

# Renliang Yuan

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6015681/publications.pdf>

Version: 2024-02-01

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  | Lattice strain mapping using circular Hough transform for electron diffraction disk detection. Ultramicroscopy, 2019, 207, 112837.   | 1.9 | 24        |
| 2  | Fast Atomic-Scale Chemical Imaging of Crystalline Materials and Dynamic Phase Transformations. Nano Letters, 2016, 16, 2728-2733.  | 9.1 | 23        |
| 3  | Training artificial neural networks for precision orientation and strain mapping using 4D electron diffraction datasets. Ultramicroscopy, 2021, 231, 113256.   | 1.9 | 18        |
| 4  | 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        |
| 5  | Soft vibrational mode associated with incommensurate orbital order in multiferroic $\text{CaMn}_7\text{O}_{12}$ . Physical Review B, 2014, 90, .   | 3.2 | 15        |
| 6  | Ultralow Thermal Conductivity in Nanoporous Crystalline $\text{Fe}_3\text{O}_4$ . Journal of Physical Chemistry C, 2021, 125, 6897-6908.   | 3.1 | 12        |
| 7  | 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        |
| 8  | Data-driven electron microscopy: electron diffraction imaging of materials structural properties. Microscopy (Oxford, England), 2022, 71, i116-i131.   | 1.5 | 11        |
| 9  | Identification and mechanical control of ferroelastic domain structure in rhombohedral $\text{CaMn}_7\text{O}_{12}$ . Physical Review B, 2015, 91, .   | 3.2 | 9         |
| 10 | Cepstral scanning transmission electron microscopy imaging of severe lattice distortions. Ultramicroscopy, 2021, 231, 113252.  | 1.9 | 9         |
| 11 | Early stages of liquid-metal embrittlement in an advanced high-strength steel. Materials Today Advances, 2022, 13, 100196.   | 5.2 | 7         |
| 12 | 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         |
| 13 | Elemental and lattice-parameter mapping of binary oxide superlattices of $(\text{LaNiO}_3)_4/(\text{LaMnO}_3)_2$ at atomic resolution. Semiconductor Science and Technology, 2017, 32, 014002.                         | 2.0 | 4         |
| 14 | 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         |
| 15 | Comparing different software packages for the mapping of strain from scanning precession diffraction data. Microscopy and Microanalysis, 2021, 27, 2-5.  | 0.4 | 3         |
| 16 | Strain Characterization of Advanced CMOS Transistors: An Industry Perspective. Microscopy and Microanalysis, 2018, 24, 974-975.  | 0.4 | 1         |
| 17 | Determination of Crystallinity in $\text{Li}_x\text{Mg}_x\text{Mn}_2\text{O}_4$ Nanocrystals Based on Diffraction Patterns Correlation Analysis and Strain Mapping. Microscopy and Microanalysis, 2019, 25, 1972-1973. | 0.4 | 1         |
| 18 | Antimony segregation in an $\text{InAs}/\text{InAs}_1\text{xSbx}$ superlattice grown by metalorganic chemical vapor deposition. Journal of Applied Physics, 2021, 130, 095302.   | 2.5 | 1         |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 19 | Improving Atomic-Scale Elemental Mapping Resolution of STEM-EDS through Optimizing Experimental Conditions. <i>Microscopy and Microanalysis</i> , 2017, 23, 394-395.                     | 0.4 | 0         |
| 20 | Developing High Resolution and High Precision Strain Mapping Methodologies for Materials Research and Semiconductor Technology. <i>Microscopy and Microanalysis</i> , 2018, 24, 966-967. | 0.4 | 0         |
| 21 | Imaging Lattice Distortions in High Entropy Alloys at Multiple Length Scales Using Electron Nanodiffraction and 4D-STEM. <i>Microscopy and Microanalysis</i> , 2020, 26, 978-980.        | 0.4 | 0         |
| 22 | Machine Learning Based Precision Orientation and Strain Mapping from 4D Diffraction Datasets. <i>Microscopy and Microanalysis</i> , 2021, 27, 1276-1278.                                 | 0.4 | 0         |