

Elliot S Padgett

List of Publications by Year in descending order

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36
papers

1,496
citations

566801

15
h-index

552369

26
g-index

36
all docs

36
docs citations

36
times ranked

2981
citing authors

#	ARTICLE	IF	CITATIONS
1	Atomically engineered ferroic layers yield a room-temperature magnetoelectric multiferroic. <i>Nature</i> , 2016, 537, 523-527.	13.7	275
2	Pt-Rich _{core} /Sn-Rich _{subsurface} /Pt _{skin} Nanocubes As Highly Active and Stable Electrocatalysts for the Ethanol Oxidation Reaction. <i>Journal of the American Chemical Society</i> , 2018, 140, 3791-3797.	6.6	166
3	Real-time imaging of activation and degradation of carbon supported octahedral Pt-Ni alloy fuel cell catalysts at the nanoscale using <i>in situ</i> electrochemical liquid cell STEM. <i>Energy and Environmental Science</i> , 2019, 12, 2476-2485.	15.6	146
4	Tuning the Electrocatalytic Oxygen Reduction Reaction Activity and Stability of Shape-Controlled Pt-Ni Nanoparticles by Thermal Annealing – Elucidating the Surface Atomic Structural and Compositional Changes. <i>Journal of the American Chemical Society</i> , 2017, 139, 16536-16547.	6.6	144
5	Mitigation of PEM Fuel Cell Catalyst Degradation with Porous Carbon Supports. <i>Journal of the Electrochemical Society</i> , 2019, 166, F198-F207.	1.3	126
6	Highly conductive and chemically stable alkaline anion exchange membranes via ROMP of <i>trans</i> -cyclooctene derivatives. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 9729-9734.	3.3	118
7	Editors' Choice – Connecting Fuel Cell Catalyst Nanostructure and Accessibility Using Quantitative Cryo-STEM Tomography. <i>Journal of the Electrochemical Society</i> , 2018, 165, F173-F180.	1.3	104
8	Revealing the atomic ordering of binary intermetallics using <i>in situ</i> heating techniques at multilength scales. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 1974-1983.	3.3	98
9	Multicomponent Nanomaterials with Complex Networked Architectures from Orthogonal Degradation and Binary Metal Backfilling in ABC Triblock Terpolymers. <i>Journal of the American Chemical Society</i> , 2015, 137, 6026-6033.	6.6	70
10	Tutorial on the Visualization of Volumetric Data Using <i>tomviz</i> . <i>Microscopy Today</i> , 2018, 26, 12-17.	0.2	43
11	Nanomaterial datasets to advance tomography in scanning transmission electron microscopy. <i>Scientific Data</i> , 2016, 3, 160041.	2.4	42
12	The exit-wave power-spectrum transform for scanning nanobeam electron diffraction: robust strain mapping at subnanometer resolution and subpicometer precision. <i>Ultramicroscopy</i> , 2020, 214, 112994.	0.8	40
13	Revealing the Nanostructure of Mesoporous Fuel Cell Catalyst Supports for Durable, High-Power Performance. <i>Journal of the Electrochemical Society</i> , 2021, 168, 024512.	1.3	23
14	Pinning Susceptibility: The Effect of Dilute, Quenched Disorder on Jamming. <i>Physical Review Letters</i> , 2016, 116, 235501.	2.9	20
15	Ultrahigh Rate Performance of a Robust Lithium Nickel Manganese Cobalt Oxide Cathode with Preferentially Orientated Li-Diffusing Channels. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 41178-41187.	4.0	20
16	Dimensionality-Induced Change in Topological Order in Multiferroic Oxide Superlattices. <i>Physical Review Letters</i> , 2021, 126, 157601.	2.9	12
17	A Simple Preparation Method for Full-Range Electron Tomography of Nanoparticles and Fine Powders. <i>Microscopy and Microanalysis</i> , 2017, 23, 1150-1158.	0.2	11
18	Sampling limits for electron tomography with sparsity-exploiting reconstructions. <i>Ultramicroscopy</i> , 2018, 186, 94-103.	0.8	11

#	ARTICLE	IF	CITATIONS
19	Influence of Aliovalent Substitutions on Oxygen Reduction on Tantalum Oxynitrides. Journal of the Electrochemical Society, 2017, 164, F645-F650.	1.3	7
20	Advanced Platform for 3D Visualization, Reconstruction, and Segmentation with Electron Tomography. Microscopy and Microanalysis, 2016, 22, 2070-2071.	0.2	5
21	Decoupling Polarization, Crystal Tilt and Symmetry in Epitaxially-Strained Ferroelectric Thin Films Using 4D-STEM. Microscopy and Microanalysis, 2019, 25, 1938-1939.	0.2	5
22	Providing Advanced Electron Tomography by Streamlining Alignment, Reconstruction, and 3D Visualization. Microscopy and Microanalysis, 2017, 23, 222-223.	0.2	4
23	Grains and Strains from Cepstral Analysis of 4D-STEM Nano-Diffraction Datasets. Microscopy and Microanalysis, 2018, 24, 546-547.	0.2	3
24	An "Extra Dimension" in Electron Tomography: Automatic Parameter Determination for Next-generation Reconstruction Methods. Microscopy and Microanalysis, 2016, 22, 556-557.	0.2	1
25	Quantifying the Atomic Ordering of Binary Intermetallic Nanocatalysts Using In Situ Heating STEM and XRD. Microscopy and Microanalysis, 2019, 25, 1488-1489.	0.2	1
26	Development of Targets for Heavy Duty Fuel Cell Vehicles with Application-Driven System Modelling. ECS Meeting Abstracts, 2020, MA2020-02, 2181-2181.	0.0	1
27	Tomography and Spectroscopy of Structure and Degradation in Carbon Electrode Materials for Energy Conversion and Storage. Microscopy and Microanalysis, 2014, 20, 504-505.	0.2	0
28	Quantitative Structural Analysis of Fuel Cell Catalysts and Carbon Supports by TEM and Cryo-STEM Tomography. Microscopy and Microanalysis, 2015, 21, 799-800.	0.2	0
29	Quantitative Information from Cryo Electron Tomography of Energy Materials. Microscopy and Microanalysis, 2016, 22, 1284-1285.	0.2	0
30	Imaging Local Polarization and Domain Boundaries with Picometer-Precision Scanning Transmission Electron Microscopy. Microscopy and Microanalysis, 2016, 22, 898-899.	0.2	0
31	New Full-Range Electron Tomography Procedure for Accurate Quantification of Surfaces, Curvature, and Porosity in Energy-Related Nanomaterials. Microscopy and Microanalysis, 2017, 23, 2002-2003.	0.2	0
32	Mapping the 3D Structure of Corrugated "Cardboard" MoS ₂ . Microscopy and Microanalysis, 2018, 24, 1584-1585.	0.2	0
33	Diffraction Mapping with a Pixelated Detector to Quantify Crystal Orientation in 3D Structures Made from 2D Materials. Microscopy and Microanalysis, 2019, 25, 1956-1957.	0.2	0
34	A Robust Basis for Grain Identification in Polycrystalline Thin Film Devices Using Cepstrum Transforms of 4D-STEM Diffraction Pattern. Microscopy and Microanalysis, 2020, 26, 1620-1622.	0.2	0
35	An Identical-Location STEM Study of the Degradation of Oer Electrocatalysts for PEM Electrolyzers. ECS Meeting Abstracts, 2021, MA2021-01, 1181-1181.	0.0	0
36	Membrane Pretreatment and Cell Conditioning for Proton Exchange Membrane Water Electrolysis. ECS Meeting Abstracts, 2021, MA2021-02, 1252-1252.	0.0	0