Renliang Yuan

List of Publications by Year
in descending order

22 papers	173 citations	1040056 9 h-index	1125743 13 g-index
22 all docs	22 docs citations	22 times ranked	281 citing authors

#	Article	IF	Citations
1	Data-driven electron microscopy: electron diffraction imaging of materials structural properties. Microscopy (Oxford, England), 2022, 71, i116-i131.	1.5	11
2	Early stages of liquid-metal embrittlement in an advanced high-strength steel. Materials Today Advances, 2022, 13, 100196.	5.2	7
3	Cepstral scanning transmission electron microscopy imaging of severe lattice distortions. Ultramicroscopy, 2021, 231, 113252.	1.9	9
4	Ultralow Thermal Conductivity in Nanoporous Crystalline Fe₃O₄. Journal of Physical Chemistry C, 2021, 125, 6897-6908.	3.1	12
5	Training artificial neural networks for precision orientation and strain mapping using 4D electron diffraction datasets. Ultramicroscopy, 2021, 231, 113256.	1.9	18
6	Comparing different software packages for the mapping of strain from scanning precession diffraction data. Microscopy and Microanalysis, 2021, 27, 2-5.	0.4	3
7	Machine Learning Based Precision Orientation and Strain Mapping from 4D Diffraction Datasets. Microscopy and Microanalysis, 2021, 27, 1276-1278.	0.4	0
8	Antimony segregation in an InAs/InAs1âˆ’xSbx superlattice grown by metalorganic chemical vapor deposition. Journal of Applied Physics, 2021, 130, 095302.	2.5	1
9	Imaging Lattice Distortions in High Entropy Alloys at Multiple Length Scales Using Electron Nanodiffraction and 4D-STEM. Microscopy and Microanalysis, 2020, 26, 978-980.	0.4	0
10	Determination of Crystallinity in Li_{1âˆ’x}Mg_xMn₂O₄ Nanocrystals Based on Diffraction Patterns Correlation Analysis and Strain Mapping. Microscopy and Microanalysis, 2019, 25, 1972-1973.	0.4	1
11	Lattice strain mapping using circular Hough transform for electron diffraction disk detection. Ultramicroscopy, 2019, 207, 112837.	1.9	24
12	Shear-band structure and chemistry in a Zr-based metallic glass probed with nano-beam x-ray fluorescence and transmission electron microscopy. Scripta Materialia, 2019, 169, 23-27.	5.2	17
13	Studies of x-ray localization and thickness dependence in atomic-scale elemental mapping by STEM energy-dispersive x-ray spectroscopy using single-frame scanning method. Ultramicroscopy, 2018, 186, 23-29.	1.9	11
14	Strain Characterization of Advanced CMOS Transistors: An Industry Perspective. Microscopy and Microanalysis, 2018, 24, 974-975.	0.4	1
15	Developing High Resolution and High Precision Strain Mapping Methodologies for Materials Research and Semiconductor Technology. Microscopy and Microanalysis, 2018, 24, 966-967.	0.4	0
16	Fast Atomic-Scale Elemental Mapping of Crystalline Materials by STEM Energy-Dispersive X-Ray Spectroscopy Achieved with Thin Specimens. Microscopy and Microanalysis, 2017, 23, 145-154.	0.4	4
17	Elemental and lattice-parameter mapping of binary oxide superlattices of (LaNiO₃)₄/(LaMnO₃)₂at atomic resolution. Semiconductor Science and Technology, 2017, 32, 014002.	2.0	4
18	Accurate Diffraction Peak Identification for Scanning Electron Nanodiffraction Based on Automated Image Processing and Feature Detection. Microscopy and Microanalysis, 2017, 23, 180-181.	0.4	3

#	Article	IF	Citations
19	Improving Atomic-Scale Elemental Mapping Resolution of STEM-EDS through Optimizing Experimental Conditions. Microscopy and Microanalysis, 2017, 23, 394-395.	0.4	0
20	Fast Atomic-Scale Chemical Imaging of Crystalline Materials and Dynamic Phase Transformations. Nano Letters, 2016, 16, 2728-2733.	9.1	23
21	Identification and mechanical control of ferroelastic domain structure in rhombohedralCaMn7O12. Physical Review B, 2015, 91, .	3.2	9
22	Soft vibrational mode associated with incommensurate orbital order in multiferroic<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>CaMn</mml:mi><mml:mn>7</mml:mn></m mathvariant="normal">O</mml:mi><mml:mn>12</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2014, 90, .	3.2	15