Anna V Ceguerra

List of Publications by Year
in descending order

56 papers	1,724 citations	236925 25 h-index	276875 41 g-index
57 all docs	57 docs citations	57 times ranked	1893 citing authors

#	Article	IF	Citations
1	Quantitative binomial distribution analyses of nanoscale likeâ€solute atom clustering and segregation in atom probe tomography data. Microscopy Research and Technique, 2008, 71, 542-550.	2.2	198
2	New insights into the phase transformations to isothermal ï‰ and ï‰-assisted Î± in near Î²-Ti alloys. Acta Materialia, 2016, 106, 353-366.	7.9	155
3	A lightweight single-phase AlTiVCr compositionally complex alloy. Acta Materialia, 2017, 123, 115-124.	7.9	151
4	Superelasticity and Tunable Thermal Expansion across a Wide Temperature Range. Journal of Materials Science and Technology, 2016, 32, 705-709.	10.7	72
5	Understanding solid solution strengthening at elevated temperatures in a creep-resistant Mgâ€“Gdâ€“Ca alloy. Acta Materialia, 2019, 181, 185-199.	7.9	71
6	Atom Probe Tomography Analysis of Boron and/or Phosphorus Distribution in Doped Silicon Nanocrystals. Journal of Physical Chemistry C, 2016, 120, 17845-17852.	3.1	62
7	Crystallographic structural analysis in atom probe microscopy via 3D Hough transformation. Ultramicroscopy, 2011, 111, 458-463.	1.9	59
8	Lattice Rectification in Atom Probe Tomography: Toward True Three-Dimensional Atomic Microscopy. Microscopy and Microanalysis, 2011, 17, 226-239.	0.4	58
9	A three-dimensional Markov field approach for the analysis of atomic clustering in atom probe data. Philosophical Magazine, 2010, 90, 1657-1683.	1.6	56
10	Magnetism of Co-doped ZnO epitaxially grown on a ZnO substrate. Physical Review B, 2012, 85, .	3.2	54
11	Atomically resolved tomography to directly inform simulations for structureâ€“property relationships. Nature Communications, 2014, 5, 5501.	12.8	53
12	Short-range order in multicomponent materials. Acta Crystallographica Section A: Foundations and Advances, 2012, 68, 547-560.	0.3	47
13	Medium-range order dictates local hardness in bulk metallic glasses. Materials Today, 2021, 44, 48-57.	14.2	47
14	Detecting and extracting clusters in atom probe data: A simple, automated method using Voronoi cells. Ultramicroscopy, 2015, 150, 30-36.	1.9	44
15	Precipitation behaviors of cubic and tetragonal Zrâ€“rich phase in Alâ€“(Siâ€“)Zr alloys. Journal of Alloys and Compounds, 2016, 674, 125-130.	5.5	41
16	Grain size stabilization of mechanically alloyed nanocrystalline Fe-Zr alloys by forming highly dispersed coherent Fe-Zr-O nanoclusters. Acta Materialia, 2018, 158, 340-353.	7.9	41
17	Applying computational geometry techniques for advanced feature analysis in atom probe data. Ultramicroscopy, 2013, 132, 100-106.	1.9	37
18	Quantitative description of atomic architecture in solid solutions: A generalized theory for multicomponent short-range order. Physical Review B, 2010, 82, .	3.2	35

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19	Nucleation driving force for Ï‰-assisted formation of Î± and associated Ï‰ morphology in Î²-Ti alloys. Scripta Materialia, 2018, 155, 149-154.	5.2	31
20	Quantitative dopant distributions in GaAs nanowires using atom probe tomography. Ultramicroscopy, 2013, 132, 186-192.	1.9	29
21	Interpreting atom probe data from chromium oxide scales. Ultramicroscopy, 2015, 159, 354-359.	1.9	29
22	A new systematic framework for crystallographic analysis of atom probe data. Ultramicroscopy, 2015, 154, 7-14.	1.9	27
23	Medium-Mn Martensitic Steel Ductilized by Baking. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 4067-4074.	2.2	27
24	Quantitative chemical-structure evaluation using atom probe tomography: Short-range order analysis of Feâ€“Al. Ultramicroscopy, 2015, 157, 12-20.	1.9	26
25	The rise of computational techniques in atom probe microscopy. Current Opinion in Solid State and Materials Science, 2013, 17, 224-235.	11.5	25
26	Roles of Nd and Mn in a new creep-resistant magnesium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 779, 139152.	5.6	25
27	Restoring the lattice of Si-based atom probe reconstructions for enhanced information on dopant positioning. Ultramicroscopy, 2015, 159, 314-323.	1.9	19
28	A nexus between 3D atomistic data hybrids derived from atom probe microscopy and computational materials science: A new analysis of solute clustering in Al-alloys. Scripta Materialia, 2017, 131, 93-97.	5.2	19
29	Atom probe tomography investigation of heterogeneous short-range ordering in the â€˜komplexâ€™ phase state (K-state) of Feâ€“18Al (at.%). Intermetallics, 2015, 64, 23-31.	3.9	18
30	Point-by-point compositional analysis for atom probe tomography. MethodsX, 2014, 1, 12-18.	1.6	17
31	On the retrieval of crystallographic information from atom probe microscopy data via signal mapping from the detector coordinate space. Ultramicroscopy, 2018, 189, 65-75.	1.9	14
32	Atom probe tomography of phosphorus- and boron-doped silicon nanocrystals with various compositions of silicon rich oxide. MRS Communications, 2016, 6, 283-288.	1.8	13
33	Yield Strength Enhancement by Carbon Trapping in Ferrite of the Quenching and Partitioning Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 235-240.	2.2	12
34	Distribution of boron and phosphorus and roles of co-doping in colloidal silicon nanocrystals. Acta Materialia, 2019, 178, 186-193.	7.9	12
35	A New Approach to Understand the Adsorption of Thiophene on Different Surfaces: An Atom Probe Investigation of Self-Assembled Monolayers. Langmuir, 2017, 33, 9573-9581.	3.5	11
36	Microstructure analysis of silicon nanocrystals formed from silicon rich oxide with high excess silicon: Annealing and doping effects. Journal of Applied Physics, 2017, 122, 025102.	2.5	11

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37	Atom probe tomography of sizeâ€controlled phosphorus doped silicon nanocrystals. Physica Status Solidi - Rapid Research Letters, 2017, 11, 1600376.	2.4	10
38	Assessing the Spatial Accuracy of the Reconstruction in Atom Probe Tomography and a New Calibratable Adaptive Reconstruction. Microscopy and Microanalysis, 2019, 25, 309-319.	0.4	10
39	Integrative Atom Probe Tomography Using Scanning Transmission Electron Microscopy-Centric Atom Placement as a Step Toward Atomic-Scale Tomography. Microscopy and Microanalysis, 2021, 27, 140-148.	0.4	8
40	Introducing a Crystallography-Mediated Reconstruction (CMR) Approach to Atom Probe Tomography. Microscopy and Microanalysis, 2019, 25, 288-300.	0.4	6
41	Spatial decomposition of molecular ions within 3D atom probe reconstructions. Ultramicroscopy, 2013, 132, 92-99.	1.9	5
42	Correlative study of lattice imperfections in long-range ordered, nano-scale domains in a Fe-Co-Mo alloy. Ultramicroscopy, 2019, 204, 91-100.	1.9	5
43	Effects of thermal annealing on the distribution of boron and phosphorus in p-i-n structured silicon nanocrystals embedded in silicon dioxide. Nanotechnology, 2022, 33, 075709.	2.6	5
44	Tracking Nanostructural Evolution in Alloys: Large-Scale Analysis of Atom Probe Tomography Data on Blue Gene/L. , 2008, , .		4
45	Deformation-induced medium-range order changes in bulk metallic glasses. Physical Review Materials, 2022, 6, .	2.4	4
46	Structural, optical, and electrical properties of silicon nanocrystals fabricated by high silicon content silicon-rich oxide and silicon dioxide bilayers. Applied Physics Express, 2016, 9, 115001.	2.4	3
47	Precipitation of string-shaped morphologies consisting of aligned Î± phase in a metastable Î² titanium alloy. Scientific Reports, 2018, 8, 2038.	3.3	3
48	3D microstructure analysis of siliconâ€“boron phosphide mixed nanocrystals. Nanoscale, 2020, 12, 7256-7262.	5.6	3
49	Automatic Fingerprint Verification Using Neural Networks. Lecture Notes in Computer Science, 2002, , 1281-1286.	1.3	3
50	A Tool for Scientific Provenance of Data and Software. , 2013, , .		2
51	The Use of Online Tools in Microscopy and Microanalysis Core Facilities. Microscopy and Microanalysis, 2015, 21, 527-528.	0.4	2
52	Atom Probe Tomography of Aluminium Alloys: A Systematic Meta-Analysis Review of 2018. Metals, 2019, 9, 1071.	2.3	2
53	Community-Driven Methods for Open and Reproducible Software Tools for Analyzing Datasets from Atom Probe Microscopy. Microscopy and Microanalysis, 2021, , 1-16.	0.4	2
54	Atom Probe Analysis of a Zr-based Bulk Metallic Glass. Microscopy and Microanalysis, 2022, 28, 1348-1358.	0.4	1

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55	Sydney Nano: small matters for big impact. Biophysical Reviews, 2018, 10, 101-103.	3.2	0
56	Interpreting the Simplified Multicomponent Short-Range Order Parameter. Microscopy and Microanalysis, 2019, 25, 332-333.	0.4	0