

# Hannes Kräger

## List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	High-temperature behavior and structural studies on Ca <sub>14</sub> Al <sub>10</sub> Zn <sub>6</sub> O <sub>35</sub> . Zeitschrift Fur Kristallographie - Crystalline Materials, 2022, 237, 219-232.	0.4	0
2	SFCA-II type Ca <sub>2.46</sub> Fe <sub>3+8.57</sub> Fe <sub>2+0.52</sub> Al <sub>5.45</sub> O <sub>24</sub> – an improved structural model for an iron-ore sinter phase. Mineralogy and Petrology, 2021, 115, 137-147.	0.4	3
3	Nomenclature and Classification of the Arctite Supergroup. Aravaite, Ba <sub>2</sub> Ca <sub>18</sub> (SiO <sub>4</sub> ) <sub>6</sub> [(PO <sub>4</sub> ) <sub>3</sub> (CO <sub>3</sub> )]F <sub>3</sub> O, a New Arctite Supergroup Mineral from Negev Desert, Israel. Canadian Mineralogist, 2021, ,.	0.3	4
4	Structural systematics of SFCA-I type solid-solutions in the system CaO–Fe <sub>2</sub> O <sub>3</sub> –FeO–Al <sub>2</sub> O <sub>3</sub> . Physics and Chemistry of Minerals, 2021, 48, 1.	0.3	5
5	K <sub>4</sub> CaSi <sub>6</sub> O <sub>15</sub> – Solving a 90-year-old riddle. Journal of the American Ceramic Society, 2021, 104, 6678.	1.9	2
6	Kahlenbergite KAl <sub>11</sub> O <sub>17</sub> ; a new <sup>i</sup> <sup>2</sup> <sup>i</sup>-alumina mineral and Fe-rich hibonite from the Hatrurim Basin, the Negev desert, Israel. European Journal of Mineralogy, 2021, 33, 341-355.	0.4	3
7	Mg(H <sub>2</sub> O) <sub>2</sub> [TeO <sub>2</sub> (OH) <sub>4</sub> ]: a polytypic structure with a two-mode disordered stacking arrangement. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2021, 77, 605-623.	0.5	3
8	Siwaqaite, Ca <sub>6</sub> Al <sub>2</sub> (CrO <sub>4</sub> ) <sub>3</sub> (OH) <sub>12</sub> ·26H <sub>2</sub> O, a new mineral of the ettringite group from the pyrometamorphic Daba-Siwaqa complex, Jordan. American Mineralogist, 2020, 105, 409-421.	0.9	13
9	Raman Spectroscopy and Single-Crystal High-Temperature Investigations of Bentorite, Ca <sub>6</sub> Cr <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub> (OH) <sub>12</sub> ·26H <sub>2</sub> O. Minerals (Basel, Switzerland), 2020, 10, 38.	0.8	2
10	Synthesis and crystal structure of ABW-type SrFe <sub>1.40</sub> V <sub>0.60</sub> O <sub>4</sub> . Acta Crystallographica Section E: Crystallographic Communications, 2020, 76, 664-667.	0.2	0
11	Structural studies on Ca <sub>3</sub> Al <sub>4</sub> MgO <sub>10</sub> (C <sub>3</sub> A <sub>2</sub> M) – A ternary phase in the system CaO–Al <sub>2</sub> O <sub>3</sub> –MgO. Journal of the American Ceramic Society, 2019, 102, 2084-2093.	1.9	5
12	Thermal expansion and compressibility of Ca <sub>3</sub> Al <sub>4</sub> ZnO <sub>10</sub> – an unusual tetrahedral framework structure. Journal of Solid State Chemistry, 2019, 276, 319-330.	1.4	3
13	Levantite, KCa <sub>3</sub> (Al <sub>2</sub> Si <sub>3</sub> )O <sub>11</sub> (PO <sub>4</sub> ), a new latiumite-group mineral from the pyrometamorphic rocks of the Hatrurim Basin, Negev Desert, Israel. Mineralogical Magazine, 2019, 83, 713-721.	0.6	7
14	A new ternary phase in the system CaO–Al <sub>2</sub> O <sub>3</sub> –Cr <sub>2</sub> O <sub>3</sub> : Crystal structure and thermal expansion of CaAl <sub>2</sub> Cr <sub>2</sub> O <sub>7</sub> . Journal of the American Ceramic Society, 2019, 102, 6968-6979.	1.9	6
15	Structural elucidation of triclinic and monoclinic SFCA-III – killing two birds with one stone. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2019, 75, 1126-1136.	0.5	14
16	Arrhenius Behavior of the Bulk Na-Ion Conductivity in Na <sub>3</sub> Sc <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> Single Crystals Observed by Microcontact Impedance Spectroscopy. Chemistry of Materials, 2018, 30, 1776-1781.	3.2	16
17	First investigations on the quaternary system Na <sub>2</sub> O-K <sub>2</sub> O-CaO-SiO <sub>2</sub> : synthesis and crystal structure of the mixed alkali calcium silicate K <sub>1.08</sub> Na <sub>0.92</sub> Ca <sub>6</sub> Si <sub>4</sub> O <sub>15</sub> . Mineralogy and Petrology, 2018, 112, 219-228.	0.4	3
18	Investigations on FCAM-III (Ca <sub>2.38</sub> Mg <sub>2.09</sub> Fe <sub>3+10.61</sub> Fe <sub>2+1.59</sub> Al <sub>9.33</sub> O <sub>36</sub> ): A new homologue of the aerigmatite structure-type in the system CaO-MgO-Fe <sub>2</sub> O <sub>3</sub> -Al <sub>2</sub> O <sub>3</sub> . Journal of Solid State Chemistry, 2018, 258, 307-319.	1.4	7

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19	Strucherite, BaCa <sub>6</sub> (SiO <sub>4</sub> ) <sub>2</sub> [(PO <sub>4</sub> )(CO <sub>3</sub> )]F, the first CO <sub>3</sub> -bearing intercalated hexagonal antiperovskite from Negev Desert, Israel. <i>American Mineralogist</i> , 2018, 103, 1699-1706.	0.9	10
20	Aravaite, Ba <sub>2</sub> Ca <sub>18</sub> (SiO <sub>4</sub> ) <sub>4</sub> <sub>6</sub> (PO <sub>4</sub> ) <sub>3</sub> <sub>3</sub> (CO <sub>3</sub> ) <sub>3</sub> <sub>0.5</sub> F <sub>3</sub> : modular structure and disorder of a new mineral with single and triple antiperovskite layers. <i>Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials</i> , 2018, 74, 492-501.		
21	Preparation and characterization of Na <sub>1.5</sub> K <sub>0.5</sub> Ca <sub>6</sub> Si <sub>4</sub> O <sub>15</sub> (Na <sub>1.5</sub> K <sub>0.5</sub> Ca <sub>6</sub> [SiO <sub>4</sub> ] <sub>2</sub> [Si <sub>2</sub> O <sub>7</sub> ]) and Na <sub>1.41</sub> K <sub>0.19</sub> Ca <sub>2.20</sub> Si <sub>2</sub> O <sub>7</sub> : two new phases in the system Na <sub>2</sub> O-K <sub>2</sub> O-CaO-SiO <sub>2</sub> . <i>European Journal of Mineralogy</i> , 2018, 30, 957-966.	0.4	1
22	New Occurrence of Rusinovite, Ca <sub>10</sub> (Si <sub>2</sub> O <sub>7</sub> ) <sub>3</sub> Cl <sub>2</sub> : Composition, Structure and Raman Data of Rusinovite from Shadil-Khokh Volcano, South Ossetia and Bellerberg Volcano, Germany. <i>Minerals (Basel.)</i> , 2018, 8, 399.	0.8	6
23	Sharyginit, Ca <sub>3</sub> TiFe <sub>2</sub> O <sub>8</sub> , A New Mineral from the Bellerberg Volcano, Germany. <i>Minerals (Basel.)</i> , Tj ETQq1 1 0.784314 rgBT /Overlock 1	0.8	8
24	New Mineral with Modular Structure Derived from Hatrurite from the Pyrometamorphic Rocks of the Hatrurim Complex: Ariegilatite, BaCa <sub>12</sub> (SiO <sub>4</sub> ) <sub>4</sub> (PO <sub>4</sub> ) <sub>2</sub> F <sub>2</sub> O, from Negev Desert, Israel. <i>Minerals (Basel.)</i> , Tj ETQq0 0 0.8gBT /Overlock 10	0.8	1
25	Molecular Level Understanding of the Reversible Phase Transformation between Forms III and II of Dapsone. <i>Crystal Growth and Design</i> , 2017, 17, 5054-5060.	1.4	19
26	Temperature- and moisture-dependent studies on alunogen and the crystal structure of meta-alunogen determined from laboratory powder diffraction data. <i>Physics and Chemistry of Minerals</i> , 2017, 44, 95-107.	0.3	12
27	Synthesis, synchrotron diffraction study and twinning in Na <sub>2</sub> Ca <sub>4</sub> Mg <sub>2</sub> Si <sub>4</sub> O <sub>15</sub> – a heteropolyhedral framework compound. <i>Zeitschrift Fur Kristallographie - Crystalline Materials</i> , 2017, 232, .	0.4	1
28	Investigations on the Crystal Structure and the Stability Field of FCAM-I (Ca <sub>3</sub> MgAl <sub>6</sub> Fe <sub>10</sub> O <sub>28</sub> ), an Iso-structure to SFCA-I. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2017, 48, 2207-2221.	1.0	12
29	Melilite-like modulation and temperature-dependent evolution in the framework structure of K <sub>2</sub> Sc[Si <sub>2</sub> O <sub>6</sub> ]F. <i>Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials</i> , 2016, 72, 209-222.	0.5	4
30	High-pressure/high-temperature synthesis and characterization of the first palladium or platinum containing lithium transition-metal sulfides Li <sub>2</sub> M <sub>3</sub> S <sub>4</sub> (M=Pd, Pt). <i>Journal of Solid State Chemistry</i> , 2016, 242, 87-95.	1.4	2
31	Wernerkrauseite, CaFe <sub>3+</sub> 2Mn <sub>4+</sub> O <sub>6</sub> : the first nonstoichiometric post-spinel mineral, from Bellerberg volcano, Eifel, Germany. <i>European Journal of Mineralogy</i> , 2016, 28, 485-493.	0.4	10
32	Crystal growth, structural characterization and high temperature behavior of Na <sub>3</sub> TmSi <sub>3</sub> O <sub>9</sub> . <i>Zeitschrift Fur Kristallographie - Crystalline Materials</i> , 2015, 230, .	0.4	1
33	Li <sub>2</sub> Ca <sub>2</sub> Si <sub>2</sub> O <sub>7</sub> : Structural, spectroscopic and computational studies on a sorosilicate. <i>Journal of Solid State Chemistry</i> , 2015, 225, 155-167.	1.4	9
34	Single-crystal structure and Raman spectroscopy of synthetic titanite analog CaAlSiO <sub>4</sub> F. <i>Mineralogy and Petrology</i> , 2015, 109, 631-641.	0.4	4
35	Innsbruckite, Mn <sub>33</sub> (Si <sub>2</sub> O <sub>5</sub> ) <sub>14</sub> (OH) <sub>38</sub> : a new mineral from the Tyrol, Austria. <i>Mineralogical Magazine</i> , 2014, 78, 1613-1627.	0.6	1
36	Structural investigations of the two polymorphs of synthetic Fe-cordierite and Raman spectroscopy of hexagonal Fe-cordierite. <i>Mineralogy and Petrology</i> , 2014, 108, 469-478.	0.4	3

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37	Monoclinic structure and nonstoichiometry of ' $KAlSiO_4 \cdot xO_1$ '. Acta Crystallographica Section C: Crystal Structure Communications, 2013, 69, 334-336.	0.4	8
38	Superstructure of Mullite-type $KAl_9O_{14}$ . Chemistry of Materials, 2013, 25, 496-502.	3.2	8
39	Structural controls on the anisotropy of tetrahedral frameworks: the example of monoclinic feldspars. European Journal of Mineralogy, 2013, 25, 597-614.	0.4	20
40	Stacking faults and superstructures in a layered brownmillerite. Acta Crystallographica Section B: Structural Science, 2011, 67, 476-485.	1.8	9
41	$Ca_5.45Li_3.55[SiO_4]_3O_0.45F_1.55$ and $Ca_7K[SiO_4]_3F_3$ : single-crystal synthesis and structures of two trigonal oxyfluorides. Zeitschrift Für Kristallographie, 2010, 225, .	1.1	9
42	Monoclinic superstructure of mullite-type $KAl_9O_{14}$ . Acta Crystallographica Section A: Foundations and Advances, 2010, 66, s176-s176.	0.3	0
43	Modulated structure and phase transitions of $Sr_{10}Ga_6O_{19}$ . Acta Crystallographica Section B: Structural Science, 2009, 65, 587-592.	1.8	4
44	Computer-controlled high-temperature single-crystal X-ray diffraction experiments and temperature calibration. Journal of Applied Crystallography, 2009, 42, 140-142.	1.9	21
45	High-temperature structural phase transition in studied by in-situ X-ray diffraction and transmission electron microscopy. Journal of Solid State Chemistry, 2009, 182, 1515-1523.	1.4	46
46	Layered brownmillerites in the system of manganese-containing alumino-ferrites. Acta Crystallographica Section A: Foundations and Advances, 2009, 65, s177-s178.	0.3	0
47	Incommensurate structure of $Ca_2Al_2O_5$ at high temperatures – structure investigation and Raman spectroscopy. Acta Crystallographica Section B: Structural Science, 2008, 64, 417-425.	1.8	38
48	$Ca_2NaSiO_4F$ : a new monoclinic polymorph. Zeitschrift Fur Kristallographie - Crystalline Materials, 2008, 223, 382-388.	0.4	6
49	$Li_2Si_3O_7$ : Crystal structure and Raman spectroscopy. Journal of Solid State Chemistry, 2007, 180, 922-928.	1.4	22
50	Study of the temperature dependence of the structure of $KY_3F_10$ . Journal of Physics Condensed Matter, 2006, 18, 2677-2687.	0.7	26
51	$Na_2Si_3O_7$ : an incommensurate structure with crenel-type modulation functions, refined from a twinned crystal. Acta Crystallographica Section B: Structural Science, 2006, 62, 440-446.	1.8	5
52	Thermal expansion of $Li_3Na_3In_2F_{12}$ garnet. Journal of Physics Condensed Matter, 2006, 18, 8925-8934.	0.7	6
53	Structural studies on $Na_6Si_8O_{19}$ – a monophyllosilicate with a new type of layered silicate anion. Solid State Sciences, 2005, 7, 1390-1396.	1.5	15
54	Incommensurately modulated ordering of tetrahedral chains in $Ca_2Fe_2O_5$ at elevated temperatures. Acta Crystallographica Section B: Structural Science, 2005, 61, 656-662.	1.8	39

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55	LaAlSiO <sub>5</sub> and apatite-type La <sub>9.71</sub> (Si <sub>0.81</sub> Al <sub>0.19</sub> O <sub>4</sub> ) <sub>6</sub> O <sub>2</sub> “the crystal structures of two synthetic lanthanum aluminosilicates. Solid State Sciences, 2004, 6, 553-560.	1.5	18
56	Divergence-slit intensity corrections for Bragg–Brentano diffractometers with circular sample surfaces and known beam intensity distribution. Journal of Applied Crystallography, 2004, 37, 472-476.	1.9	5