Andrew King

List of Publications by Year
in descending order

28	1,093	516710 16	501196 28
papers	citations	h-index	g-index

29	29	29	1187
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Three-dimensional grain mapping by x-ray diffraction contrast tomography and the use of Friedel pairs in diffraction data analysis. Review of Scientific Instruments, 2009, 80, 033905.	1.3	223
2	Evidence for Hydraulic Vulnerability Segmentation and Lack of Xylem Refilling under Tension. Plant Physiology, 2016, 172, 1657-1668.	4.8	132
3	Advances in X-ray diffraction contrast tomography: flexibility in the setup geometry and application to multiphase materials. Journal of Applied Crystallography, 2013, 46, 297-311.	4.5	108
4	Drought will not leave your glass empty: Low risk of hydraulic failure revealed by long-term drought observations in worldâ€™s top wine regions. Science Advances, 2018, 4, eaao6969.	10.3	107
5	Tomography and imaging at the PSICHE beam line of the SOLEIL synchrotron. Review of Scientific Instruments, 2016, 87, 093704.	1.3	59
6	Neither xylem collapse, cavitation, or changing leaf conductance drive stomatal closure in wheat. Plant, Cell and Environment, 2020, 43, 854-865.	5.7	59
7	A study of deformation twinning in a titanium alloy by X-ray diffraction contrast tomography. Acta Materialia, 2016, 105, 417-428.	7.9	56
8	An inconvenient truth about xylem resistance to embolism in the model species for refilling Laurus nobilis L.. Annals of Forest Science, 2018, 75, 1.	2.0	53
9	Visual and hydraulic techniques produce similar estimates of cavitation resistance in woody species. New Phytologist, 2020, 228, 884-897.	7.3	37
10	Catastrophic Failure: How and When? Insights From 4â€D In Situ Xâ€ray Microtomography. Journal of Geophysical Research: Solid Earth, 2020, 125, e2020JB019642.	3.4	33
11	Formation of bridgmanite-enriched layer at the top lower-mantle during magma ocean solidification. Nature Communications, 2020, 11, 548.	12.8	26
12	Lack of vulnerability segmentation in four angiosperm tree species: evidence from direct X-ray microtomography observation. Annals of Forest Science, 2020, 77, 1.	2.0	26
13	The impact of drought-induced root and root hair shrinkage on rootâ€“soil contact. Plant Physiology, 2022, 189, 1232-1236.	4.8	26
14	Following the phase transitions of iron in 3D with X-ray tomography and diffraction under extreme conditions. Acta Materialia, 2020, 192, 30-39.	7.9	21
15	Rotating tomography Parisâ€“Edinburgh cell: a novel portable press for micro-tomographic 4-D imaging at extreme pressure/temperature/stress conditions. High Pressure Research, 2016, 36, 512-532.	1.2	20
16	High-speed tomography under extreme conditions at the PSICHE beamline of the SOLEIL Synchrotron. Journal of Synchrotron Radiation, 2018, 25, 818-825.	2.4	16
17	Recent Tomographic Imaging Developments at the PSICHE Beamline. Integrating Materials and Manufacturing Innovation, 2019, 8, 551-558.	2.6	15
18	Synchrotron-Based Phase Mapping in Corroded Metals: Insights from Early Copper-Base Artifacts. Analytical Chemistry, 2019, 91, 1815-1825.	6.5	15

#	Article	IF	Citations
19	Development of synchrotron X-ray micro-tomography under extreme conditions of pressure andÂtemperature. Journal of Synchrotron Radiation, 2017, 24, 240-247.	2.4	12
20	Synchrotron x-ray computed microtomography for high pressure science. Journal of Applied Physics, 2020, 127, .	2.5	9
21	Thermal expansion of liquid Fe-S alloy at high pressure. Earth and Planetary Science Letters, 2021, 563, 116884.	4.4	8
22	Amorpheus: a Python-based software for the treatment of X-ray scattering data of amorphous and liquid systems. High Pressure Research, 2022, 42, 69-93.	1.2	7
23	Development of a Versatile Mechanical Testing Device for In Situ Synchrotron Tomography and Diffraction Experiments. Integrating Materials and Manufacturing Innovation, 2019, 8, 378-387.	2.6	6
24	Quantitative 4D X-ray microtomography under extreme conditions: a case study on magma migration. Journal of Synchrotron Radiation, 2021, 28, 1598-1609.	2.4	5
25	Combined angular and energy dispersive diffraction: optimized data acquisition, normalization and reduction. Journal of Applied Crystallography, 2022, 55, 218-227.	4.5	5
26	Boronâ€“MgO composite as an X-ray transparent pressure medium in the multi-anvil apparatus. Review of Scientific Instruments, 2020, 91, 043903.	1.3	3
27	In situ tomographic study of a 3D-woven SiC/SiC composite part subjected to severe thermo-mechanical loads. Journal of Synchrotron Radiation, 2022, 29, 522-531.	2.4	3
28	In situ characterization of liquids at high pressure combining X-ray tomography, X-ray diffraction and X-ray absorption using the white beam station at PSICHÃ‰. Journal of Synchrotron Radiation, 2022, 29, 853-861.	2.4	3