## **Tobias Beirau**

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Partially disordered pyrochlore: time-temperature dependence of recrystallization and dehydration. Zeitschrift Fur Kristallographie - Crystalline Materials, 2022, .	0.8	0
2	High-temperature resonant ultrasound spectroscopy of highly radiation-damaged pyrochlore: Structural reorganization and high acoustic loss. Applied Physics Letters, 2022, 120, 231901.	3.3	0
3	A modeling approach to predict the mechanical response of materials to irradiation damage from external sources: Nanoindentation of Pb-implanted ZrSiO4. Materialia, 2022, 24, 101506.	2.7	0
4	Modelling the effect of intrinsic radiation damage on mechanical properties: The crystalline-to-amorphous transition in zircon. Scripta Materialia, 2021, 197, 113789.	5.2	7
5	Percolation transitions in pyrochlore: Radiation-damage and thermally induced structural reorganization. Applied Physics Letters, 2021, 119, .	3.3	4
6	Fracture toughness of radiation-damaged zircon studied by nanoindentation pillar-splitting. Applied Physics Letters, 2021, 119, .	3.3	3
7	Mechanical and structural response of radiation-damaged pyrochlore to thermal annealing. Materialia, 2020, 14, 100950.	2.7	6
8	Iron sites in radiation-damaged allanite-(Ce): the effects of thermally induced oxidation and structural reorganization. Hyperfine Interactions, 2020, 241, 1.	0.5	1
9	Nano-indentation and avalanches in compressed porous SiO2. Applied Physics Letters, 2019, 115, 071902.	3.3	5
10	Mechanical and structural properties of radiation-damaged allanite-(Ce) and the effects of thermal annealing. Physics and Chemistry of Minerals, 2019, 46, 921-933.	0.8	11
11	Radiation-damage in multi-layered zircon: Mechanical properties. Applied Physics Letters, 2019, 115, .	3.3	7
12	Maximization of the reuse of industrial residues for the production of eco-friendly CSA-belite clinker. Construction and Building Materials, 2019, 208, 250-257.	7.2	16
13	Avalanches during recrystallization in radiation-damaged pyrochlore and allanite: Statistical similarity to phase transitions in functional materials. Applied Physics Letters, 2019, 115, .	3.3	5
14	Locally preserved <i>α</i> → <i>β</i> phase transition in natural radiation-damaged titanite (CaTiSiO <sub>5</sub> ): evidence from laser-induced photoluminescence and dielectric measurements. Journal of Physics Condensed Matter, 2018, 30, 035403.	1.8	3
15	Radiation-induced effects on the mechanical properties of natural ZrSiO4: double cascade-overlap damage accumulation. Physics and Chemistry of Minerals, 2018, 45, 435-442.	0.8	3
16	Radiation-damage-induced transitions in zircon: Percolation theory applied to hardness and elastic moduli as a function of density. Applied Physics Letters, 2018, 112, .	3.3	9
17	Thermal annealing of natural, radiation-damaged pyrochlore. Zeitschrift Fur Kristallographie - Crystalline Materials, 2017, 232, 25-38.	0.8	17
18	Anisotropic mechanical properties of zircon and the effect of radiation damage. Physics and Chemistry of Minerals, 2016, 43, 627-638.	0.8	14

#	Article	IF	CITATIONS
19	Mechanical properties of natural radiation-damaged titanite and temperature-induced structural reorganization: A nanoindentation and Raman spectroscopic study. American Mineralogist, 2016, 101, 399-406.	1.9	10
20	Structural anisotropy and annealing-induced nanoscale atomic rearrangements in metamict titanite. American Mineralogist, 2012, 97, 1354-1365.	1.9	17