R E Dunin-Borkowski

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

603 papers

14,615 citations

58 h-index

100 g-index

637 ext. papers

16,537 ext. citations

avg, IF

6.58 L-index

#	Paper	IF	Citations
603	Electron tomography and holography in materials science. <i>Nature Materials</i> , 2009 , 8, 271-80	27	669
602	In situ observations of catalyst dynamics during surface-bound carbon nanotube nucleation. <i>Nano Letters</i> , 2007 , 7, 602-8	11.5	605
601	Large-scale synthesis of single-crystalline iron oxide magnetic nanorings. <i>Journal of the American Chemical Society</i> , 2008 , 130, 16968-77	16.4	395
600	Discrete atom imaging of one-dimensional crystals formed within single-walled carbon nanotubes. <i>Science</i> , 2000 , 289, 1324-7	33.3	364
599	Magnetic microstructure of magnetotactic bacteria by electron holography. <i>Science</i> , 1998 , 282, 1868-7	0 33.3	330
598	Ledge-flow-controlled catalyst interface dynamics during Si nanowire growth. <i>Nature Materials</i> , 2008 , 7, 372-5	27	227
597	Gold catalyzed growth of silicon nanowires by plasma enhanced chemical vapor deposition. <i>Journal of Applied Physics</i> , 2003 , 94, 6005-6012	2.5	225
596	High-yield synthesis and optical properties of g-C3N4. <i>Nanoscale</i> , 2015 , 7, 12343-50	7.7	208
595	Rh-Doped Pt-Ni Octahedral Nanoparticles: Understanding the Correlation between Elemental Distribution, Oxygen Reduction Reaction, and Shape Stability. <i>Nano Letters</i> , 2016 , 16, 1719-25	11.5	188
594	The size distribution, imaging and obstructing properties of C60 and higher fullerenes formed within arc-grown single walled carbon nanotubes. <i>Chemical Physics Letters</i> , 2000 , 316, 191-198	2.5	164
593	Controlling the orientation, edge geometry, and thickness of chemical vapor deposition graphene. <i>ACS Nano</i> , 2013 , 7, 1351-9	16.7	159
592	Experimental observation of chiral magnetic bobbers in B20-type FeGe. <i>Nature Nanotechnology</i> , 2018 , 13, 451-455	28.7	150
591	Two layer 4:4 co-ordinated KI crystals grown within single walled carbon nanotubes. <i>Chemical Physics Letters</i> , 2000 , 329, 61-65	2.5	147
590	Flux closure in self-assembled cobalt nanoparticle rings. <i>Angewandte Chemie - International Edition</i> , 2003 , 42, 5591-3	16.4	146
589	Direct imaging of nanoscale magnetic interactions in minerals. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002 , 99, 16556-61	11.5	145
588	Quantitative electron holography of biased semiconductor devices. <i>Physical Review Letters</i> , 2002 , 88, 238302	7.4	141
587	Boosting the Thermoelectric Performance of (Na,K)-Codoped Polycrystalline SnSe by Synergistic Tailoring of the Band Structure and Atomic-Scale Defect Phonon Scattering. <i>Journal of the American Chemical Society</i> , 2017 , 139, 9714-9720	16.4	135

(2016-2001)

586	Magnetite morphology and life on Mars. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2001 , 98, 13490-5	11.5	133
585	Anomalous Resistance Hysteresis in Oxide ReRAM: Oxygen Evolution and Reincorporation Revealed by In Situ TEM. <i>Advanced Materials</i> , 2017 , 29, 1700212	24	129
584	Elemental Anisotropic Growth and Atomic-Scale Structure of Shape-Controlled Octahedral Pt-Ni-Co Alloy Nanocatalysts. <i>Nano Letters</i> , 2015 , 15, 7473-80	11.5	129
583	Imaging Catalysts at Work: A Hierarchical Approach from the Macro- to the Meso- and Nano-scale. <i>ChemCatChem</i> , 2013 , 5, 62-80	5.2	122
582	Direct observation of domain-wall pinning at nanoscale constrictions. <i>Applied Physics Letters</i> , 2005 , 87, 102509	3.4	118
581	Three-dimensional tomographic imaging and characterization of iron compounds within Alzheimer's plaque core material. <i>Journal of Alzheimeris Disease</i> , 2008 , 14, 235-45	4.3	115
580	Aberration-corrected imaging of active sites on industrial catalyst nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2007 , 46, 3683-5	16.4	109
579	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	16.4	107
578	Direct Imaging of a Zero-Field Target Skyrmion and Its Polarity Switch in a Chiral Magnetic Nanodisk. <i>Physical Review Letters</i> , 2017 , 119, 197205	7.4	107
577	Dipolar magnetism in ordered and disordered low-dimensional nanoparticle assemblies. <i>Scientific Reports</i> , 2013 , 3, 1234	4.9	101
576	In situ redox cycle of a nickel\(\text{SZ} \) fuel cell anode in an environmental transmission electron microscope. \(Acta Materialia, \) 2010 , 58, 4578-4589	8.4	101
575	Aberration corrected and monochromated environmental transmission electron microscopy: challenges and prospects for materials science. <i>Materials Science and Technology</i> , 2010 , 26, 1338-1344	1.5	97
574	Acid-Promoter-Free Ethylene Methoxycarbonylation over Ru-Clusters/Ceria: The Catalysis of Interfacial Lewis Acid-Base Pair. <i>Journal of the American Chemical Society</i> , 2018 , 140, 4172-4181	16.4	94
573	Resolving the structure of active sites on platinum catalytic nanoparticles. <i>Nano Letters</i> , 2010 , 10, 3073	-6 1.5	94
572	Off-axis electron holography of magnetic nanowires and chains, rings, and planar arrays of magnetic nanoparticles. <i>Microscopy Research and Technique</i> , 2004 , 64, 390-402	2.8	94
571	Reduction of nickel oxide particles by hydrogen studied in an environmental TEM. <i>Journal of Materials Science</i> , 2013 , 48, 2893-2907	4.3	93
570	Controllable atomic scale patterning of freestanding monolayer graphene at elevated temperature. <i>ACS Nano</i> , 2013 , 7, 1566-72	16.7	90
569	In Situ TEM Analysis of Organic-Inorganic Metal-Halide Perovskite Solar Cells under Electrical Bias. <i>Nano Letters</i> , 2016 , 16, 7013-7018	11.5	87

568	Towards quantitative electron holography of magnetic thin films using in situ magnetization reversal. <i>Ultramicroscopy</i> , 1998 , 74, 61-73	3.1	85
567	Magnetic interactions within patterned cobalt nanostructures using off-axis electron holography. Journal of Applied Physics, 1998 , 84, 374-378	2.5	85
566	Nonadiabatic spin torque investigated using thermally activated magnetic domain wall dynamics. <i>Physical Review Letters</i> , 2010 , 105, 056601	7.4	84
565	Terbium-Doped VO2 Thin Films: Reduced Phase Transition Temperature and Largely Enhanced Luminous Transmittance. <i>Langmuir</i> , 2016 , 32, 759-64	4	83
564	Off-axis electron holography of magnetotactic bacteria: magnetic microstructure of strains MV-1 and MS-1. <i>European Journal of Mineralogy</i> , 2001 , 13, 671-684	2.2	83
563	Resolution and aberration correction in liquid cell transmission electron microscopy. <i>Nature Reviews Materials</i> , 2019 , 4, 61-78	73.3	83
562	Self-limited single nanowire systems combining all-in-one memristive and neuromorphic functionalities. <i>Nature Communications</i> , 2018 , 9, 5151	17.4	83
561	Alloy nanowires: Invar inside carbon nanotubes. <i>Chemical Communications</i> , 2001 , 471-472	5.8	80
560	Control of morphology and formation of highly geometrically confined magnetic skyrmions. <i>Nature Communications</i> , 2017 , 8, 15569	17.4	79
559	Towards an integrated materials characterization toolbox. <i>Journal of Materials Research</i> , 2011 , 26, 134	1- <u>1</u> . <u>3</u> 83	75
558	Determination of the 3D shape of a nanoscale crystal with atomic resolution from a single image. <i>Nature Materials</i> , 2014 , 13, 1044-9	27	70
557	Vortex flux channeling in magnetic nanoparticle chains. <i>Physical Review Letters</i> , 2003 , 91, 257207	7.4	69
556	Experimental characterisation of CCD cameras for HREM at 300 kV. <i>Ultramicroscopy</i> , 2000 , 85, 9-13	3.1	68
555	Engineering stable electrocatalysts by synergistic stabilization between carbide cores and Pt shells. <i>Nature Materials</i> , 2020 , 19, 287-291	27	68
554	1D lanthanide halide crystals inserted into single-walled carbon nanotubes. <i>Chemical Communications</i> , 2000 , 2427-2428	5.8	66
553	High-Resolution Three-Dimensional Mapping of Semiconductor Dopant Potentials. <i>Nano Letters</i> , 2007 , 7, 2020-2023	11.5	65
552	A simple algorithm for measuring particle size distributions on an uneven background from TEM images. <i>Ultramicroscopy</i> , 2011 , 111, 101-6	3.1	64
551	Interface Engineering in Nanostructured Nickel Phosphide Catalyst for Efficient and Stable Water Oxidation. <i>ACS Catalysis</i> , 2017 , 7, 5450-5455	13.1	61

(2014-2015)

550	Rapid low dose electron tomography using a direct electron detection camera. <i>Scientific Reports</i> , 2015 , 5, 14516	4.9	61
549	Nanoscale analysis of three-dimensional structures by electron tomography. <i>Scripta Materialia</i> , 2006 , 55, 29-33	5.6	59
548	Discrete dynamics of nanoparticle channelling in suspended graphene. <i>Nano Letters</i> , 2011 , 11, 2689-92	11.5	58
547	Off-axis electron holography of patterned magnetic nanostructures. <i>Journal of Microscopy</i> , 2000 , 200, 187-205	1.9	58
546	Switching asymmetries in closely coupled magnetic nanostructure arrays. <i>Applied Physics Letters</i> , 1999 , 75, 2641-2643	3.4	58
545	Controlling Near-Surface Ni Composition in Octahedral PtNi(Mo) Nanoparticles by Mo Doping for a Highly Active Oxygen Reduction Reaction Catalyst. <i>Nano Letters</i> , 2019 , 19, 6876-6885	11.5	56
544	Improvement in electron holographic phase images of focused-ion-beam-milled GaAs and Si p-n junctions by in situ annealing. <i>Applied Physics Letters</i> , 2006 , 88, 063510	3.4	56
543	Electron holography for the study of magnetic nanomaterials. <i>Accounts of Chemical Research</i> , 2008 , 41, 665-74	24.3	55
542	The Effect of Surface Site Ensembles on the Activity and Selectivity of Ethanol Electrooxidation by Octahedral PtNiRh Nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 6533-6538	16.4	54
541	Dopant profiling of focused ion beam milled semiconductors using off-axis electron holography; reducing artifacts, extending detection limits and reducing the effects of gallium implantation. <i>Ultramicroscopy</i> , 2010 , 110, 383-389	3.1	53
540	Magnetic properties, microstructure, composition, and morphology of greigite nanocrystals in magnetotactic bacteria from electron holography and tomography. <i>American Mineralogist</i> , 2006 , 91, 1216-1229	2.9	53
539	Spin torque and heating effects in current-induced domain wall motion probed by transmission electron microscopy. <i>Applied Physics Letters</i> , 2007 , 90, 132506	3.4	52
538	Electron beam induced in situ clusterisation of 1D ZrCl4 chains within single-walled carbon nanotubes. <i>Chemical Communications</i> , 2001 , 845-846	5.8	52
537	Single-Crystalline W-Doped VO2 Nanobeams with Highly Reversible Electrical and Plasmonic Responses Near Room Temperature. <i>Advanced Materials Interfaces</i> , 2016 , 3, 1600164	4.6	52
536	Measuring the orbital angular momentum spectrum of an electron beam. <i>Nature Communications</i> , 2017 , 8, 15536	17.4	51
535	Niperovskite interaction and its structural and catalytic consequences in methane steam reforming and methanation reactions. <i>Journal of Catalysis</i> , 2016 , 337, 26-35	7.3	51
534	Origin of magnetization decay in spin-dependent tunnel junctions. <i>Science</i> , 1999 , 286, 1337-40	33.3	50
533	Visualized effect of oxidation on magnetic recording fidelity in pseudo-single-domain magnetite particles. <i>Nature Communications</i> , 2014 , 5, 5154	17.4	49

532	Microstructural characterization and microstructural effects on the thermal conductivity of AlN(Y2O3) ceramics. <i>Journal of the European Ceramic Society</i> , 2002 , 22, 247-252	6	49
531	V-shaped defects connected to inversion domains in AlGaN layers. <i>Applied Physics Letters</i> , 2001 , 78, 152	29 5 .1453	149
530	Realization of electron vortices with large orbital angular momentum using miniature holograms fabricated by electron beam lithography. <i>Applied Physics Letters</i> , 2017 , 110, 093113	3.4	48
529	Suppressing Twin Formation in Bi2Se3 Thin Films. <i>Advanced Materials Interfaces</i> , 2014 , 1, 1400134	4.6	48
528	Towards data-driven next-generation transmission electron microscopy. <i>Nature Materials</i> , 2021 , 20, 274	1- <u>2-</u> 79	48
527	Direct observation of ferrimagnetic/ferroelastic domain interactions in magnetite below the Verwey transition. <i>Earth and Planetary Science Letters</i> , 2010 , 297, 10-17	5.3	47
526	Unravelling Degradation Pathways of Oxide-Supported Pt Fuel Cell Nanocatalysts under In Situ Operating Conditions. <i>Advanced Energy Materials</i> , 2018 , 8, 1701663	21.8	46
525	Magnetic induction mapping of magnetite chains in magnetotactic bacteria at room temperature and close to the Verwey transition using electron holography. <i>Journal of Physics: Conference Series</i> , 2005 , 17, 108-121	0.3	46
524	Magnetic tunnel junctions thermally stable to above 300 °C. <i>Applied Physics Letters</i> , 1999 , 75, 543-545	3.4	46
523	Eigenmode Tomography of Surface Charge Oscillations of Plasmonic Nanoparticles by Electron Energy Loss Spectroscopy. <i>ACS Photonics</i> , 2015 , 2, 1628-1635	6.3	45
522	In situ transmission electron microscopy of light-induced photocatalytic reactions. <i>Nanotechnology</i> , 2012 , 23, 075705	3.4	45
521	Sulfides in Biosystems. <i>Reviews in Mineralogy and Geochemistry</i> , 2006 , 61, 679-714	7.1	45
520	Quantitative magnetization measurements on nanometer ferromagnetic cobalt wires using electron holography. <i>Applied Physics Letters</i> , 2003 , 82, 88-90	3.4	45
519	Nanotubes from Misfit Layered Compounds: A New Family of Materials with Low Dimensionality. Journal of Physical Chemistry Letters, 2014 , 5, 3724-36	6.4	44
518	Synthesis and optical properties of silicon nanowires grown by different methods. <i>Applied Physics A: Materials Science and Processing</i> , 2006 , 85, 247-253	2.6	44
517	The development of Fresnel contrast analysis, and the interpretation of mean inner potential profiles at interfaces. <i>Ultramicroscopy</i> , 2000 , 83, 193-216	3.1	44
516	High-\$T_{rm c}\$ DC SQUIDs for Magnetoencephalography. <i>IEEE Transactions on Applied Superconductivity</i> , 2013 , 23, 1600705-1600705	1.8	43
515	Three-dimensional shapes and spatial distributions of Pt and PtCr catalyst nanoparticles on carbon black. <i>Journal of Microscopy</i> , 2008 , 232, 248-59	1.9	43

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514	Shape Stability of Octahedral PtNi Nanocatalysts for Electrochemical Oxygen Reduction Reaction Studied by in situ Transmission Electron Microscopy. <i>ACS Nano</i> , 2018 , 12, 5306-5311	16.7	43	
513	Dealloyed PtNi-CoreBhell Nanocatalysts Enable Significant Lowering of Pt Electrode Content in Direct Methanol Fuel Cells. <i>ACS Catalysis</i> , 2019 , 9, 3764-3772	13.1	42	
512	Atomic scale imaging of magnetic circular dichroism by achromatic electron microscopy. <i>Nature Materials</i> , 2018 , 17, 221-225	27	42	
511	Strategies for Doped Nanocrystalline Silicon Integration in Silicon Heterojunction Solar Cells. <i>IEEE Journal of Photovoltaics</i> , 2016 , 6, 1132-1140	3.7	42	
510	Polarity-driven polytypic branching in cu-based quaternary chalcogenide nanostructures. <i>ACS Nano</i> , 2014 , 8, 2290-301	16.7	41	
509	High-TcSQUID biomagnetometers. Superconductor Science and Technology, 2017, 30, 083001	3.1	41	
508	Effects of internal mineral structures on the magnetic remanence of silicate-hosted titanomagnetite inclusions: An electron holography study. <i>Journal of Geophysical Research</i> , 2006 , 111, n/a-n/a		41	
507	Quantitative electron holographic tomography for the 3D characterisation of semiconductor device structures. <i>Ultramicroscopy</i> , 2008 , 108, 1401-7	3.1	40	
506	Temperature and Magnetic Field Dependence of the Internal and Lattice Structures of Skyrmions by Off-Axis Electron Holography. <i>Physical Review Letters</i> , 2017 , 118, 087202	7.4	39	
505	Formation of unexpectedly active Ni-Fe oxygen evolution electrocatalysts by physically mixing Ni and Fe oxyhydroxides. <i>Chemical Communications</i> , 2019 , 55, 818-821	5.8	39	
504	Hidden surface states at non-polar GaN (101년) facets: Intrinsic pinning of nanowires. <i>Applied Physics Letters</i> , 2013 , 103, 152101	3.4	39	
503	The impact of trench defects in InGaN/GaN light emitting diodes and implications for the green gap[problem. <i>Applied Physics Letters</i> , 2014 , 105, 112110	3.4	39	
502	Nanoscale scanning transmission electron tomography. <i>Journal of Microscopy</i> , 2006 , 223, 185-90	1.9	39	
501	Off-axis electron holography of electrostatic potentials in unbiased and reverse biased focused ion beam milled semiconductor devices. <i>Journal of Microscopy</i> , 2004 , 214, 287-96	1.9	39	
500	Conventional and back-side focused ion beam milling for off-axis electron holography of electrostatic potentials in transistors. <i>Ultramicroscopy</i> , 2005 , 103, 67-81	3.1	39	
499	Direct visualization of the thermomagnetic behavior of pseudo-single-domain magnetite particles. <i>Science Advances</i> , 2016 , 2, e1501801	14.3	39	
498	On the origin of differential phase contrast at a locally charged and globally charge-compensated domain boundary in a polar-ordered material. <i>Ultramicroscopy</i> , 2015 , 154, 57-63	3.1	37	
497	Oxidation mechanism of nickel particles studied in an environmental transmission electron microscope. <i>Acta Materialia</i> , 2014 , 67, 362-372	8.4	37	

496	Carrier localization in the vicinity of dislocations in InGaN. Journal of Applied Physics, 2017, 121, 013104	2.5	36
495	Tuning the Plasmonic Response up: Hollow Cuboid Metal Nanostructures. ACS Photonics, 2016, 3, 770-7	769 3	36
494	Transverse domain walls in nanoconstrictions. <i>Applied Physics Letters</i> , 2007 , 91, 112502	3.4	36
493	Atomically dispersed Fe in a C2N Based Catalyst as a Sulfur Host for Efficient LithiumBulfur Batteries. <i>Advanced Energy Materials</i> , 2021 , 11, 2003507	21.8	36
492	Resonances of nanoparticles with poor plasmonic metal tips. <i>Scientific Reports</i> , 2015 , 5, 17431	4.9	35
491	Self-assembly and flux closure studies of magnetic nanoparticle rings. <i>Journal of Materials Chemistry</i> , 2011 , 21, 16686		35
490	Quantitative determination of domain wall coupling energetics. <i>Applied Physics Letters</i> , 2006 , 88, 21251	13.4	35
489	Direct Observation of Compositionally Homogeneous a-C:H Band-Gap-Modulated Superlattices. <i>Physical Review Letters</i> , 1995 , 75, 4258-4261	7.4	35
488	Effect of lanthanum doping on modulating the thermochromic properties of VO2 thin films. <i>RSC Advances</i> , 2016 , 6, 48455-48461	3.7	35
487	Single crystalline superstructured stable single domain magnetite nanoparticles. <i>Scientific Reports</i> , 2017 , 7, 45484	4.9	34
486	Observation of nanoscale magnetic fields using twisted electron beams. <i>Nature Communications</i> , 2017 , 8, 689	17.4	34
485	Convenient preparation of high-quality specimens for annealing experiments in the transmission electron microscope. <i>Microscopy and Microanalysis</i> , 2014 , 20, 1638-45	0.5	34
484	The quantitative measurement of magnetic moments from phase images of nanoparticles and nanostructures II Fundamentals. <i>Ultramicroscopy</i> , 2010 , 110, 425-432	3.1	34
483	Ferrimagnetic/ferroelastic domain interactions in magnetite below the Verwey transition. Part I: electron holography and Lorentz microscopy. <i>Phase Transitions</i> , 2013 , 86, 67-87	1.3	33
482	Boosting Photoelectrochemical Water Oxidation of Hematite in Acidic Electrolytes by Surface State Modification. <i>Advanced Energy Materials</i> , 2019 , 9, 1901836	21.8	32
481	Direct measurement of the charge distribution along a biased carbon nanotube bundle using electron holography. <i>Applied Physics Letters</i> , 2011 , 98, 243101	3.4	32
480	Structural, chemical and magnetic properties of secondary phases in Co-doped ZnO. <i>New Journal of Physics</i> , 2011 , 13, 103001	2.9	32
479	Magnetic fluctuations in nanosized goethite (FeOOH) grains. <i>Journal of Physics Condensed Matter</i> , 2009 , 21, 016007	1.8	32

(2011-2008)

478	Reversal of Flux Closure States in Cobalt Nanoparticle Rings With Coaxial Magnetic Pulses. <i>Advanced Materials</i> , 2008 , 20, 4248-4252	24	32
477	Determination of mean inner potential of germanium using off-axis electron holography. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 1999 , 55, 652-658		32
476	Bifunctional Electrocatalysis on Pd-Ni CoreBhell Nanoparticles for Hydrogen Oxidation Reaction in Alkaline Medium. <i>Advanced Materials Interfaces</i> , 2018 , 5, 1701666	4.6	31
475	Off-axis electron holography observation of magnetic microstructure in a magnetite (001) thin film containing antiphase domains. <i>Physical Review B</i> , 2006 , 73,	3.3	31
474	Off-axis electron holography of unbiased and reverse-biased focused ion beam milled Si p-n junctions. <i>Microscopy and Microanalysis</i> , 2005 , 11, 66-78	0.5	31
473	The effect of interfacial pH on the surface atomic elemental distribution and on the catalytic reactivity of shape-selected bimetallic nanoparticles towards oxygen reduction. <i>Nano Energy</i> , 2016 , 27, 390-401	17.1	31
472	An Unconventional Transient Phase with Cycloidal Order of Polarization in Energy-Storage Antiferroelectric PbZrO. <i>Advanced Materials</i> , 2020 , 32, e1907208	24	30
471	Magnetic Nanocrystals in Organisms. <i>Elements</i> , 2009 , 5, 235-240	3.8	30
470	The contribution of phonon scattering to high-resolution images measured by off-axis electron holography. <i>Ultramicroscopy</i> , 2004 , 98, 115-33	3.1	30
469	Interferometric methods for mapping static electric and magnetic fields. <i>Comptes Rendus Physique</i> , 2014 , 15, 126-139	1.4	29
468	Mineral magnetism of dusty olivine: A credible recorder of pre-accretionary remanence. <i>Geochemistry, Geophysics, Geosystems</i> , 2011 , 12, n/a-n/a	3.6	29
467	Concave curvature facets benefit oxygen electroreduction catalysis on octahedral shaped PtNi nanocatalysts. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 1149-1159	13	28
466	New progress in the fabrication of nth micromorph solar cells for opaque substrates. <i>Solar Energy Materials and Solar Cells</i> , 2013 , 114, 147-155	6.4	28
465	The influence of electron irradiation on electron holography of focused ion beam milled GaAs p-n junctions. <i>Journal of Applied Physics</i> , 2007 , 101, 094508	2.5	28
464	Shape-Controlled Nanoparticles in Pore-Confined Space. <i>Journal of the American Chemical Society</i> , 2018 , 140, 15684-15689	16.4	28
463	Performance of a direct detection camera for off-axis electron holography. <i>Ultramicroscopy</i> , 2016 , 161, 90-97	3.1	27
462	Band offsets at zincblende-wurtzite GaAs nanowire sidewall surfaces. <i>Applied Physics Letters</i> , 2013 , 103, 122104	3.4	27
461	Quantitative strain mapping of InAs/InP quantum dots with 1 nm spatial resolution using dark field electron holography. <i>Applied Physics Letters</i> , 2011 , 99, 261911	3.4	27

460	Magnetic Skyrmion Formation at Lattice Defects and Grain Boundaries Studied by Quantitative Off-Axis Electron Holography. <i>Nano Letters</i> , 2017 , 17, 1395-1401	11.5	26
459	Room-temperature all-solid-state sodium batteries with robust ceramic interface between rigid electrolyte and electrode materials. <i>Nano Energy</i> , 2019 , 65, 104040	17.1	26
458	Photodriven Dipole Reordering: Key to Carrier Separation in Metalorganic Halide Perovskites. <i>ACS Nano</i> , 2019 , 13, 4402-4409	16.7	26
457	Direct observation of the thermal demagnetization of magnetic vortex structures in nonideal magnetite recorders. <i>Geophysical Research Letters</i> , 2016 , 43, 8426-8434	4.9	26
456	Microstructural characterisation of GaN(As) films grown on (001) GaP by molecular beam epitaxy. Journal of Crystal Growth, 1997 , 171, 321-332	1.6	26
455	Model-independent measurement of the charge density distribution along an Fe atom probe needle using off-axis electron holography without mean inner potential effects. <i>Journal of Applied Physics</i> , 2015 , 117, 134301	2.5	25
454	In situ Reduction and Oxidation of Nickel from Solid Oxide Fuel Cells in a Transmission Electron Microscope. <i>ECS Transactions</i> , 2009 , 25, 1985-1992	1	25
453	Quantitative off-axis electron holography of GaAs p-n junctions prepared by focused ion beam milling. <i>Journal of Microscopy</i> , 2009 , 233, 102-13	1.9	25
452	Interlayer coupling within individual submicron magnetic elements. <i>Journal of Applied Physics</i> , 2000 , 87, 7400-7404	2.5	25
451	Atomic-scale quantification of charge densities in two-dimensional materials. <i>Physical Review B</i> , 2018 , 98,	3.3	25
450	Determination of the electrostatic potential distribution in Pt/Fe:SrTiO[Inb:SrTiO[Ithin-film structures by electron holography. <i>Scientific Reports</i> , 2014 , 4, 6975	4.9	24
449	Geometric reconstruction methods for electron tomography. <i>Ultramicroscopy</i> , 2013 , 128, 42-54	3.1	24
448	Automated discrete electron tomography´- Towards routine high-fidelity reconstruction of nanomaterials. <i>Ultramicroscopy</i> , 2017 , 175, 87-96	3.1	23
447	Dislocations in AlGaN: Core Structure, Atom Segregation, and Optical Properties. <i>Nano Letters</i> , 2017 , 17, 4846-4852	11.5	23
446	Enhancing the optoelectronic properties of amorphous zinc tin oxide by subgap defect passivation: A theoretical and experimental demonstration. <i>Physical Review B</i> , 2017 , 95,	3.3	23
445	Towards quantitative electrostatic potential mapping of working semiconductor devices using off-axis electron holography. <i>Ultramicroscopy</i> , 2015 , 152, 10-20	3.1	23
444	Towards quantitative off-axis electron holographic mapping of the electric field around the tip of a sharp biased metallic needle. <i>Journal of Applied Physics</i> , 2014 , 116, 024305	2.5	23
443	Identification of screw dislocations as fast-forming sites in Fe-doped SrTiO3. <i>Applied Physics Letters</i> , 2013 , 102, 183504	3.4	23

(2014-2016)

442	Photogrammetry of the three-dimensional shape and texture of a nanoscale particle using scanning electron microscopy and free software. <i>Ultramicroscopy</i> , 2016 , 169, 80-88	3.1	23
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