

# Yu-Tsun Shao

## List of Publications by Year in descending order

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Version: 2024-02-01

41

papers

1,122

citations

471061

17

h-index

395343

33

g-index

41

all docs

41

docs citations

41

times ranked

1571

citing authors

#	ARTICLE	IF	CITATIONS
1	Data-driven electron microscopy: electron diffraction imaging of materials structural properties. <i>Microscopy (Oxford, England)</i> , 2022, 71, i116-i131.	0.7	11
2	Coexisting ferromagnetic–“antiferromagnetic state in twisted bilayer CrI <sub>3</sub> . <i>Nature Nanotechnology</i> , 2022, 17, 143-147.	15.6	115
3	Liberating a hidden antiferroelectric phase with interfacial electrostatic engineering. <i>Science Advances</i> , 2022, 8, eabg5860.	4.7	18
4	Very-High Dynamic Range, 10,000 Frames/Second Pixel Array Detector for Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2022, 28, 425-440.	0.2	21
5	Room-temperature skyrmion lattice in a layered magnet (Fe <sub>0.5</sub> Co <sub>0.5</sub> ) <sub>5</sub> GeTe <sub>2</sub> . <i>Science Advances</i> , 2022, 8, eabm7103.	4.7	55
6	Disentangling Magnetic and Grain Contrast in Polycrystalline $\text{Fe}_{0.5}\text{Co}_{0.5}\text{GeTe}_2$ Thin Films Using Four-Dimensional Lorentz Scanning Transmission Electron Microscopy. <i>Physical Review Applied</i> , 2022, 17, .	1.5	9
7	Metal Monolayers on Command: Underpotential Deposition at Nanocrystal Surfaces: A Quantitative <i>Operando</i> Electrochemical Transmission Electron Microscopy Study. <i>ACS Energy Letters</i> , 2022, 7, 1292-1297.	8.8	7
8	A room temperature polar magnetic metal. <i>Physical Review Materials</i> , 2022, 6, .	0.9	21
9	Pervasive beyond Room-Temperature Ferromagnetism in a Doped van der Waals Magnet. <i>Physical Review Letters</i> , 2022, 128, .	2.9	42
10	Cepstral scanning transmission electron microscopy imaging of severe lattice distortions. <i>Ultramicroscopy</i> , 2021, 231, 113252.	0.8	9
11	Electron ptychography achieves atomic-resolution limits set by lattice vibrations. <i>Science</i> , 2021, 372, 826-831.	6.0	154
12	Detecting minute amounts of nitrogen in GaNAs thin films using STEM and CBED. <i>Ultramicroscopy</i> , 2021, 231, 113299.	0.8	1
13	Cepstral Scanning Transmission Electron Microscopy Imaging of Disordered Crystals using Coherent Diffuse Scattering. <i>Microscopy and Microanalysis</i> , 2021, 27, 2664-2665.	0.2	0
14	Probing the dynamics of ferroelectric topological oscillators with the electron beam. <i>Microscopy and Microanalysis</i> , 2021, 27, 690-692.	0.2	2
15	Multislice electron ptychography enables lattice vibration-limited resolution and linear phase-contrast imaging in thick samples. <i>Microscopy and Microanalysis</i> , 2021, 27, 754-756.	0.2	0
16	Dose-efficient strain mapping with high precision and throughput using cepstral transforms on 4D-STEM data. <i>Microscopy and Microanalysis</i> , 2021, 27, 1994-1996.	0.2	3
17	Emergent chirality in a polar meron to skyrmion transition revealed by 4D-STEM. <i>Microscopy and Microanalysis</i> , 2021, 27, 348-350.	0.2	7
18	Elucidating Cathodic Corrosion Mechanisms with Operando Electrochemical Liquid-Cell STEM in Multiple Dimensions. <i>Microscopy and Microanalysis</i> , 2021, 27, 238-240.	0.2	4

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19	Wide Dynamic Range, 10 kHz Framing Detector for 4D-STEM. <i>Microscopy and Microanalysis</i> , 2021, 27, 992-993.	0.2	2
20	Three-dimensional imaging of single dopants inside crystals using multislice electron ptychography. <i>Microscopy and Microanalysis</i> , 2021, 27, 2146-2148.	0.2	5
21	Light-emitting diodes with AlN polarization-induced buried tunnel junctions: A second look. <i>Applied Physics Letters</i> , 2020, 117, .	1.5	11
22	Structural and piezoelectric properties of ultra-thin $\text{Sc}_x\text{Al}_{1-x}\text{N}$ films grown on GaN by molecular beam epitaxy. <i>Applied Physics Letters</i> , 2020, 117, .	1.5	34
23	Mapping Topological Dipole Textures, Chirality, and the Potential Energy Landscape of Polar Skyrmiions Using 4D-STEM. <i>Microscopy and Microanalysis</i> , 2020, 26, 968-970.	0.2	1
24	The exit-wave power-cepstrum transform for scanning nanobeam electron diffraction: robust strain mapping at subnanometer resolution and subpicometer precision. <i>Ultramicroscopy</i> , 2020, 214, 112994.	0.8	40
25	Temperature-independent giant dielectric response in transitional $\text{BaTiO}_3$ thin films. <i>Applied Physics Reviews</i> , 2020, 7, 011402.	5.5	35
26	A new era in ferroelectrics. <i>APL Materials</i> , 2020, 8, .	2.2	36
27	Electron image contrast analysis of mosaicity in rutile nanocrystals using direct electron detection. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2020, 76, 687-697.	0.0	0
28	Decoupling Polarization, Crystal Tilt and Symmetry in Epitaxially-Strained Ferroelectric Thin Films Using 4D-STEM. <i>Microscopy and Microanalysis</i> , 2019, 25, 1938-1939.	0.2	5
29	Direct Synthesis of $\text{H}_{2}\text{O}_{2}$ on AgPt Octahedra: The Importance of Ag-Pt Coordination for High $\text{H}_{2}\text{O}_{2}$ Selectivity. <i>ACS Catalysis</i> , 2018, 8, 2880-2889.	5.5	48
30	Scanning Convergent Beam Electron Diffraction (CBED), the Essential Questions of Why, What and How?. <i>Microscopy and Microanalysis</i> , 2018, 24, 172-173.	0.2	3
31	Electroplating lithium transition metal oxides. <i>Science Advances</i> , 2017, 3, e1602427.	4.7	62
32	Nanoscale symmetry fluctuations in ferroelectric barium titanate, $\text{BaTiO}_3$ . <i>Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials</i> , 2017, 73, 708-714.	0.5	15
33	Lattice-Rotation Vortex at the Charged Monoclinic Domain Boundary in a Relaxor Ferroelectric Crystal. <i>Physical Review Letters</i> , 2017, 118, 157601.	2.9	19
34	Symmetry-Breaking Nanoregions in Single-Phase High Entropy Alloys Determined using Scanning Convergent Beam Electron Diffraction. <i>Microscopy and Microanalysis</i> , 2017, 23, 348-349.	0.2	0
35	Regioselective Atomic Rearrangement of Ag-Pt Octahedral Catalysts by Chemical Vapor-Assisted Treatment. <i>Nano Letters</i> , 2016, 16, 7988-7992.	4.5	21
36	Ag-Pt Compositional Intermetallics Made from Alloy Nanoparticles. <i>Nano Letters</i> , 2016, 16, 6599-6603.	4.5	39

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37	Fundamental Symmetry of Barium Titanate Single Crystal Determined Using Energy-Filtered Scanning Convergent Beam Electron Diffraction. <i>Microscopy and Microanalysis</i> , 2016, 22, 516-517.	0.2	4
38	Principles and Applications of Energy-Filtered Scanning CBED for Ferroelectric Domain Imaging and Symmetry Determination. <i>Microscopy and Microanalysis</i> , 2015, 21, 1245-1246.	0.2	2
39	Enhancing the efficiency of low bandgap conducting polymer bulk heterojunction solar cells using P3HT as a morphology control agent. <i>Journal of Materials Chemistry A</i> , 2013, 1, 2447.	5.2	44
40	Bi-hierarchical nanostructures of donor-acceptor copolymer and fullerene for high efficient bulk heterojunction solar cells. <i>Energy and Environmental Science</i> , 2013, 6, 1938.	15.6	101
41	Nanoparticle-Tuned Self-Organization of a Bulk Heterojunction Hybrid Solar Cell with Enhanced Performance. <i>ACS Nano</i> , 2012, 6, 1657-1666.	7.3	116