

# Leigh Stephenson

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6153112/publications.pdf>

Version: 2024-02-01

37  
papers

2,112  
citations

331259

21  
h-index

360668

35  
g-index

40  
all docs

40  
docs citations

40  
times ranked

1677  
citing authors

#	ARTICLE	IF	CITATIONS
1	New Techniques for the Analysis of Fine-Scaled Clustering Phenomena within Atom Probe Tomography (APT) Data. <i>Microscopy and Microanalysis</i> , 2007, 13, 448-463.	0.2	281
2	Advances in the calibration of atom probe tomographic reconstruction. <i>Journal of Applied Physics</i> , 2009, 105, .	1.1	214
3	Quantitative binomial distribution analyses of nanoscale like-solute atom clustering and segregation in atom probe tomography data. <i>Microscopy Research and Technique</i> , 2008, 71, 542-550.	1.2	198
4	Spatial Resolution in Atom Probe Tomography. <i>Microscopy and Microanalysis</i> , 2010, 16, 99-110.	0.2	153
5	Estimation of the Reconstruction Parameters for Atom Probe Tomography. <i>Microscopy and Microanalysis</i> , 2008, 14, 296-305.	0.2	143
6	Qualification of the tomographic reconstruction in atom probe by advanced spatial distribution map techniques. <i>Ultramicroscopy</i> , 2009, 109, 815-824.	0.8	129
7	Current Challenges and Opportunities in Microstructure-Related Properties of Advanced High-Strength Steels. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2020, 51, 5517-5586.	1.1	115
8	Ti and its alloys as examples of cryogenic focused ion beam milling of environmentally-sensitive materials. <i>Nature Communications</i> , 2019, 10, 942.	5.8	89
9	Characterizing solute hydrogen and hydrides in pure and alloyed titanium at the atomic scale. <i>Acta Materialia</i> , 2018, 150, 273-280.	3.8	81
10	Origin of the spatial resolution in atom probe microscopy. <i>Applied Physics Letters</i> , 2009, 95, 034103.	1.5	80
11	Solute hydrogen and deuterium observed at the near atomic scale in high-strength steel. <i>Acta Materialia</i> , 2020, 188, 108-120.	3.8	64
12	Lattice Rectification in Atom Probe Tomography: Toward True Three-Dimensional Atomic Microscopy. <i>Microscopy and Microanalysis</i> , 2011, 17, 226-239.	0.2	58
13	Clustering in Age-Hardenable Aluminum Alloys. <i>Advanced Engineering Materials</i> , 2018, 20, 1800255.	1.6	58
14	The Laplace Project: An integrated suite for preparing and transferring atom probe samples under cryogenic and UHV conditions. <i>PLoS ONE</i> , 2018, 13, e0209211.	1.1	57
15	Atomically resolved tomography to directly inform simulations for structure-property relationships. <i>Nature Communications</i> , 2014, 5, 5501.	5.8	53
16	Atomic-Scale Mapping of Impurities in Partially Reduced Hollow TiO <sub>2</sub> Nanowires. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 5651-5655.	7.2	42
17	Enabling near-atomic-scale analysis of frozen water. <i>Science Advances</i> , 2020, 6, .	4.7	41
18	Interfaces and defect composition at the near-atomic scale through atom probe tomography investigations. <i>Journal of Materials Research</i> , 2018, 33, 4018-4030.	1.2	35

#	ARTICLE	IF	CITATIONS
19	Interpreting atom probe data from chromium oxide scales. <i>Ultramicroscopy</i> , 2015, 159, 354-359.	0.8	29
20	Imaging individual solute atoms at crystalline imperfections in metals. <i>New Journal of Physics</i> , 2019, 21, 123020.	1.2	26
21	Direct Imaging of Dopant and Impurity Distributions in 2D MoS <sub>2</sub> . <i>Advanced Materials</i> , 2020, 32, e1907235.	11.1	26
22	A near atomic-scale view at the composition of amyloid-beta fibrils by atom probe tomography. <i>Scientific Reports</i> , 2018, 8, 17615.	1.6	20
23	Atom probe analysis of electrode materials for Li-ion batteries: challenges and ways forward. <i>Journal of Materials Chemistry A</i> , 2022, 10, 4926-4935.	5.2	20
24	Reflections on the Spatial Performance of Atom Probe Tomography in the Analysis of Atomic Neighborhoods. <i>Microscopy and Microanalysis</i> , 2022, 28, 1116-1126.	0.2	16
25	Hydride growth mechanism in zircaloy-4: Investigation of the partitioning of alloying elements. <i>Materialia</i> , 2021, 15, 101006.	1.3	14
26	Nanoglass "Nanocrystal Composite" a Novel Material Class for Enhanced Strength "Plasticity Synergy. <i>Small</i> , 2020, 16, e2004400.	5.2	12
27	Convolutional neural network-assisted recognition of nanoscale L12 ordered structures in face-centred cubic alloys. <i>Npj Computational Materials</i> , 2021, 7, .	3.5	11
28	Status and Direction of Atom Probe Analysis of Frozen Liquids. <i>Microscopy and Microanalysis</i> , 2022, 28, 1150-1167.	0.2	8
29	Revealing atomic-scale vacancy-solute interaction in nickel. <i>Scripta Materialia</i> , 2021, 203, 114036.	2.6	7
30	Laser-equipped gas reaction chamber for probing environmentally sensitive materials at near atomic scale. <i>PLoS ONE</i> , 2022, 17, e0262543.	1.1	7
31	Dynamic Effects in Voltage Pulsed Atom Probe. <i>Microscopy and Microanalysis</i> , 2020, 26, 1133-1146.	0.2	6
32	Hydrogen and deuterium charging of lifted-out specimens for atom probe tomography. <i>Open Research Europe</i> , 0, 1, 122.	2.0	6
33	Three-Dimensional Atomically Resolved Analytical Imaging with a Field Ion Microscope. <i>Microscopy and Microanalysis</i> , 2022, 28, 1264-1279.	0.2	5
34	Hydrogen and deuterium charging of site-specific specimen for atom probe tomography. <i>Open Research Europe</i> , 0, 1, 122.	2.0	3
35	Analytical Three-Dimensional Field Ion Microscopy of an Amorphous Glass FeBSi. <i>Microscopy and Microanalysis</i> , 2021, , 1-9.	0.2	2
36	Hough Transform Based Accurate Composition Extractions From Correlation Histograms in Atom Probe Tomography. <i>Microscopy and Microanalysis</i> , 2019, 25, 324-325.	0.2	1

#	ARTICLE	IF	CITATIONS
37	Direct Observation of Hydrogen in Cold-Drawn Pearlitic Steel Wires Using Cryogenic Atom Probe Tomography. <i>Microscopy and Microanalysis</i> , 2019, 25, 2522-2523.	0.2	1