R E Dunin-Borkowski

List of Publications by Year in descending order

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598 papers 18,651 citations

64 h-index 109 g-index

637 all docs

637 docs citations

637 times ranked

20884 citing authors

| # | Article | IF | Citations |
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| 1 | Quantitative imaging of the magnetic field distribution in an artificial spin ice studied by off-axis electron holography. Journal of Magnetism and Magnetic Materials, 2022, 543, 168535. | 2.3 | 2 |
| 2 | Continuous illumination picosecond imaging using a delay line detector in a transmission electron microscope. Ultramicroscopy, 2022, 233, 113392. | 1.9 | 5 |
| 3 | Local magnetic spin mismatch promoting photocatalytic overall water splitting with exceptional solar-to-hydrogen efficiency. Energy and Environmental Science, 2022, 15, 265-277. | 30.8 | 37 |
| 4 | All room-temperature synthesis, N2 photofixation and reactivation over 2D cobalt oxides. Applied Catalysis B: Environmental, 2022, 304, 121001. | 20.2 | 11 |
| 5 | Theoretical and practical aspects of the design and production of synthetic holograms for transmission electron microscopy. Journal of Applied Physics, 2022, 131, . | 2.5 | 5 |
| 6 | <i>Operando</i> transmission electron microscopy of battery cycling: thickness dependent breaking of TiO ₂ coating on Si/SiO ₂ nanoparticles. Chemical Communications, 2022, 58, 3130-3133. | 4.1 | 2 |
| 7 | A High Conductivity 1D π–d Conjugated Metal–Organic Framework with Efficient Polysulfide Trappingâ€Diffusionâ€Catalysis in Lithium–Sulfur Batteries. Advanced Materials, 2022, 34, e2108835. | 21.0 | 86 |
| 8 | Prospect for measuring two-dimensional van der Waals magnets by electron magnetic chiral dichroism. Ultramicroscopy, 2022, 234, 113476. | 1.9 | 1 |
| 9 | Amorphizing noble metal chalcogenide catalysts at the single-layer limit towards hydrogen production. Nature Catalysis, 2022, 5, 212-221. | 34.4 | 113 |
| 10 | Enhanced Polysulfide Conversion with Highly Conductive and Electrocatalytic Iodineâ€Doped Bismuth Selenide Nanosheets in Lithium–Sulfur Batteries. Advanced Functional Materials, 2022, 32, . | 14.9 | 49 |
| 11 | Direct growth of single-metal-atom chains. , 2022, 1, 245-253. | | 16 |
| 12 | Highly complex magnetic behavior resulting from hierarchical phase separation in AlCo(Cr)FeNi high-entropy alloys. IScience, 2022, 25, 104047. | 4.1 | 8 |
| 13 | TiN nanobridge Josephson junctions and nanoSQUIDs on SiN-buffered Si. Superconductor Science and Technology, 2022, 35, 065001. | 3.5 | 6 |
| 14 | Imaging biological macromolecules in thick specimens: The role of inelastic scattering in cryoEM. Ultramicroscopy, 2022, 237, 113510. | 1.9 | 14 |
| 15 | A novel π-d conjugated cobalt tetraaza[14]annulene based atomically dispersed electrocatalyst for efficient CO2 reduction. Chemical Engineering Journal, 2022, 442, 136129. | 12.7 | 16 |
| 16 | Unveiling the three-dimensional magnetic texture of skyrmion tubes. Nature Nanotechnology, 2022, 17, 250-255. | 31.5 | 45 |
| 17 | Atomic-Scale Insights into Nickel Exsolution on LaNiO ₃ Catalysts via <i>In Situ</i> Electron Microscopy. Journal of Physical Chemistry C, 2022, 126, 786-796. | 3.1 | 14 |
| 18 | Progress on Emerging Ferroelectric Materials for Energy Harvesting, Storage and Conversion. Advanced Energy Materials, 2022, 12, . | 19.5 | 45 |

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| 19 | Molecular engineering to introduce carbonyl between nickel salophen active sites to enhance electrochemical CO2 reduction to methanol. Applied Catalysis B: Environmental, 2022, 314, 121451. | 20.2 | 32 |
| 20 | A Self-Flux-Biased NanoSQUID with Four NbN-TiN-NbN Nanobridge Josephson Junctions. Electronics (Switzerland), 2022, 11, 1704. | 3.1 | 4 |
| 21 | Diversity of states in a chiral magnet nanocylinder. APL Materials, 2022, 10, . | 5.1 | 2 |
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| 23 | Skyrmion–antiskyrmion pair creation and annihilation in a cubic chiral magnet. Nature Physics, 2022, 18, 863-868. | 16.7 | 17 |
| 24 | Extraction of 3D quantitative maps using EDS-STEM tomography and HAADF-EDS bimodal tomography. Ultramicroscopy, 2021, 220, 113166. | 1.9 | 0 |
| 25 | Atomically dispersed Fe in a C ₂ N Based Catalyst as a Sulfur Host for Efficient Lithium–Sulfur Batteries. Advanced Energy Materials, 2021, 11, 2003507. | 19.5 | 91 |
| 26 | Towards data-driven next-generation transmission electron microscopy. Nature Materials, 2021, 20, 274-279. | 27.5 | 130 |
| 27 | Off-axis electron holography of Néel-type skyrmions in multilayers of heavy metals and ferromagnets. Ultramicroscopy, 2021, 220, 113155. | 1.9 | 9 |
| 28 | A cartridge-based turning specimen holder with wireless tilt angle measurement for magnetic induction mapping in the transmission electron microscope. Ultramicroscopy, 2021, 220, 113098. | 1.9 | 8 |
| 29 | In Situ Observation of Pointâ€Defectâ€Induced Unitâ€Cellâ€Wise Energy Storage Pathway in Antiferroelectric PbZrO ₃ . Advanced Functional Materials, 2021, 31, 2008609. | 14.9 | 18 |
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| 32 | Bulk nanomachining of cantilevers with Nb nanoSQUIDs based on nanobridge Josephson junctions. Superconductor Science and Technology, 2021, 34, 035014. | 3.5 | 8 |
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| 38 | Operando high-pressure investigation of size-controlled CuZn catalysts for the methanol synthesis reaction. Nature Communications, 2021, 12, 1435. | 12.8 | 62 |
| 39 | Experimental Demonstration of an Electrostatic Orbital Angular Momentum Sorter for Electron Beams. Physical Review Letters, 2021, 126, 094802. | 7.8 | 39 |
| 40 | Introduction to a special issue on Frontiers of Aberration Corrected Electron Microscopy in honour of Wolfgang Baumeister, Colin Humphreys, John Spence and Knut Urban on the occasion of their 75th, 80th, 75th and 80th birthdays. Ultramicroscopy, 2021, 231, 113290. | 1.9 | 0 |
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| 82 | Interplay of intrinsic and extrinsic states in pinning and passivation of <i>m</i> -cl>p-clp-cl>p-cl>p-cl>p-cl>p-cl>p-cl>p-cl>p-cl>p-cl>p-cl>p-cl>p-cl>p-cl>p-clp | 2.5 | 2 |
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