Phil K Cook

List of Publications by Year
in descending order

22	424	759233 12	752698 20
papers	citations	h-index	g-index

22	22	22	526
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Trace Element Patterns in Otoliths: The Role of Biomineralization. Reviews in Fisheries Science and Aquaculture, 2021, 29, 445-477.	9.1	87
2	X-ray diffraction microscopy based on refractive optics. Journal of Applied Crystallography, 2017, 50, 1441-1456.	4.5	50
3	A multi-scale study of the interaction of Sn solutes with dislocations during static recovery in Î±-Fe. Acta Materialia, 2019, 174, 92-104.	7.9	34
4	Quantifying microscale drivers for fatigue failure via coupled synchrotron X-ray characterization and simulations. Nature Communications, 2020, 11, 3189.	12.8	30
5	Biomineralization as a Paradigm of Directional Solidification: A Physical Model for Molluscan Shell Ultrastructural Morphogenesis. Advanced Materials, 2018, 30, e1803855.	21.0	27
6	Synthesis of Co3[Fe(CN)6]2 molecular-based nanomagnets in MSU mesoporous silica by integrative chemistry. New Journal of Chemistry, 2009, 33, 2449.	2.8	24
7	Sub-surface measurements of the austenite microstructure in response to martensitic phase transformation. Acta Materialia, 2019, 179, 273-286.	7.9	23
8	In situ visualization of long-range defect interactions at the edge of melting. Science Advances, 2021, 7, .	10.3	23
9	Reciprocal space mapping and strain scanning using X-ray diffraction microscopy. Journal of Applied Crystallography, 2018, 51, 1428-1436.	4.5	22
10	4D microstructural evolution in a heavily deformed ferritic alloy: A new perspective in recrystallisation studies. Scripta Materialia, 2022, 214, 114689.	5.2	15
11	Probing nanoscale structure and strain by dark-field x-ray microscopy. MRS Bulletin, 2020, 45, 277-282.	3.5	14
12	Biogenic and diagenetic indicators in archaeological and modern otoliths: Potential and limits of high definition synchrotron micro-XRF elemental mapping. Chemical Geology, 2015, 414, 1-15.	3.3	12
13	In-operando observation of microstructural evolution in a solid oxide cell electrolyte operating at high polarization. Journal of Power Sources, 2019, 413, 351-359.	7.8	12
14	Strontium speciation in archaeological otoliths. Journal of Analytical Atomic Spectrometry, 2016, 31, 700-711.	3.0	11
15	Quantitative mapping of nanotwin variants in the bulk. Scripta Materialia, 2021, 199, 113878.	5.2	10
16	Insights into the Exceptional Crystallographic Order of Biominerals Using Dark-Field X-ray Microscopy. Microscopy and Microanalysis, 2018, 24, 90-91.	0.4	8
17	Dark-field X-ray microscopy reveals mosaicity and strain gradients across sub-surface TiC and TiN particles in steel matrix composites. Scripta Materialia, 2020, 187, 402-406.	5.2	6
18	Imaging microstructural dynamics and strain fields in electro-active materials in situ with dark field x-ray microscopy. Review of Scientific Instruments, 2020, 91, 065103.	1.3	6

#	Article	IF	Citations
19	Full-section otolith microtexture imaged by local-probe X-ray diffraction. Journal of Applied Crystallography, 2018, 51, 1182-1196.	4.5	5
20	Untangling the mechanisms of lattice distortions in biogenic crystals across scales. Advanced Materials, 2022, , 2200690.	21.0	3
21	Bulk heterogeneity in barium titanate above the Curie temperature. Applied Physics Letters, 2021, 119, .	3.3	2
22	Sub-Surface Measurements of the Austenite Microstructure in Response to Martensitic Phase Transformation. SSRN Electronic Journal, 0, , .	0.4	0