

Benjamin H Savitzky

List of Publications by Year in descending order

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38
papers

1,064
citations

566801

15
h-index

500791

28
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38
all docs

38
docs citations

38
times ranked

1878
citing authors

#	ARTICLE	IF	CITATIONS
1	Electric field control of chirality. <i>Science Advances</i> , 2022, 8, eabj8030.	4.7	35
2	Automated Crystal Orientation Mapping in py4DSTEM using Sparse Correlation Matching. <i>Microscopy and Microanalysis</i> , 2022, 28, 390-403.	0.2	17
3	Cryogenic 4D-STEM analysis of an amorphous-crystalline polymer blend: Combined nanocrystalline and amorphous phase mapping. <i>IScience</i> , 2022, 25, 103882.	1.9	7
4	Correlative analysis of structure and chemistry of Li_xFePO_4 platelets using 4D-STEM and X-ray ptychography. <i>Materials Today</i> , 2022, 52, 102-111.	8.3	4
5	Correlative image learning of chemo-mechanics in phase-transforming solids. <i>Nature Materials</i> , 2022, 21, 547-554.	13.3	27
6	Multiscale hierarchical structures from a nanocluster mesophase. <i>Nature Materials</i> , 2022, 21, 518-525.	13.3	27
7	py4DSTEM: A Software Package for Four-Dimensional Scanning Transmission Electron Microscopy Data Analysis. <i>Microscopy and Microanalysis</i> , 2021, 27, 712-743.	0.2	121
8	Open-Source Tools and Containers for the Production of Large-Scale S/TEM Datasets. <i>Microscopy and Microanalysis</i> , 2021, 27, 62-63.	0.2	1
9	4D >Crystal: Deep Learning Crystallographic Information From Electron Diffraction Images. <i>Microscopy and Microanalysis</i> , 2021, 27, 2774-2776.	0.2	2
10	A Fast Algorithm for Scanning Transmission Electron Microscopy Imaging and 4D-STEM Diffraction Simulations. <i>Microscopy and Microanalysis</i> , 2021, 27, 835-848.	0.2	11
11	The evolution of an open source file format: a version control story. <i>Microscopy and Microanalysis</i> , 2021, 27, 1092-1094.	0.2	0
12	Using py4DSTEM in GMS: Hybrid Open-Source, Commercial-Freeware Methods for Analyzing 4D STEM Datasets. <i>Microscopy and Microanalysis</i> , 2021, 27, 1352-1354.	0.2	0
13	The mesoscale order of nacreous pearls. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	12
14	Patterned probes for high precision 4D-STEM bragg measurements. <i>Ultramicroscopy</i> , 2020, 209, 112890.	0.8	61
15	Image Registration of Low-Signal-to-Noise STEM Data with Open Source Software. <i>Microscopy and Microanalysis</i> , 2019, 25, 200-201.	0.2	0
16	Low Temperature Electron Microscopy of "Charge-Ordered" Phases. <i>Microscopy and Microanalysis</i> , 2019, 25, 934-935.	0.2	1
17	Orientational Disorder in Epitaxially Connected Quantum Dot Solids. <i>ACS Nano</i> , 2019, 13, 11460-11468.	7.3	12
18	Mesophase Formation Stabilizes High-Purity Magic-Sized Clusters. <i>Journal of the American Chemical Society</i> , 2018, 140, 3652-3662.	6.6	71

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19	Nature and evolution of incommensurate charge order in manganites visualized with cryogenic scanning transmission electron microscopy. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 1445-1450.	3.3	68
20	Probing the Atomic Lattice Response of Quantum Materials Across Phase Transitions. Microscopy and Microanalysis, 2018, 24, 80-81.	0.2	0
21	Tricky Registration for Unruly Data: Image Registration of Low-Signal-to-Noise Cryo-STEM Data. Microscopy and Microanalysis, 2018, 24, 518-519.	0.2	0
22	Connectivity of centermost chromatophores in <i>Rhodobacter sphaeroides</i> bacteria. Molecular Microbiology, 2018, 109, 812-825.	1.2	24
23	Image registration of low signal-to-noise cryo-STEM data. Ultramicroscopy, 2018, 191, 56-65.	0.8	59
24	Successive Ionic Layer Absorption and Reaction for Postassembly Control over Inorganic Interdot Bonds in Long-Range Ordered Nanocrystal Films. ACS Applied Materials & Interfaces, 2017, 9, 13500-13507.	4.0	18
25	Bending and breaking of stripes in a charge ordered manganite. Nature Communications, 2017, 8, 1883.	5.8	51
26	Mapping Picometer Scale Periodic Lattice Distortions with Aberration Corrected Scanning Transmission Electron Microscopy. Microscopy and Microanalysis, 2017, 23, 420-421.	0.2	0
27	Aberration-Corrected STEM/EELS at Cryogenic Temperatures. Microscopy and Microanalysis, 2017, 23, 428-429.	0.2	3
28	Emergent Phase Coherence of Stripe Order in Manganites Revealed with Cryogenic Scanning Transmission Electron Microscopy. Microscopy and Microanalysis, 2017, 23, 1630-1631.	0.2	0
29	Epitaxial Quantum Dot Superlattices: From Synthesis to Characterization to Electronic Structure. Microscopy and Microanalysis, 2017, 23, 1884-1885.	0.2	0
30	Quantitative, Real-Space Statistical Analysis of Imperfect Lattices. Microscopy and Microanalysis, 2016, 22, 892-893.	0.2	0
31	Mapping Periodic Lattice Distortions in Exfoliated Dichalcogenides with Atomic Resolution cryo-STEM. Microscopy and Microanalysis, 2016, 22, 1550-1551.	0.2	0
32	Strain Accommodation and Coherency in Laterally-Stitched WSe ₂ /WS ₂ Junctions. Microscopy and Microanalysis, 2016, 22, 870-871.	0.2	5
33	Atomic lattice disorder in charge-density-wave phases of exfoliated dichalcogenides (1T-TaS ₂). Nature Communications, 2016, 7, 11420-11424.	3.3	86
34	Propagation of Structural Disorder in Epitaxially Connected Quantum Dot Solids from Atomic to Micron Scale. Nano Letters, 2016, 16, 5714-5718.	4.5	43
35	Colloidal Synthesis of PbS and PbS/CdS Nanosheets Using Acetate-Free Precursors. Chemistry of Materials, 2016, 28, 127-134.	3.2	51
36	Charge transport and localization in atomically coherent quantum dot solids. Nature Materials, 2016, 15, 557-563.	13.3	244

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37	Long Range Order and Atomic Connectivity in Two-Dimensional Square PbSe Nanocrystal Superlattices. <i>Microscopy and Microanalysis</i> , 2015, 21, 1329-1330.	0.2	1
38	Three-Dimensional Arrangement and Connectivity of Lead-Chalcogenide Nanoparticle Assemblies for Next Generation Photovoltaics. <i>Microscopy and Microanalysis</i> , 2014, 20, 542-543.	0.2	2