

# Artur Benisek

## List of Publications by Year in descending order

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72  
papers

1,207  
citations

394286

19  
h-index

434063

31  
g-index

73  
all docs

73  
docs citations

73  
times ranked

1086  
citing authors

#	ARTICLE	IF	CITATIONS
1	Thermodynamic data of belite polymorphs. Cement and Concrete Research, 2022, 152, 106621.	4.6	3
2	Prediction and observation of formation of Ca-Mg arsenates in acidic and alkaline fluids: Thermodynamic properties and mineral assemblages at Jáchymov, Czech Republic and Rotgalden, Austria. Chemical Geology, 2021, 559, 119922.	1.4	5
3	Raman spectroscopic insights into the glass transition of poly(methyl methacrylate). Physical Chemistry Chemical Physics, 2021, 23, 1649-1665.	1.3	12
4	A new activity model for Fe-Mg-Al biotites: Applications in the K <sub>2</sub> O-FeO-MgO-Al <sub>2</sub> O <sub>3</sub> -SiO <sub>2</sub> -H <sub>2</sub> O (KFMASH) system. Contributions To Mineralogy and Petrology, 2021, 176, 1.	1.2	2
5	A new activity model for Fe-Mg-Al biotites: Derivation and calibration of mixing parameters. Contributions To Mineralogy and Petrology, 2021, 176, 1.	1.2	0
6	Chapmanite [Fe <sub>2</sub> Sb(Si <sub>2</sub> O <sub>5</sub> ) <sub>3</sub> (OH)]: thermodynamic properties and formation in low-temperature environments. European Journal of Mineralogy, 2021, 33, 357-371.	0.4	3
7	The assimilation of felsic xenoliths in kimberlites: insights into temperature and volatiles during kimberlite emplacement. Contributions To Mineralogy and Petrology, 2021, 176, 1.	1.2	3
8	Excess heat capacity and entropy of mixing along the hydroxyapatite-chlorapatite and hydroxyapatite-fluorapatite binaries. Physics and Chemistry of Minerals, 2021, 48, 44.	0.3	2
9	Study on the structural phase transitions in NaSICON-type compounds using Ag <sub>3</sub> Sc <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> as a model system. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2021, 77, 10-22.	0.5	2
10	Excess enthalpy of mixing of mineral solid solutions derived from density-functional calculations. Physics and Chemistry of Minerals, 2020, 47, 15.	0.3	3
11	Thermodynamic properties of calcium alkali phosphates Ca(Na,K)PO <sub>4</sub> . Journal of Materials Science, 2020, 55, 8477-8490.	1.7	5
12	Thermodynamic properties, crystal structure and phase relations of pushcharovskite [Cu(AsO <sub>3</sub> ) <sub>3</sub> (OH)(H <sub>2</sub> O)·0.5H <sub>2</sub> O] geminite [Cu(AsO <sub>3</sub> ) <sub>3</sub> (OH)(H <sub>2</sub> O)] and lironite [Cu <sub>2</sub> Al(AsO <sub>4</sub> ) <sub>4</sub> (OH)]	0.4	7
13	A new activity model for Mg-Al biotites determined through an integrated approach. Contributions To Mineralogy and Petrology, 2019, 174, 76.	1.2	5
14	Furfuryl Alcohol and Lactic Acid Blends: Homo- or Co-Polymerization?. Polymers, 2019, 11, 1533.	2.0	7
15	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
16	P21/c-C2/c phase transition and mixing properties of the (Li,Na)FeGe <sub>2</sub> O <sub>6</sub> solid solution: A calorimetric and thermodynamic study. Journal of Chemical Thermodynamics, 2018, 120, 123-140.	1.0	6
17	Stability and calorimetric studies of silico-ferrites of calcium aluminum and magnesium. Journal of the American Ceramic Society, 2018, 101, 4193-4202.	1.9	1
18	Plagioclase composition by Raman spectroscopy. Journal of Raman Spectroscopy, 2018, 49, 684-698.	1.2	41

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19	Thermodynamics, crystal chemistry and structural complexity of the $\text{Fe}(\text{SO}_4)(\text{OH})(\text{H}_2\text{O})_x$ phases: $\text{Fe}(\text{SO}_4)(\text{OH})$ , metahohmannite, butlerite, parabutlerite, amarantite, hohmannite, and fibroferrite. <i>European Journal of Mineralogy</i> , 2018, 30, 259-275.	0.4	20
20	Thermodynamics of disordering in $\text{Au}_3\text{Cu}$ . <i>Journal of Alloys and Compounds</i> , 2018, 735, 1344-1349.	2.8	5
21	Heat capacity measurements of $\text{CaAlSiO}_4\text{F}$ from 5 to 850 K and its standard entropy. <i>American Mineralogist</i> , 2018, 103, 1165-1168.	0.9	3
22	The accuracy of standard enthalpies and entropies for phases of petrological interest derived from density-functional calculations. <i>Contributions To Mineralogy and Petrology</i> , 2018, 173, 90.	1.2	22
23	Thermodynamic properties of mansfieldite ( $\text{AlAsO}_4 \cdot 2\text{H}_2\text{O}$ ), angelellite ( $\text{Fe}_4(\text{AsO}_4)_2\text{O}_3$ ) and kamarizaite ( $\text{Fe}_3(\text{AsO}_4)_2(\text{OH}) \cdot 3\text{H}_2\text{O}$ ). <i>Mineralogical Magazine</i> , 2018, 82, 1333-1354.	0.6	8
24	Vibrational entropy of disorder in $\text{Cu}_3\text{Au}$ with different degrees of short-range order. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 19441-19446.	1.3	5
25	Thermodynamics and crystal chemistry of rhomboclase, ( $\text{H}_5\text{O}_2$ ) $\text{Fe}(\text{SO}_4)_2 \cdot 2\text{H}_2\text{O}$ , and the phase ( $\text{H}_3\text{O}$ ) $\text{Fe}(\text{SO}_4)_2$ and implications for acid mine drainage. <i>American Mineralogist</i> , 2017, 102, 643-654.	0.9	5
26	Thermodynamics, stability, crystal structure, and phase relations among euchroite, $\text{Cu}_2(\text{AsO}_4)(\text{OH}) \cdot 3\text{H}_2\text{O}$ , and related minerals. <i>European Journal of Mineralogy</i> , 2017, 29, 5-16.	0.4	9
27	Thermodynamic properties of tooeleite, $\text{Fe}_{63+}(\text{As}_3\text{O}_3)_4(\text{SO}_4)(\text{OH})_4 \cdot 4\text{H}_2\text{O}$ . <i>Chemie Der Erde</i> , 2016, 76, 419-428.	0.8	14
28	Thermodynamic properties of $\text{FeAsO}_4 \cdot 0.75\text{H}_2\text{O}$ - a more favorable disposable product of low As solubility. <i>Hydrometallurgy</i> , 2016, 164, 136-140.	1.8	8
29	Crystal chemistry, Mössbauer spectroscopy, and thermodynamic properties of botryogen. <i>Neues Jahrbuch Fur Mineralogie, Abhandlungen</i> , 2016, 193, 147-159.	0.1	2
30	The Structure and Thermochemistry of Three Fe-Mg Chlorites. <i>Clays and Clay Minerals</i> , 2015, 63, 351-367.	0.6	6
31	The vibrational and configurational entropy of disordering in $\text{Cu}_3\text{Au}$ . <i>Journal of Alloys and Compounds</i> , 2015, 632, 585-590.	2.8	25
32	First-principles investigation of the lattice vibrations in the alkali feldspar solid solution. <i>Physics and Chemistry of Minerals</i> , 2015, 42, 243-249.	0.3	9
33	Standard-state thermodynamic properties of annite, $\text{KFe}_3[(\text{OH})_2\text{AlSi}_3\text{O}_{10}]$ , based on new calorimetric measurements. <i>European Journal of Mineralogy</i> , 2015, 27, 603-616.	0.4	5
34	Thermochemistry of the alkali feldspars: Calorimetric study of the entropy relations in the low albite-low microcline series. <i>American Mineralogist</i> , 2014, 99, 76-83.	0.9	11
35	Thermodynamic mixing properties and behavior of almandine-spessartine solid solutions. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 125, 210-224.	1.6	10
36	The vibrational and configurational entropy of $\beta$ -brass. <i>Journal of Chemical Thermodynamics</i> , 2014, 71, 126-132.	1.0	5

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37	Thermodynamic mixing properties and behavior of grossular-spessartine, (Ca Mn <sub>1-3</sub> ) <sub>3</sub> Al <sub>2</sub> Si <sub>3</sub> O <sub>12</sub> , solid solutions. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 141, 294-302.	1.6	7
38	Heat capacity and entropy of rutile and TiO <sub>2</sub> II: Thermodynamic calculation of rutile-TiO <sub>2</sub> II transition boundary. <i>Physics of the Earth and Planetary Interiors</i> , 2014, 226, 39-47.	0.7	12
39	Heat capacity and entropy of low structural state plagioclases. <i>Physics and Chemistry of Minerals</i> , 2013, 40, 167-173.	0.3	9
40	Calorimetric study of the entropy relation in the NaCl-KCl system. <i>Journal of Chemical Thermodynamics</i> , 2013, 62, 231-235.	1.0	7
41	The heat capacity of fayalite at high temperatures. <i>American Mineralogist</i> , 2012, 97, 657-660.	0.9	29
42	Almandine: Lattice and non-lattice heat capacity behavior and standard thermodynamic properties. <i>American Mineralogist</i> , 2012, 97, 1771-1782.	0.9	25
43	Experimentally Determined Standard Thermodynamic Properties of Synthetic MgSO <sub>4</sub> ·4H <sub>2</sub> O (Starkeyite) and MgSO <sub>4</sub> ·3H <sub>2</sub> O: A Revised Internally Consistent Thermodynamic Data Set for Magnesium Sulfate Hydrates. <i>Astrobiology</i> , 2012, 12, 1042-1054.	1.5	21
44	Thermodynamic behavior and properties of katoite (hydrogrossular): A calorimetric study. <i>American Mineralogist</i> , 2012, 97, 1252-1255.	0.9	17
45	Grossular: A crystal-chemical, calorimetric, and thermodynamic study. <i>American Mineralogist</i> , 2012, 97, 1299-1313.	0.9	22
46	A relationship to estimate the excess entropy of mixing: Application in silicate solid solutions and binary alloys. <i>Journal of Alloys and Compounds</i> , 2012, 527, 127-131.	2.8	25
47	Heat capacity, entropy and phase equilibria of stishovite. <i>Physics and Chemistry of Minerals</i> , 2012, 39, 153-162.	0.3	15
48	Heat capacity, entropy, and phase equilibria of dmitryivanovite. <i>Physics and Chemistry of Minerals</i> , 2012, 39, 259-267.	0.3	7
49	On the nature of the excess heat capacity of mixing. <i>Physics and Chemistry of Minerals</i> , 2011, 38, 185-191.	0.3	12
50	A sample-saving method for heat capacity measurements on powders using relaxation calorimetry. <i>Cryogenics</i> , 2011, 51, 460-464.	0.9	57
51	Heat capacity and third-law entropy of kaersutite, pargasite, fluoropargasite, tremolite and fluorotremolite. <i>European Journal of Mineralogy</i> , 2010, 22, 319-331.	0.4	8
52	Excess heat capacity and entropy of mixing in the high-structural state (K,Ca)-feldspar binary. <i>Physics and Chemistry of Minerals</i> , 2010, 37, 209-218.	0.3	13
53	Excess heat capacity and entropy of mixing along the chlorapatite-fluorapatite binary join. <i>Physics and Chemistry of Minerals</i> , 2010, 37, 665-676.	0.3	27
54	A ternary feldspar-mixing model based on calorimetric data: development and application. <i>Contributions To Mineralogy and Petrology</i> , 2010, 160, 327-337.	1.2	126

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55	Excess heat capacity and entropy of mixing in ternary series of high-structural-state feldspars. <i>European Journal of Mineralogy</i> , 2010, 22, 403-410.	0.4	23
56	Excess heat capacity and entropy of mixing in high structural state plagioclase. <i>American Mineralogist</i> , 2009, 94, 1153-1161.	0.9	28
57	Thermodynamic mixing behavior of synthetic Ca-Tschermak diopside pyroxene solid solutions: III. An analysis of IR line broadening and heat of mixing behavior. <i>Physics and Chemistry of Minerals</i> , 2008, 35, 399-407.	0.3	17
58	The uncertainty in determining the third law entropy by the heat-pulse calorimetric technique. <i>Cryogenics</i> , 2008, 48, 527-529.	0.9	25
59	Thermodynamic mixing behavior of synthetic Ca-Tschermak diopside pyroxene solid solutions: I. Volume and heat capacity of mixing. <i>Physics and Chemistry of Minerals</i> , 2007, 34, 733-746.	0.3	28
60	Thermodynamic mixing behavior of synthetic Ca-Tschermak diopside pyroxene solid solutions: II. Heat of mixing and activity-composition relationships. <i>Physics and Chemistry of Minerals</i> , 2007, 34, 747-755.	0.3	18
61	Control of Oxygen Partial Pressure by means of H <sub>2</sub> or CO Gas Mixtures. <i>Journal of the Electrochemical Society</i> , 2005, 152, H157.	1.3	6
62	New developments in two-feldspar thermometry. <i>American Mineralogist</i> , 2004, 89, 1496-1504.	0.9	74
63	Electrochemical device for the precise adjustment of oxygen partial pressures in a gas stream. <i>Solid State Ionics</i> , 2004, 170, 99-104.	1.3	8
64	Enthalpies in (Na,Ca)- and (K,Ca)-feldspar binaries: a high-temperature solution calorimetric study. <i>Contributions To Mineralogy and Petrology</i> , 2003, 145, 119-129.	1.2	19
65	Thermodynamic properties of Na <sub>2</sub> Ti <sub>6</sub> O <sub>13</sub> and Na <sub>2</sub> Ti <sub>3</sub> O <sub>7</sub> : electrochemical and calorimetric determination. <i>Journal of Chemical Thermodynamics</i> , 2003, 35, 1469-1487.	1.0	25
66	The heat capacity of two natural chlorite group minerals derived from differential scanning calorimetry. <i>Physics and Chemistry of Minerals</i> , 2001, 28, 332-336.	0.3	14
67	Transport properties of La <sub>0.4</sub> Sr <sub>0.6</sub> CoO <sub>3</sub> . <i>Solid State Ionics</i> , 2001, 141-142, 375-380.	1.3	20
68	Heat capacities of Tschermak substituted Fe-biotite. <i>Contributions To Mineralogy and Petrology</i> , 1999, 135, 53-61.	1.2	14
69	Annite stability revised: hydrogen-sensor data for the reaction annite = sanidine + magnetite + H <sub>2</sub> : additional results and reply to Chou. <i>Contributions To Mineralogy and Petrology</i> , 1997, 128, 306-311.	1.2	4
70	Activity-composition relationship in Tschermak's substituted Fe biotites at 700°C, 2 kbar. <i>Contributions To Mineralogy and Petrology</i> , 1996, 125, 85-99.	1.2	12
71	The stability of annite+quartz: reversed experimental data for the reaction 2 annite+3 quartz=2 sanidine+3 fayalite +2 H <sub>2</sub> O. <i>Contributions To Mineralogy and Petrology</i> , 1995, 121, 380-387.	1.2	9
72	Factors controlling the development of prism faces in granite zircons: a microprobe study. <i>Contributions To Mineralogy and Petrology</i> , 1993, 114, 441-451.	1.2	122