	1.9	74
51	An Update on Color in Gems. Part 2: Colors Involving Multiple Atoms and Color Centers. Gems & Gemology, 1988, 24, 3-15.	0.6	73
52	Elastic properties of pyrope. Physics and Chemistry of Minerals, 1991, 17, 617.	0.8	72
53	FTIR spectroscopy of lawsonite between 82 and 325 K. American Mineralogist, 1996, 81, 1080-1091.	1.9	71
54	Analysis of hydrogen and fluorine in pyroxenes: II. Clinopyroxene. American Mineralogist, 2013, 98, 1042-1054.	1.9	71

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55	Channel constituents in beryl. Physics and Chemistry of Minerals, 1978, 3, 225-235.	0.8	70
56	A model for the irradiative coloration of smoky feldspar and the inhibiting influence of water. Physics and Chemistry of Minerals, 1985, 12, 324-332.	0.8	68
57	Analysis of hydrogen and fluorine in pyroxenes: I. Orthopyroxene. American Mineralogist, 2013, 98, 1026-1041.	1.9	67
58	Identifying characteristics of charge transfer transitions in minerals. Physics and Chemistry of Minerals, 1987, 14, 94-99.	0.8	66
59	Mid-infrared reflectance spectra and optical constants of six iron oxide/oxyhydroxide phases. Icarus, 2009, 204, 663-671.	2.5	66
60	Dielectric constants of yttrium and rareâ€earth garnets, the polarizability of gallium oxide, and the oxide additivity rule. Journal of Applied Physics, 1990, 67, 3798-3802.	2.5	64
61	Single-crystal IR spectroscopy of very strong hydrogen bonds in pectolite, NaCa <sub>2</sub> [Si <sub>3</sub> O <sub>8</sub> (OH)], and serandite, NaMn <sub>2</sub> [Si <sub>3</sub> O <sub>8</sub> (OH)]. American Mineralogist, 1998, 83, 569-576.	1.9	63
62	The hydrous component in andradite garnet. American Mineralogist, 1998, 83, 835-840.	1.9	63
63	Mid-infrared (5–100 μm) reflectance spectra and optical constants of ten phyllosilicate minerals. Icarus, 2007, 192, 605-622.	2.5	63
64	Raman characterization of synthetic magnesian calcites. American Mineralogist, 2016, 101, 2525-2538.	1.9	63
65	An Update on Color in Gems. Part 3: Colors Caused By Band Gaps and Physical Phenomena. Gems & Gemology, 1988, 24, 81-102.	0.6	63
66	Grossmanite, CaTi3+AlSiO6, a new pyroxene from the Allende meteorite. American Mineralogist, 2009, 94, 1491-1494.	1.9	62
67	Stationary and mobile hydrogen defects in potassium feldspar. Geochimica Et Cosmochimica Acta, 1996, 60, 4075-4094.	3.9	61
68	Krotite, CaAl2O4, a new refractory mineral from the NWA 1934 meteorite. American Mineralogist, 2011, 96, 709-715.	1.9	60
69	Barioperovskite, BaTiO3, a new mineral from the Benitoite Mine, California. American Mineralogist, 2008, 93, 154-157.	1.9	59
70	Dihydroxo-bridged ferric dimer. Journal of the American Chemical Society, 1969, 91, 4564-4566.	13.7	58
71	Hydrogen, lithium, and boron in mantle-derived olivine: The role of coupled substitutions. American Mineralogist, 2002, 87, 1432-1436.	1.9	58
72	Water in boninite glass and coexisting orthopyroxene: concentration and partitioning. Contributions To Mineralogy and Petrology, 1995, 118, 414-419.	3.1	55

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73	Hydrogen bonding interactions in phase A [Mg 7 Si 2 O 8 (OH) 6 ] at ambient and high pressure. Physics and Chemistry of Minerals, 2000, 27, 225-233.	0.8	55
74	Mn-rich tourmaline from Austria: structure, chemistry, optical spectra, and relations to synthetic solid solutions. American Mineralogist, 2004, 88, 1369-1376.	1.9	55
75	Davisite, CaScAlSiO6, a new pyroxene from the Allende meteorite. American Mineralogist, 2009, 94, 845-848.	1.9	54
76	Dielectric constant of MgAl2O4 spinel and the oxide additivity rule. Journal of Physics and Chemistry of Solids, 1991, 52, 1055-1059.	4.0	53
77	Allendeite (Sc4Zr3O12) and hexamolybdenum (Mo,Ru,Fe), two new minerals from an ultrarefractory inclusion from the Allende meteorite. American Mineralogist, 2014, 99, 654-666.	1.9	53
78	Panguite, (Ti4+,Sc,Al,Mg,Zr,Ca)1.8O3, a new ultra-refractory titania mineral from the Allende meteorite: Synchrotron micro-diffraction and EBSD. American Mineralogist, 2012, 97, 1219-1225.	1.9	52
79	The hydrous component of pyrope from the Dora Maira Massif, Western Alps. European Journal of Mineralogy, 1989, 1, 151-154.	1.3	51
80	Liebermannite, <scp>KA</scp>  Si <sub>3</sub> O <sub>8</sub> , a new shockâ€metamorphic, highâ€pressure mineral from the Zagami Martian meteorite. Meteoritics and Planetary Science, 2018, 53, 50-61.	1.6	49
81	Spectroscopic standards for four- and fivefold-coordinated Fe <sup>2+</sup> in oxygen-based minerals. American Mineralogist, 2001, 86, 896-903.	1.9	48
82	The Geochemistry of Gems and Its Relevance to Gemology: Different Traces, Different Prices. Elements, 2009, 5, 159-162.	0.5	47
83	Elastic properties of hydrogrossular garnet and implications for water in the upper mantle. Journal of Geophysical Research, 1993, 98, 20031-20037.	3.3	46
84	Water content of the Martian soil: Laboratory simulations of reflectance spectra. Journal of Geophysical Research, 1998, 103, 11125-11133.	3.3	45
85	The Influence of Water on the Optical Properties of Singleâ€Layer Molybdenum Disulfide. Advanced Materials, 2015, 27, 2734-2740.	21.0	44
86	Fibrous nanoinclusions in massive rose quartz: HRTEM and AEM investigations. American Mineralogist, 2002, 87, 269-276.	1.9	43
87	Optical spectroscopic study of tuhualite and a re-examination of the beryl, cordierite, and osumilite spectra. American Mineralogist, 2001, 86, 973-980.	1.9	42
88	Calcium Tschermak's pyroxene, CaAlAlSiO6, from the Allende and Murray meteorites: EBSD and micro-Raman characterizations. American Mineralogist, 2009, 94, 1483-1486.	1.9	42
89	Fast single-photon avalanche diode arrays for laser Raman spectroscopy. Optics Letters, 2011, 36, 3672.	3.3	42
90	Kangite, (Sc,Ti,Al,Zr,Mg,Ca,Â)2O3, a new ultra-refractory scandia mineral from the Allende meteorite: Synchrotron micro-Laue diffraction and electron backscatter diffraction. American Mineralogist, 2013, 98, 870-878.	1.9	42

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91	Monipite, MoNiP, a new phosphide mineral in a Ca-Al-rich inclusion from the Allende meteorite. American Mineralogist, 2014, 99, 198-205.	1.9	42
92	Hydrous species in feldspars: A reassessment based on FTIR and SIMS. American Mineralogist, 2015, 100, 1209-1221.	1.9	42
93	Electronic energy levels in hexahalotellurate(IV) complexes. Journal of the American Chemical Society, 1970, 92, 307-310.	13.7	41
94	Spectroscopic standard for tetrahedrally coordinated ferric iron: ? LiAlO2:Fe3+. Physics and Chemistry of Minerals, 1983, 9, 212-215.	0.8	41
95	The diffusion behavior of hydrogen in plagioclase feldspar at 800-1000 ÂC: Implications for re-equilibration of hydroxyl in volcanic phenocrysts. American Mineralogist, 2013, 98, 1779-1787.	1.9	41
96	Anisotropic Quantum Well Electro-Optics in Few-Layer Black Phosphorus. Nano Letters, 2019, 19, 269-276.	9.1	40
97	Tunable intraband optical conductivity and polarization-dependent epsilon-near-zero behavior in black phosphorus. Science Advances, 2021, 7, .	10.3	40
98	Infrared and electron microprobe analysis of ammonium ions in hyalophane feldspar. European Journal of Mineralogy, 1992, 4, 847-850.	1.3	40
99	Synthesis and structural characterization of a new cyanomanganate(III) complex, heptapotassium .muoxo-bis[pentacyanomanganate(III)]cyanide. Journal of the American Chemical Society, 1974, 96, 7910-7915.	13.7	39
100	Dielectric constants of crystalline and amorphous spodumene, anorthite and diopside and the oxide additivity rule. Physics and Chemistry of Minerals, 1992, 19, 148.	0.8	39
101	Mn-bearing "oxy-rossmanite" with tetrahedrally coordinated Al and B from Austria: Structure, chemistry, and infrared and optical spectroscopic study. American Mineralogist, 2005, 90, 481-487.	1.9	39
102	Brearleyite, Ca12Al14O32Cl2, a new alteration mineral from the NWA 1934 meteorite. American Mineralogist, 2011, 96, 1199-1206.	1.9	39
103	Tracing the fluid evolution of the Kiruna iron oxide apatite deposits using zircon, monazite, and whole rock trace elements and isotopic studies. Chemical Geology, 2017, 466, 303-322.	3.3	39
104	Nearly 90% Circularly Polarized Emission in Monolayer WS <sub>2</sub> Single Crystals by Chemical Vapor Deposition. ACS Nano, 2020, 14, 1350-1359.	14.6	39
105	Discovery of davemaoite, CaSiO <sub>3</sub> -perovskite, as a mineral from the lower mantle. Science, 2021, 374, 891-894.	12.6	39
106	CRYSTAL CHEMISTRY OF DARK BLUE AQUAMARINE FROM THE TRUE BLUE SHOWING, YUKON TERRITORY, CANADA. Canadian Mineralogist, 2010, 48, 597-613.	1.0	38
107	Silica coatings in the Ka'u Desert, Hawaii, a Mars analog terrain: A micromorphological, spectral, chemical, and isotopic study. Journal of Geophysical Research, 2010, 115, .	3.3	38
108	Natural hydrous amorphous silica: Quantitation of network speciation and hydroxyl content by 29Si MAS NMR and vibrational spectroscopy. American Mineralogist, 2012, 97, 203-211.	1.9	38

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109	Miniaturized time-resolved Raman spectrometer for planetary science based on a fast single photon avalanche diode detector array. Applied Optics, 2016, 55, 739.	2.1	38
110	Ferric iron in tourmaline. Physics and Chemistry of Minerals, 1984, 11, 225-234.	0.8	37
111	Fe2+-Ti4+ charge transfer in stoichiometric Fe2+,Ti4+-minerals. Physics and Chemistry of Minerals, 1988, 16, 78.	0.8	37
112	Calculated trends of oh infrared stretching vibrations with composition and structure in aluminosilicate molecules. Physics and Chemistry of Minerals, 1993, 20, 425.	0.8	37
113	Estimated optical constants of gypsum in the regions of weak absorptions: Application of scattering theories and comparisons to independent measurements. Journal of Geophysical Research, 2007, 112, .	3.3	37
114	Amorphous, hydrous, ferric phosphatic dermal granules in Molpadia (Holothuroidea): Physical and chemical characterization and ecologic implications of the bioinorganic fraction. Chemical Geology, 1975, 15, 15-51.	3.3	36
115	Buseckite, (Fe,Zn,Mn)S, a new mineral from the Zaklodzie meteorite. American Mineralogist, 2012, 97, 1226-1233.	1.9	36
116	A heterogeneous lunar interior for hydrogen isotopes as revealed by the lunar highlands samples. Earth and Planetary Science Letters, 2017, 473, 14-23.	4.4	36
117	Single-crystal IR- and UV/VIS-spectroscopic measurements on transition-metal-bearing pyrope: the incorporation of hydroxide in garnet. European Journal of Mineralogy, 2000, 12, 259-271.	1.3	36
118	Limitations of Fe2+ and Mn2+ site occupancy in tourmaline: Evidence from Fe2+- and Mn2+-rich tourmaline. American Mineralogist, 2012, 97, 1402-1416.	1.9	35
119	Optical spectra of Co <sup>2+</sup> in three synthetic silicate minerals. American Mineralogist, 2001, 86, 889-895.	1.9	34
120	Tourmaline of the elbaite-schorl series from the Himalaya Mine, Mesa Grande, California: A detailed investigation. American Mineralogist, 2010, 95, 24-40.	1.9	34
121	Time-resolved Raman spectroscopy for in situ planetary mineralogy. Applied Optics, 2010, 49, 4951.	2.1	34
122	Direct growth of mm-size twisted bilayer graphene by plasma-enhanced chemical vapor deposition. Carbon, 2020, 156, 212-224.	10.3	34
123	Refractive index and optical dispersion of In2O3, InBO3 and gahnite. Materials Research Bulletin, 2013, 48, 2240-2243.	5.2	33
124	IR spectroscopy and OH– in silicate garnet: The long quest to document the hydrogarnet substitution. American Mineralogist, 2018, 103, 384-393.	1.9	33
125	Pezzottaite from Ambatovita, Madagascar: A New Gem Mineral. Gems & Gemology, 2003, 39, 284-301.	0.6	33
126	Absorption spectrum of shock-compressed Fe2+-bearing MgO and the radiative conductivity of the lower mantle. Physics of the Earth and Planetary Interiors, 1980, 22, 272-276.	1.9	32

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127	Simultaneous pair electronic excitations in a binuclear iron(III) complex. Chemical Physics Letters, 1970, 6, 26-28.	2.6	31
128	Determination of quantitative cation distribution in orthopyroxenes from electronic absorption spectra. Physics and Chemistry of Minerals, 1979, 4, 43-53.	0.8	31
129	Hydroxide in kyanite: A quantitative determination of the absolute amount and calibration of the IR spectrum. American Mineralogist, 2004, 89, 998-1003.	1.9	31
130	Fe-BEARING OLENITE WITH TETRAHEDRALLY COORDINATED AI FROM AN ABYSSAL PEGMATITE AT KUTNA HORA, CZECH REPUBLIC: STRUCTURE, CRYSTAL CHEMISTRY, OPTICAL AND XANES SPECTRA. Canadian Mineralogist, 2006, 44, 23-30.	1.0	31
131	Low water contents in diamond mineral inclusions: Proto-genetic origin in a dry cratonic lithosphere. Earth and Planetary Science Letters, 2016, 433, 125-132.	4.4	31
132	Dielectric constants of tephroite, fayalite and olivine and the oxide additivity rule. Physics and Chemistry of Minerals, 1991, 18, 1.	0.8	30
133	Crystal field stabilization energies of almandine-pyrope and almandine-spessartine garnets determined by FTIR near infrared measurements. Physics and Chemistry of Minerals, 1994, 21, 516.	0.8	30
134	Hydrogen in spessartine-almandine garnets as a tracer of granitic pegmatite evolution. American Mineralogist, 2001, 86, 485-490.	1.9	30
135	Li-bearing tourmalines in Variscan granitic pegmatites from the Moldanubian nappes, Lower Austria. European Journal of Mineralogy, 2012, 24, 695-715.	1.3	30
136	Browneite, MnS, a new sphalerite-group mineral from the Zaklodzie meteorite. American Mineralogist, 2012, 97, 2056-2059.	1.9	30
137	Warkite, Ca2Sc6Al6O20, a new mineral in carbonaceous chondrites and a key-stone phase in ultrarefractory inclusions from the solar nebula. Geochimica Et Cosmochimica Acta, 2020, 277, 52-86.	3.9	30
138	Evidence in Tissint for recent subsurface water on Mars. Earth and Planetary Science Letters, 2015, 425, 55-63.	4.4	29
139	Hydrogen in "anhydrous―minerals. Nuclear Instruments & Methods in Physics Research B, 1990, 45, 41-44.	1.4	28
140	Orientation and motion of water molecules in cordierite: A proton nuclear magnetic resonance study. Physics and Chemistry of Minerals, 1982, 8, 14-19.	0.8	27
141	Crystal chemistry of wadsleyite II and water in the Earth's interior. Physics and Chemistry of Minerals, 2005, 31, 691-705.	0.8	27
142	Anharmonic lattice dynamics of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"> <mml:msub> <mml:mtext> Ag </mml:mtext> <mml:mn>2  by inelastic neutron scattering and first-principles molecular dynamics simulations. Physical Review B, 2014, 89, .</mml:mn></mml:msub></mml:math>	:/mml:mn:	·
143	Ambient and coldâ€temperature infrared spectra and XRD patterns of ammoniated phyllosilicates and carbonaceous chondrite meteorites relevant to Ceres and other solar system bodies. Meteoritics and Planetary Science, 2018, 53, 1884-1901.	1.6	27
144	Nitrogen incorporation in silicates and metals: Results from SIMS, EPMA, FTIR, and laser-extraction mass spectrometry. American Mineralogist, 2019, 104, 31-46.	1.9	27

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145	Developments in Gemstone Analysis Techniques and Instrumentation During the 2000s. Gems & Gemology, 2010, 46, 241-257.	0.6	27
146	Exsolution of metallic copper from Lake County labradorite. Geology, 1985, 13, 644.	4.4	26
147	Murchisite, Cr5S6, a new mineral from the Murchison meteorite. American Mineralogist, 2011, 96, 1905-1908.	1.9	26
148	Gem-Quality Cuprian-Elbaite Tourmalines From São José Da Batalha, ParaÃba, Brazil. Gems & Gemology, 1990, 26, 189-205.	0.6	26
149	Rb, Sr, Nd and Sm concentrations in quartz. Geochimica Et Cosmochimica Acta, 1987, 51, 2325-2329.	3.9	25
150	OH in naturally occurring corundum. European Journal of Mineralogy, 2006, 18, 441-447.	1.3	25
151	Quantitative laser-induced breakdown spectroscopy of potassium for in-situ geochronology on Mars. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2012, 70, 45-50.	2.9	25
152	Machiite, Al2Ti3O9, a new oxide mineral from the Murchison carbonaceous chondrite: A new ultra-refractory phase from the solar nebula. American Mineralogist, 2020, 105, 239-243.	1.9	25
153	Mn-rich fluorapatite from Austria: Crystal structure, chemical analysis, and spectroscopic investigations. American Mineralogist, 2004, 89, 629-632.	1.9	24
154	IR spectroscopy of hemimorphite between 82 and 373 K and optical evidence for a low-temperature phase transition. European Journal of Mineralogy, 1997, 9, 793-802.	1.3	24
155	Proton disorder in dehydrated hemimorphite – IR spectroscopy and X-ray structure refinement at low and ambient temperatures. European Journal of Mineralogy, 1997, 9, 803-810.	1.3	24
156	Electrically Tunable and Dramatically Enhanced Valleyâ€Polarized Emission of Monolayer WS <sub>2</sub> at Room Temperature with Plasmonic Archimedes Spiral Nanostructures. Advanced Materials, 2022, 34, e2104863.	21.0	24
157	Absorption spectra of Cr3+ in Al2O3 under shock compression. Physics and Chemistry of Minerals, 1979, 4, 253-263.	0.8	23
158	Effect of H2O and CO2 on Dielectric Properties of Single-Crystal Cordierite and Comparison with Polycrystalline Cordierite. Journal of the American Ceramic Society, 1992, 75, 2395-2399.	3.8	23
159	Plumbophyllite, a new species from the Blue Bell claims near Baker, San Bernardino County, California. American Mineralogist, 2009, 94, 1198-1204.	1.9	23
160	Timescales and mechanisms of formation of amorphous silica coatings on fresh basalts at Kīlauea Volcano, Hawai'i. Journal of Volcanology and Geothermal Research, 2014, 286, 41-54.	2.1	23
161	Correlation between OH concentration and oxygen isotope diffusion rate in diopsides from the Adirondack Mountains, New York. American Mineralogist, 2002, 87, 899-908.	1.9	22
162	Feasibility of determining the quantitative OH content of garnets with Raman spectroscopy. American Mineralogist, 2002, 87, 307-311.	1.9	22

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163	High-temperature, high-pressure optical spectroscopic study of ferric-iron-bearing tourmaline. American Mineralogist, 2002, 87, 1148-1153.	1.9	22
164	THE ORIGIN OF COLOR IN "FIRE" OBSIDIAN. Canadian Mineralogist, 2007, 45, 551-557.	1.0	22
165	V3+-bearing, Mg-rich, strongly disordered olenite from a graphite deposit near Amstall, Lower Austria: A structural, chemical and spectroscopic investigation. Neues Jahrbuch Fur Mineralogie, Abhandlungen, 2008, 184, 243-253.	0.3	22
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