

Thomas Malcherek

List of Publications by Year in descending order

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68

papers

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citations

394421

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434195

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78

docs citations

78

times ranked

1243

citing authors

#	ARTICLE	IF	CITATIONS
1	Autocorrelation analysis of infrared spectra from minerals. <i>European Journal of Mineralogy</i> , 2000, 12, 503-519.	1.3	102
2	Exploring the potential of Raman spectroscopy for crystallochemical analyses of complex hydrous silicates: II. Tourmalines. <i>American Mineralogist</i> , 2016, 101, 970-985.	1.9	61
3	One-Dimensional Array of Two- and Three-Center Cation- \cdots Cation Bonds in the Structure of Li ₄ [UO ₂) ₁₀ O ₁₀ (Mo ₂ O ₈)]. <i>Inorganic Chemistry</i> , 2007, 46, 8442-8444.	4.0	58
4	Localized defects in radiation-damaged zircon. <i>Acta Crystallographica Section B: Structural Science</i> , 2000, 56, 947-952.	1.8	53
5	Micro-Raman study of copper hydroxychlorides and other corrosion products of bronze samples mimicking archaeological coins. <i>Analytical and Bioanalytical Chemistry</i> , 2012, 402, 1451-1457.	3.7	52
6	Diffuse scattering anisotropy and the P21/a \rightarrow A2/aphase transition in titanite, CaTiOSiO ₄ . <i>Journal of Applied Crystallography</i> , 2001, 34, 108-113.	4.5	43
7	Structure and stability of Cd ₂ Nb ₂ O ₇ and Cd ₂ Ta ₂ O ₇ explored by ab initio calculations. <i>Physical Review B</i> , 2008, 78, .	3.2	43
8	K[AsW ₂ O ₉], the first member of the arsenate-tungsten bronze family: Synthesis, structure, spectroscopic and non-linear optical properties. <i>Journal of Solid State Chemistry</i> , 2013, 204, 59-63.	2.9	41
9	Polarization Dependent High Energy Resolution X-ray Absorption Study of Dicesium Uranyl Tetrachloride. <i>Inorganic Chemistry</i> , 2015, 54, 174-182.	4.0	41
10	Structural properties of ferromagnesian cordierites. <i>American Mineralogist</i> , 2001, 86, 66-79.	1.9	38
11	Tuning of Inter- versus Intrachain Magnetic Interactions in Cyano-Bridged Ni ^{II} /M ^{III} (M = Cr, Fe, Co) Chain Complexes. <i>Inorganic Chemistry</i> , 2006, 45, 7722-7735.	4.0	32
12	High Structural Complexity of Potassium Uranyl Borates Derived from High-Temperature/High-Pressure Reactions. <i>Inorganic Chemistry</i> , 2013, 52, 5110-5118.	4.0	32
13	Encapsulation of Cyanometalates by a Tris-macrocyclic Ligand Tricopper(II) Complex: Syntheses, Structural Variation, and Magnetic Exchange Coupling Pathways. <i>Chemistry - A European Journal</i> , 2006, 12, 737-748.	3.3	30
14	Structures of the pseudo-trigonal polymorphs of Cu ₂ (OH) ₃ Cl. <i>Acta Crystallographica Section B: Structural Science</i> , 2009, 65, 334-341.	1.8	29
15	Metamictization and recrystallization of titanite: An infrared spectroscopic study. <i>American Mineralogist</i> , 2002, 87, 882-890.	1.9	28
16	Cu ₃ MgCl ₂ (OH) ₆ and the bond-valence parameters of the OH \cdots Cl bond. <i>Acta Crystallographica Section B: Structural Science</i> , 2007, 63, 157-160.	1.8	27
17	Complex clover cross-sectioned nanotubules exist in the structure of the first uranium borate phosphate. <i>Chemical Communications</i> , 2012, 48, 3479.	4.1	25
18	A temperature-induced reversible transformation between paratacamite and herbertsmithite. <i>Physics and Chemistry of Minerals</i> , 2014, 41, 33-48.	0.8	22

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19	Crystal chemistry of anhydrous Li uranyl phosphates and arsenates. I. Polymorphism and structure topology: Synthesis and crystal structures of $\hat{1}\pm\text{Li}[(\text{UO}_2)(\text{PO}_4)]$, $\hat{1}\pm\text{Li}[(\text{UO}_2)(\text{AsO}_4)]$, $\hat{1}^2\text{Li}[(\text{UO}_2)(\text{AsO}_4)]$ and $\text{Li}_2[(\text{UO}_2)_3(\text{P}_2\text{O}_7)_2]$. <i>Journal of Solid State Chemistry</i> , 2008, 181, 3010-3015.	2.9	20
20	Radiation-damaged zircon under high pressures. <i>Physics and Chemistry of Minerals</i> , 2018, 45, 981-993.	0.8	20
21	Nondestructive determination of the amphibole crystalâ€¢chemical formulae by Raman spectroscopy: One step closer. <i>Journal of Raman Spectroscopy</i> , 2020, 51, 1530-1548.	2.5	20
22	Influence of the octahedral cationic-site occupancies on the framework vibrations of Li-free tourmalines, with implications for estimating temperature and oxygen fugacity in host rocks. <i>American Mineralogist</i> , 2016, 101, 2554-2563.	1.9	19
23	The new mineral stetindite, CeSiO_4 , a cerium end-member of the zircon group. <i>Neues Jahrbuch Fur Mineralogie, Abhandlungen</i> , 2009, 186, 195-200.	0.3	18
24	The crystal structure of $\text{Cd}_{2-2}\text{Nb}_{2-2}\text{O}_{7-7}$: symmetry mode analysis of the ferroelectric phase. <i>Journal of Physics Condensed Matter</i> , 2010, 22, 205401.	1.8	18
25	Highly Distorted Uranyl Ion Coordination and One/Two-Dimensional Structural Relationship in the $\text{Ba}_2[\text{UO}_2(\text{TO}_4)_2]$ ($T = \text{P, As}$) System: An Experimental and Computational Study. <i>Inorganic Chemistry</i> , 2014, 53, 7650-7660.	4.0	18
26	Structural anisotropy and annealing-induced nanoscale atomic rearrangements in metamict titanite. <i>American Mineralogist</i> , 2012, 97, 1354-1365.	1.9	17
27	Synthesis of Uranium Materials under Extreme Conditions: $\text{UO}_{2-2}[\text{B}_{3-3}\text{Al}_{4-4}\text{O}_{11-11}(\text{OH})]$, a Complex 3D Aluminoborate. <i>Chemistry - A European Journal</i> , 2012, 18, 4166-4169.	3.3	15
28	Structural phase transitions of clinoatacamite and the dynamic Jahnâ€¢Teller effect. <i>Physics and Chemistry of Minerals</i> , 2017, 44, 307-321.	0.8	13
29	The atacamite family of minerals â€“ a testbed for quantum spin liquids. <i>Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials</i> , 2018, 74, 519-526.	1.1	13
30	The crystal structure of $\text{Li}_4[(\text{UO}_2)_2(\text{W}_2\text{O}_{10})]$ and crystal chemistry of Li uranyl tungstates. <i>Zeitschrift FÃ¼r Kristallographie</i> , 2007, 222, 391-395.	1.1	12
31	Temperature and composition dependence of structural phase transitions in $\text{Ca}(\text{TixZr}_{1-x})\text{OGeO}_4$. <i>American Mineralogist</i> , 2005, 90, 687-694.	1.9	11
32	Haydeeite, $\text{Cu}_3\text{Mg}(\text{OH})_6\text{Cl}_2$, a new mineral from the Haydee mine, Salar Grande, Atacama desert, Chile. <i>Neues Jahrbuch Fur Mineralogie, Abhandlungen</i> , 2007, 184, 39-43.	0.3	10
33	Novel Fundamental Building Blocks and Site Dependent Isomorphism in the First Actinide Borophosphates. <i>Inorganic Chemistry</i> , 2013, 52, 7881-7888.	4.0	10
34	Structure and phase transitions of LiTaOGeO_4 . <i>Acta Crystallographica Section B: Structural Science</i> , 2002, 58, 607-612.	1.8	9
35	Isomorphy of structural phase transitions in LiTaOSiO_4 , LiTaOGeO_4 and titanite, CaTiOSiO_4 . <i>Journal of Solid State Chemistry</i> , 2004, 177, 3254-3262.	2.9	9
36	First Mixed Alkaline Uranyl Molybdates: Synthesis and Crystal Structures of $\text{CsNa}_3[(\text{UO}_2)_4\text{O}_4(\text{Mo}_2\text{O}_8)]$ and $\text{Cs}_2\text{Na}_8[(\text{UO}_2)_8\text{O}_8(\text{Mo}_5\text{O}_{20})]$. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2009, 635, 1231-1235.	1.2	9

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37	Composition–“thermal expandability relations and oxidation processes in tourmaline studied by in situ Raman spectroscopy. Physics and Chemistry of Minerals, 2017, 44, 735-748.	0.8	9
38	A high-temperature diffraction study of the solid solution CaTiOSiO ₄ -CaTiOGeO ₄ . American Mineralogist, 2005, 90, 1325-1334.	1.9	8
39	Anatacamite from La Vendida mine, Sierra Corda, Atacama desert, Chile: a triclinic polymorph of Cu ₂ (OH) ₃ Cl. Neues Jahrbuch Fur Mineralogie, Abhandlungen, 2010, 187, 307-312.	0.3	8
40	Crystal structures of new potassium silicates and aluminosilicates of Sm, Tb, Gd, and Yb and their relation to the armstrongite (CaZr(Si ₆ O ₁₅)·3H ₂ O) structure. Journal of Solid State Chemistry, 2015, 227, 196-203.	2.9	7
41	A structural phase transition in NaTaOGeO ₄ and its relation to phase transitions in titanite. Acta Crystallographica Section B: Structural Science, 2007, 63, 545-550.	1.8	6
42	Phase transitions of titanite <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>CaTiSiO</mml:mi><mml:mn>5</mml:mn><mml:math> from density functional perturbation theory. Physical Review Materials, 2018, 2, .	2.4	16
43	The new mineral erikapohlite, Cu ₃ (Zn,Cu,Mg)4Ca ₂ (AsO ₄) ₆ · 2H ₂ O, the Ca-dominant analogue of keyite, from Tsumeb, Namibia. Neues Jahrbuch Fur Mineralogie, Abhandlungen, 2013, 190, 319-325.	0.3	5
44	Structure and phase transitions of CaTaOAlO ₄ . Journal of Applied Crystallography, 2004, 37, 117-122.	4.5	4
45	The structure of SrTiOGeO ₄ and its solid solution with CaTiOGeO ₄ . Physics and Chemistry of Minerals, 2005, 32, 531-545.	0.8	4
46	CaZrGeO ₅ and the triclinic instability of the titanite structure type. Zeitschrift Fur Kristallographie - Crystalline Materials, 2005, 220, .	0.8	4
47	Atelisite-(Y), a new rare earth defect silicate of the KDP structure type. European Journal of Mineralogy, 2012, 24, 1053-1060.	1.3	4
48	Rich Coordination of Nd ³⁺ in Mg ₂ Nd ₁₃ (BO ₃) ₈ (SiO ₄) ₄ (OH) ₄ Derived from High-Pressure/High-Temperature Conditions. Inorganic Chemistry, 2012, 51, 3941-3943.	4	1
49	The keyite crystal structure, revisited. Zeitschrift Fur Kristallographie - Crystalline Materials, 2013, 228, .	0.8	4
50	Vanackerite, a new lead cadmium arsenate of the apatite supergroup from Tsumeb, Namibia. Neues Jahrbuch Fur Mineralogie, Abhandlungen, 2016, 193, .	0.3	4
51	"Early partial melting" in annealed natural cordierites. European Journal of Mineralogy, 2002, 14, 879-890.	1.3	3
52	Galloplumbogummite from Tsumeb, Namibia, a new member of the alunite group with tetravalent charge balance. Neues Jahrbuch Fur Mineralogie, Abhandlungen, 2014, 191, 301-309.	0.3	3
53	Structural and compositional variations of basic Cu(II) chlorides in the herbertsmithite and gillardite structure field. Mineralogical Magazine, 2017, 81, 123-134.	1.4	3
54	Fehrite, MgCu ₄ (SO ₄) ₂ (OH) ₆ · 6H ₂ O, the magnesium analogue of ktenasite from the Casuasidad mine near Baños de Alhamilla, Almeria, Spain. Neues Jahrbuch Fur Mineralogie, Abhandlungen, 2021, 197, 1-10.	0.3	3

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55	Vondechenite, a new hydrous calcium copper chloride hydroxide, from the Bellerberg, East-Eifel volcanic area, Germany. <i>Neues Jahrbuch Fur Mineralogie, Abhandlungen</i> , 2018, 195, 79-86.	0.3	3
56	Strain modulation around inclusions in an annealed natural cordierite. <i>European Journal of Mineralogy</i> , 2001, 13, 921-928.	1.3	2
57	Crystal structure of Cr-bearing Mg ₃ BeAl ₈ O ₁₆ , a new polytype of magnesiotaaffeite-2N ²² S. <i>Acta Crystallographica Section E: Crystallographic Communications</i> , 2016, 72, 1060-1063.	0.5	2
58	Perrierite-(Ce) from the Laacher See tephra, Eifel, Germany, and the modular character of the chevkinitite group of minerals. <i>Physics and Chemistry of Minerals</i> , 2021, 48, 1.	0.8	1
59	The modulated low-temperature structure of malayaite, CaSnOSiO ₄ . <i>Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials</i> , 2020, 76, 316-321.	1.1	1
60	Sanromanite, Na ₂ CaPb ₃ (CO ₃) ₅ , from the Santa Rosa mine, Atacama desert, Chile, a new mineral of the burbankite group. <i>Neues Jahrbuch Fur Mineralogie, Abhandlungen</i> , 2007, 183, 117-121.	0.3	0
61	RASTGUI- a free software package for reciprocal space mapping. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2009, 65, s236-s237.	0.3	0
62	The crystal structure of creaseyite: a disordered, nanoporous lead iron copper aluminosilicate. <i>Zeitschrift Fur Kristallographie - Crystalline Materials</i> , 2013, 228, 134-139.	0.8	0
63	TEMPERATURE-INDUCED P ₂ ₁ ₁ C ₁ TO C ₂ PHASE TRANSITION IN PARTIALLY AMORPHOUS (METAMICT) TITANITE REVEALED BY RAMAN SPECTROSCOPY. <i>Canadian Mineralogist</i> , 2014, 52, 587-587.	1.0	0
64	Cayalsite-(Y), a new rare-earth calcium aluminium fluorosilicate with OD character. <i>European Journal of Mineralogy</i> , 2015, 27, 683-694.	1.3	0
65	Erazoite, a new copper tin sulfide from the El Guanaco gold deposit, Antofagasta Province, Chile. <i>Neues Jahrbuch Fur Mineralogie, Abhandlungen</i> , 2017, 194, 91-96.	0.3	0
66	Ferroelectric ordering of Cd ₂ Nb ₂ O ₇ . <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2009, 65, s204-s205.	0.3	0
67	Chemical mixing and Raman hard-mode spectroscopy in ferroelastic lead phosphate-arsenate: local symmetry splitting and multiscaling behaviour. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2010, 66, s275-s275.	0.3	0
68	Y ₄ H ₈ Si ₃ O ₁₆ : a naturally occurring defect silicate of the KDP structure type. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2010, 66, s187-s187.	0.3	0