

Mary C Scott

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6961816/publications.pdf>

Version: 2024-02-01

56
papers

2,937
citations

257101

24
h-index

174990

52
g-index

58
all docs

58
docs citations

58
times ranked

4768
citing authors

#	ARTICLE	IF	CITATIONS
1	Simultaneous Successive Twinning Captured by Atomic Electron Tomography. ACS Nano, 2022, 16, 588-596.	7.3	12
2	Chemical and Structural Alterations in the Amorphous Structure of Obsidian due to Nanolites. Microscopy and Microanalysis, 2022, 28, 289-295.	0.2	4
3	Orientated Growth of Ultrathin Tellurium by van der Waals Epitaxy. Advanced Materials Interfaces, 2022, 9, .	1.9	7
4	Automated Crystal Orientation Mapping in py4DSTEM using Sparse Correlation Matching. Microscopy and Microanalysis, 2022, 28, 390-403.	0.2	17
5	Thermodynamically Driven Synthetic Optimization for Cation-Disordered Rock Salt Cathodes. Advanced Energy Materials, 2022, 12, .	10.2	20
6	Structural heterogeneity in non-crystalline Te _x Se _{1-x} thin films. Applied Physics Letters, 2022, 121, 012101.	1.5	1
7	Classifying handedness in chiral nanomaterials using label error robust deep learning. Npj Computational Materials, 2022, 8, .	3.5	3
8	3D Nanotomography of calcium silicate hydrates by transmission electron microscopy. Journal of the American Ceramic Society, 2021, 104, 1852-1862.	1.9	9
9	Role of element-specific damping in ultrafast, helicity-independent, all-optical switching dynamics in amorphous (Gd,Tb)Co thin films. Physical Review B, 2021, 103, .	1.1	40
10	Understanding Diameter and Length Effects in a Solution-Processable Tellurium-Poly(3,4-Ethylenedioxythiophene) Polystyrene Sulfonate Hybrid Thermoelectric Nanowire Mesh. Advanced Electronic Materials, 2021, 7, 2000904.	2.6	6
11	Machine Learning Pipeline for Segmentation and Defect Identification from High-Resolution Transmission Electron Microscopy Data. Microscopy and Microanalysis, 2021, 27, 549-556.	0.2	34
12	Phase-contrast imaging of multiply-scattering extended objects at atomic resolution by reconstruction of the scattering matrix. Physical Review Research, 2021, 3, .	1.3	11
13	Decoupling electron and phonon transport in single-nanowire hybrid materials for high-performance thermoelectrics. Science Advances, 2021, 7, .	4.7	30
14	A layered nonstoichiometric lepidocrocite-type sodium titanate anode material for sodium-ion batteries. MRS Energy & Sustainability, 2021, 8, 88.	1.3	4
15	Tellurium Single-Crystal Arrays by Low-Temperature Evaporation and Crystallization. Advanced Materials, 2021, 33, e2100860.	11.1	32
16	A Fast Algorithm for Scanning Transmission Electron Microscopy Imaging and 4D-STEM Diffraction Simulations. Microscopy and Microanalysis, 2021, 27, 835-848.	0.2	11
17	Revealing the Phase Separation Behavior of Thermodynamically Immiscible Elements in a Nanoparticle. Nano Letters, 2021, 21, 6684-6689.	4.5	18
18	Structural Ordering and Composition of Warner Mountains Obsidian and its Microlites. Microscopy and Microanalysis, 2021, 27, 1850-1852.	0.2	0

#	ARTICLE	IF	CITATIONS
19	Prismatic 2.0 Å Simulation software for scanning and high resolution transmission electron microscopy (STEM and HRTEM). <i>Micron</i> , 2021, 151, 103141.	1.1	42
20	Elucidating the local atomic and electronic structure of amorphous oxidized superconducting niobium films. <i>Applied Physics Letters</i> , 2021, 119, .	1.5	10
21	Evaporated tellurium thin films for p-type field-effect transistors and circuits. <i>Nature Nanotechnology</i> , 2020, 15, 53-58.	15.6	153
22	Tilted fluctuation electron microscopy. <i>Applied Physics Letters</i> , 2020, 117, .	1.5	6
23	Evaporated $\text{Se}_x\text{Te}_{1-x}$ Thin Films with Tunable Bandgaps for Short-Wave Infrared Photodetectors. <i>Advanced Materials</i> , 2020, 32, e2001329.	11.1	49
24	Characterization of mechanical degradation in an all-solid-state battery cathode. <i>Journal of Materials Chemistry A</i> , 2020, 8, 17399-17404.	5.2	100
25	Direct Bandgap-like Strong Photoluminescence from Twisted Multilayer MoS_2 Grown on SrTiO_3 . <i>ACS Nano</i> , 2020, 14, 16761-16769.	7.3	16
26	Direct Visualization of the Interfacial Degradation of Cathode Coatings in Solid State Batteries: A Combined Experimental and Computational Study. <i>Advanced Energy Materials</i> , 2020, 10, 1903778.	10.2	67
27	In-situ resonant band engineering of solution-processed semiconductors generates high performance n-type thermoelectric nano-inks. <i>Nature Communications</i> , 2020, 11, 2069.	5.8	23
28	Tilted Fluctuation Electron Microscopy Characterization of Magnetically Anisotropic Amorphous Metal Films. <i>Microscopy and Microanalysis</i> , 2019, 25, 1886-1887.	0.2	0
29	Machine Learning for High Throughput HRTEM Analysis. <i>Microscopy and Microanalysis</i> , 2019, 25, 150-151.	0.2	7
30	Engineering Chiral Structures Through Strain Release: Electron Tomography Study of Twisted Nanowires. <i>Microscopy and Microanalysis</i> , 2019, 25, 1804-1805.	0.2	1
31	Polaronic Trions at the $\text{MoS}_2/\text{SrTiO}_3$ Interface. <i>Advanced Materials</i> , 2019, 31, 1903569.	11.1	26
32	Interface engineering for light-driven water oxidation: unravelling the passivating and catalytic mechanism in BiVO_4 overlayers. <i>Sustainable Energy and Fuels</i> , 2019, 3, 127-135.	2.5	28
33	Helical van der Waals crystals with discretized Eshelby twist. <i>Nature</i> , 2019, 570, 358-362.	13.7	91
34	Optical and electrical properties of two-dimensional palladium diselenide. <i>Applied Physics Letters</i> , 2019, 114, .	1.5	74
35	Elimination of Response to Relative Humidity Changes in Chemical-Sensitive Field-Effect Transistors. <i>ACS Sensors</i> , 2019, 4, 1857-1863.	4.0	24
36	Ion Write Microthermotics: Programming Thermal Metamaterials at the Microscale. <i>Nano Letters</i> , 2019, 19, 3830-3837.	4.5	45

#	ARTICLE	IF	CITATIONS
37	Synthetic WSe ₂ monolayers with high photoluminescence quantum yield. <i>Science Advances</i> , 2019, 5, eaau4728.	4.7	78
38	Three-dimensional Architecture Enabled by Strained Two-dimensional Material Heterojunction. <i>Nano Letters</i> , 2018, 18, 1819-1825.	4.5	24
39	Facile bottom-up synthesis of partially oxidized black phosphorus nanosheets as metal-free photocatalyst for hydrogen evolution. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 4345-4350.	3.3	207
40	Linear and Nonlinear Reconstruction Algorithms for Atomic-Resolution Tomography Using Phase Contrast Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2018, 24, 110-111.	0.2	1
41	Characterizing Magnetic Anisotropy in Amorphous Metal Films Using Tilted Fluctuation Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2018, 24, 204-205.	0.2	1
42	Atomic Electron Tomography: Adding a New Dimension to See Single Atoms in Materials. <i>Microscopy and Microanalysis</i> , 2018, 24, 558-559.	0.2	0
43	Direct observation of anisotropic small-hole polarons in an orthorhombic structure of $\text{BiV}_4\text{O}_{14}$ films. <i>Physical Review B</i> , 2018, 97, ...	1.1	7
44	Solution-Synthesized High-Mobility Tellurium Nanoflakes for Short-Wave Infrared Photodetectors. <i>ACS Nano</i> , 2018, 12, 7253-7263.	7.3	298
45	Deciphering chemical order/disorder and material properties at the single-atom level. <i>Nature</i> , 2017, 542, 75-79.	13.7	243
46	Tunable and low-loss correlated plasmons in Mott-like insulating oxides. <i>Nature Communications</i> , 2017, 8, 15271.	5.8	42
47	Atomically Altered Hematite for Highly Efficient Perovskite Tandem Water-Splitting Devices. <i>ChemSusChem</i> , 2017, 10, 2449-2456.	3.6	71
48	Efficient solar-driven electrochemical CO ₂ reduction to hydrocarbons and oxygenates. <i>Energy and Environmental Science</i> , 2017, 10, 2222-2230.	15.6	145
49	Nanomaterial datasets to advance tomography in scanning transmission electron microscopy. <i>Scientific Data</i> , 2016, 3, 160041.	2.4	42
50	Three-Dimensional Determination of the Coordinates of Individual Atoms in Materials. <i>Microscopy and Microanalysis</i> , 2016, 22, 916-917.	0.2	0
51	Stability Studies of MAPbI ₃ : Identification of Degradation Pathways and Strategies for Observing the Native Structure of Lead Halide Perovskites. <i>Microscopy and Microanalysis</i> , 2016, 22, 1510-1511.	0.2	1
52	Three-dimensional coordinates of individual atoms in materials revealed by electron tomography. <i>Nature Materials</i> , 2015, 14, 1099-1103.	13.3	172
53	Three-Dimensional Imaging of Dislocations and Defects in Materials at Atomic Resolution Using Electron Tomography. <i>Microscopy and Microanalysis</i> , 2014, 20, 1062-1063.	0.2	0
54	Atomic Resolution Tomography of Magnetically Anisotropic FePt Nanoparticles. <i>Microscopy and Microanalysis</i> , 2014, 20, 804-805.	0.2	1

#	ARTICLE	IF	CITATIONS
55	Towards three-dimensional structural determination of amorphous materials at atomic resolution. Physical Review B, 2013, 88, .	1.1	17
56	Electron tomography at 2.4-Ångström resolution. Nature, 2012, 483, 444-447.	13.7	366