Paul Midgley

List of Publications by Year in Descending Order

382 papers	15,963 citations	62 h-index	115 g-index
410 ext. papers	17,687 ext. citations	6.6 avg, IF	6.73 L-index

#	Paper	IF	Citations
382	Unveiling the interaction mechanisms of electron and X-ray radiation with halide perovskite semiconductors using scanning nano-probe diffraction.. *Advanced Materials*, **2022**, e2200383	24	1
381	Microcavity-like exciton-polaritons can be the primary photoexcitation in bare organic semiconductors. *Nature Communications*, **2021**, 12, 6519	17.4	5
380	Scanning electron diffraction tomography of strain. *Inverse Problems*, **2021**, 37, 015003	2.3	3
379	Microstructural and mechanical characterisation of a second generation hybrid metal extrusion & bonding aluminium-steel butt joint. *Materials Characterization*, **2021**, 173, 110761	3.9	4
378	Revisiting metal fluorides as lithium-ion battery cathodes. *Nature Materials*, **2021**, 20, 841-850	27	34
377	Local Crystallinity in Twisted Cellulose Nanofibers. *ACS Nano*, **2021**, 15, 2730-2737	16.7	19
376	Stabilized tilted-octahedra halide perovskites inhibit local formation of performance-limiting phases.. *Science*, **2021**, 374, 1598-1605	33.3	28
375	Factors Governing the Chemical Stability of Shear-Exfoliated ZnSe(alkylamine) II□VI Layered Hybrids. *Chemistry of Materials*, **2020**, 32, 2379-2388	9.6	1
374	Direct Imaging of Correlated Defect Nanodomains in a Metal-Organic Framework. *Journal of the American Chemical Society*, **2020**, 142, 13081-13089	16.4	34
373	Functional Group Mapping by Electron Beam Vibrational Spectroscopy from Nanoscale Volumes. *Nano Letters*, **2020**, 20, 1272-1279	11.5	17
372	Density-based clustering of crystal (mis)orientations and the Python library. *Journal of Applied Crystallography*, **2020**, 53, 1293-1298	3.8	5
371	Nanocrystal segmentation in scanning precession electron diffraction data. *Journal of Microscopy*, **2020**, 279, 158-167	1.9	8
370	Activation of Copper Species on Carbon Nitride for Enhanced Activity in the Arylation of Amines. *ACS Catalysis*, **2020**, 10, 11069-11080	13.1	12
369	A new route to porous metal□organic framework crystal□glass composites. *Chemical Science*, **2020**, 11, 9910-9918	9.4	5
368	Magnetic Vortex States in Toroidal Iron Oxide Nanoparticles: Combining Micromagnetics with Tomography. *Nano Letters*, **2020**, 20, 7405-7412	11.5	2
367	Performance-limiting nanoscale trap clusters at grain junctions in halide perovskites. *Nature*, **2020**, 580, 360-366	50.4	155
366	Low-Dose Scanning Electron Diffraction Microscopy of Mechanochemically Nanostructured Pharmaceuticals. *Microscopy and Microanalysis*, **2019**, 25, 1746-1747	0.5	5

365	Multidimensional Electron Diffraction-Microscopy of Cabotegravir Nanocrystals. *Microscopy and Microanalysis*, **2019**, 25, 1942-1943	0.5	
364	Synthesis and Properties of a Compositional Series of MIL-53(Al) Metal-Organic Framework Crystal-Glass Composites. *Journal of the American Chemical Society*, **2019**, 141, 15641-15648	16.4	23
363	Phase diagrams of liquid-phase mixing in multi-component metal-organic framework glasses constructed by quantitative elemental nano-tomography. *APL Materials*, **2019**, 7, 091111	5.7	9
362	Controlling the speciation and reactivity of carbon-supported gold nanostructures for catalysed acetylene hydrochlorination. *Chemical Science*, **2019**, 10, 359-369	9.4	48
361	Metal-organic framework crystal-glass composites. *Nature Communications*, **2019**, 10, 2580	17.4	49
360	Atom-by-Atom Resolution of Structure–Function Relations over Low-Nuclearity Metal Catalysts. *Angewandte Chemie*, **2019**, 131, 8816-8821	3.6	11
359	Atom-by-Atom Resolution of Structure-Function Relations over Low-Nuclearity Metal Catalysts. *Angewandte Chemie - International Edition*, **2019**, 58, 8724-8729	16.4	64
358	Unsupervised machine learning applied to scanning precession electron diffraction data. *Advanced Structural and Chemical Imaging*, **2019**, 5,	3.9	25
357	Field Response of Magnetic Vortices in Dusty Olivine From the Semarkona Chondrite. *Geochemistry, Geophysics, Geosystems*, **2019**, 20, 1441-1453	3.6	3
356	Do Images of Biskyrmions Show Type-II Bubbles?. *Advanced Materials*, **2019**, 31, e1806598	24	41
355	Analysis of structural distortion in Eshelby twisted InP nanowires by scanning precession electron diffraction. *Nano Research*, **2019**, 12, 939-946	10	2
354	Electron Ptychography Using Fast Binary 4D STEM Data. *Microscopy and Microanalysis*, **2019**, 25, 1662-1663	0.5	2
353	Scan Strategies for Electron Energy Loss Spectroscopy at Optical and Vibrational Energies in Perylene Diimide Nanobelts. *Microscopy and Microanalysis*, **2019**, 25, 1738-1739	0.5	0
352	Local Coordination in Metal-Organic Frameworks Probed in the Vibrational and Optical Regime by EELS. *Microscopy and Microanalysis*, **2019**, 25, 606-607	0.5	
351	Mapping Non-Crystalline Nanostructure in Beam Sensitive Systems With Low-dose Scanning Electron Pair Distribution Function Analysis. *Microscopy and Microanalysis*, **2019**, 25, 1636-1637	0.5	2
350	Electron Tomography in Materials Science. *Springer Handbooks*, **2019**, 1279-1329	1.3	6
349	Flux melting of metal-organic frameworks. *Chemical Science*, **2019**, 10, 3592-3601	9.4	37
348	Mechanical Properties and Processing Techniques of Bulk Metal-Organic Framework Glasses. *Journal of the American Chemical Society*, **2019**, 141, 1027-1034	16.4	45

347	Crystallographic relationships of T-/S-phase aggregates in an Al□Cu□Mg□Ag alloy. *Acta Materialia*, **2019**, 166, 587-596	8.4	22
346	Secondary magnetite in ancient zircon precludes analysis of a Hadean geodynamo. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 407-412	11.5	17
345	Directional sinogram inpainting for limited angle tomography. *Inverse Problems*, **2019**, 35, 024004	2.3	20
344	Diketopyrrolopyrrole pigment core@multi-layer SiO2 shell with improved photochemical stability. *Dyes and Pigments*, **2018**, 156, 108-115	4.6	5
343	Single-atom heterogeneous catalysts based on distinct carbon nitride scaffolds. *National Science Review*, **2018**, 5, 642-652	10.8	82
342	□Ga2O3 grown by low temperature atomic layer deposition on sapphire. *Journal of Crystal Growth*, **2018**, 487, 23-27	1.6	24
341	Sol□el Synthesis of Robust Metal□rganic Frameworks for Nanoparticle Encapsulation. *Advanced Functional Materials*, **2018**, 28, 1705588	15.6	43
340	Self-Assembly of the Nonplanar Fe(III) Phthalocyanine Small-Molecule: Unraveling the Impact on the Magnetic Properties of Organic Nanowires. *Chemistry of Materials*, **2018**, 30, 879-887	9.6	7
339	Liquid phase blending of metal-organic frameworks. *Nature Communications*, **2018**, 9, 2135	17.4	49
338	A sol-gel monolithic metal-organic framework with enhanced methane uptake. *Nature Materials*, **2018**, 17, 174-179	27	257
337	Scanning Electron Diffraction □Crystal Mapping at the Nanoscale. *Microscopy and Microanalysis*, **2018**, 24, 182-183	0.5	2
336	Nanomagnetic properties of the meteorite cloudy zone. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, E11436-E11445	11.5	21
335	Subwavelength Spatially Resolved Coordination Chemistry of Metal-Organic Framework Glass Blends. *Journal of the American Chemical Society*, **2018**, 140, 17862-17866	16.4	14
334	Adatom dynamics and the surface reconstruction of Si(110) revealed using time-resolved electron microscopy. *Applied Physics Letters*, **2018**, 113, 183104	3.4	6
333	All Mixed Up: Using Machine Learning to Address Heterogeneity in (Natural) Materials. *Microscopy and Microanalysis*, **2018**, 24, 562-563	0.5	1
332	Advances in the Synthesis and Long-Term Protection of Zero-Valent Iron Nanoparticles. *Particle and Particle Systems Characterization*, **2018**, 35, 1800120	3.1	8
331	A heterogeneous single-atom palladium catalyst surpassing homogeneous systems for Suzuki coupling. *Nature Nanotechnology*, **2018**, 13, 702-707	28.7	316
330	Denoising time-resolved microscopy image sequences with singular value thresholding. *Ultramicroscopy*, **2017**, 178, 112-124	3.1	25

329	Microfluidization of Graphite and Formulation of Graphene-Based Conductive Inks. *ACS Nano*, **2017**, 11, 2742-2755	16.7	192
328	Stabilization of Single Metal Atoms on Graphitic Carbon Nitride. *Advanced Functional Materials*, **2017**, 27, 1605785	15.6	172
327	Catalysts: Stabilization of Single Metal Atoms on Graphitic Carbon Nitride (Adv. Funct. Mater. 8/2017). *Advanced Functional Materials*, **2017**, 27,	15.6	2
326	Progress and opportunities in EELS and EDS tomography. *Ultramicroscopy*, **2017**, 180, 133-141	3.1	29
325	Anomalous diffusion of single metal atoms on a graphene oxide support. *Chemical Physics Letters*, **2017**, 683, 370-374	2.5	21
324	On the crystallography and composition of topologically close-packed phases in ATI 718Plus . *Acta Materialia*, **2017**, 130, 271-280	8.4	45
323	Gold and iodine diffusion in large area perovskite solar cells under illumination. *Nanoscale*, **2017**, 9, 4700-4706	7.7	103
322	High-resolution scanning precession electron diffraction: Alignment and spatial resolution. *Ultramicroscopy*, **2017**, 174, 79-88	3.1	19
321	Transition-Metal Decorated Aluminum Nanocrystals. *ACS Nano*, **2017**, 11, 10281-10288	16.7	64
320	Entropic Comparison of Atomic-Resolution Electron Tomography of Crystals and Amorphous Materials. *Physical Review Letters*, **2017**, 119, 166101	7.4	4
319	Data Clustering and Scanning Precession Electron Diffraction for Microanalysis. *Microscopy and Microanalysis*, **2017**, 23, 116-117	0.5	2
318	The Microstructure of Pharmaceutical Materials Revealed by Scanning Electron Diffraction. *Microscopy and Microanalysis*, **2017**, 23, 1192-1193	0.5	3
317	Nanoscale Strain Tomography by Scanning Precession Electron Diffraction. *Microscopy and Microanalysis*, **2017**, 23, 1710-1711	0.5	3
316	Optimization of Three-Dimensional (3D) Chemical Imaging by Soft X-Ray Spectro-Tomography Using a Compressed Sensing Algorithm. *Microscopy and Microanalysis*, **2017**, 23, 951-966	0.5	8
315	Sub-nanometer surface chemistry and orbital hybridization in lanthanum-doped ceria nano-catalysts revealed by 3D electron microscopy. *Scientific Reports*, **2017**, 7, 5406	4.9	13
314	Crystal Face Distributions and Surface Site Densities of Two Synthetic Goethites: Implications for Adsorption Capacities as a Function of Particle Size. *Langmuir*, **2017**, 33, 8924-8932	4	13
313	Multi-Dimensional Multi-Functional Catalytic Architecture: A Selectively Functionalized Three-Dimensional Hierarchically Ordered Macro/Mesoporous Network for Cascade Reactions Analyzed by Electron Tomography. *Microscopy and Microanalysis*, **2017**, 23, 2042-2043	0.5	2
312	Scanning Precession Electron Diffraction Study of Hybrid Precipitates in a 6xxx Series Aluminium Alloy. *Microscopy and Microanalysis*, **2017**, 23, 114-115	0.5	

311	On three-dimensional misorientation spaces. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2017**, 473, 20170274	2.4	23
310	Synthetic mimetics of the endogenous gastrointestinal nanomineral: Silent constructs that trap macromolecules for intracellular delivery. *Nanomedicine: Nanotechnology, Biology, and Medicine*, **2017**, 13, 619-630	6	15
309	Sparsity, Parsimony and Data Reduction - Applications across Multi-Dimensional Electron Microscopy. *Microscopy and Microanalysis*, **2017**, 23, 112-113	0.5	
308	Inter-phase Relationships Revealed in 3-Dimensional Orientation Spaces. *Microscopy and Microanalysis*, **2017**, 23, 202-203	0.5	1
307	Local Layer Stacking and Structural Disorder in Graphene Oxide Studied via Scanning Electron Diffraction.. *Microscopy and Microanalysis*, **2017**, 23, 1754-1755	0.5	1
306	Multi-modal electron tomography for 3D spectroscopic analysis using limited projections **2016**, 9-10		0
305	Phase mapping of 2xxx-series aluminium alloys by scanning precession electron diffraction **2016**, 255-256		
304	STEM imaging of atom dynamics: novel methods for accurate particle tracking **2016**, 505-506		0
303	Structure and topology of chemical vapour deposited graphene by scanning electron diffraction **2016**, 474-475		
302	Scanning electron diffraction of polyethylene **2016**, 692-693		
301	SAMFire - a smart adaptive fitting algorithm for multi-dimensional microscopy **2016**, 95-96		
300	Nanoscale Crystal Cartography using Scanning Electron Diffraction **2016**, 613-614		
299	Magnetic microscopy of metallic meteorites: probing the magnetic state of the early solar system **2016**, 1170-1171		
298	Electron Tomography **2016**, 343-376		4
297	EFTEM **2016**, 377-404		1
296	Coarsening behaviour and interfacial structure of □ precipitates in Co-Al-W based superalloys. *Acta Materialia*, **2016**, 120, 14-23	8.4	55
295	Large-scale ordering of nanoparticles using viscoelastic shear processing. *Nature Communications*, **2016**, 7, 11661	17.4	88
294	Nanometer-scale monitoring of quantum-confined Stark effect and emission efficiency droop in multiple GaN/AlN quantum disks in nanowires. *Physical Review B*, **2016**, 93,	3.3	16

293	Analytical electron tomography. *MRS Bulletin*, **2016**, 41, 531-536	3.2	8
292	Scanning electron diffraction using the pnCCD (S)TEM Camera **2016**, 641-642		
291	A Compressive Sensing based acquisition design for quantitative ultra-low dose high-resolution imaging and spectroscopy in the STEM **2016**, 324-325		1
290	Compressed sensing electron tomography of needle-shaped biological specimens--Potential for improved reconstruction fidelity with reduced dose. *Ultramicroscopy*, **2016**, 160, 230-238	3.1	39
289	Hardness and microstructural variation of Al-Mg-Mn-Sc-Zr alloy. *Micron*, **2016**, 82, 1-8	2.3	17
288	A novel 3D absorption correction method for quantitative EDX-STEM tomography. *Ultramicroscopy*, **2016**, 160, 118-129	3.1	32
287	Crystallographic mapping in engineering alloys by scanning precession electron diffraction **2016**, 211-212		
286	Time-resolved imaging and analysis of single atom diffusion on graphene oxide **2016**, 447-448		
285	In situ observation of heat-induced degradation of perovskite solar cells **2016**, 191-192		
284	Quantitative elemental and bonding EELS tomography of a complex nanoparticle **2016**, 27-28		1
283	Improved Data Analysis and Reconstruction Methods for STEM-EDX Tomography. *Microscopy and Microanalysis*, **2016**, 22, 284-285	0.5	1
282	3D Visualization of the Iron Oxidation State in FeO/Fe3O4 Core-Shell Nanocubes from Electron Energy Loss Tomography. *Nano Letters*, **2016**, 16, 5068-73	11.5	47
281	Design of Highly Selective Platinum Nanoparticle Catalysts for the Aerobic Oxidation of KA-Oil using Continuous-Flow Chemistry. *ChemSusChem*, **2016**, 9, 423-7	8.3	7
280	Practical Implementation of Compressive Sensing for High Resolution STEM. *Microscopy and Microanalysis*, **2016**, 22, 558-559	0.5	7
279	Structural changes in FeOx/Al2O3 catalysts during ethylbenzene dehydrogenation **2016**, 2, 25-32		1
278	Vacuum template synthesis of multifunctional nanotubes with tailored nanostructured walls. *Scientific Reports*, **2016**, 6, 20637	4.9	13
277	Blind source separation aided characterization of the γ′ strengthening phase in an advanced nickel-based superalloy by spectroscopic 4D electron microscopy. *Acta Materialia*, **2016**, 107, 229-238	8.4	16
276	Structural and Optical Properties of Discrete Dendritic Pt Nanoparticles on Colloidal Au Nanoprisms. *Journal of Physical Chemistry C*, **2016**, 120, 20843-20851	3.8	23

275	Multi-scale three-dimensional characterization of iron particles in dusty olivine: Implications for paleomagnetism of chondritic meteorites. *American Mineralogist*, **2016**, 101, 2070-2084	2.9	28
274	Encapsulation for long-term stability enhancement of perovskite solar cells. *Nano Energy*, **2016**, 30, 162-172	12.1	200
273	A New Method for Determining the Composition of Core–Shell Nanoparticles via Dual-EDX+EELS Spectrum Imaging. *Particle and Particle Systems Characterization*, **2016**, 33, 749-755	3.1	3
272	Electron Energy Loss Spectroscopy Investigation into Symmetry in Gold Trimer and Tetramer Plasmonic Nanoparticle Structures. *ACS Nano*, **2016**, 10, 8552-63	16.7	31
271	On the nature of the omega tri-layer periodicity in rapidly cooled Ti-15Mo. *Scripta Materialia*, **2015**, 107, 79-82	5.6	13
270	An endogenous nanomineral chaperones luminal antigen and peptidoglycan to intestinal immune cells. *Nature Nanotechnology*, **2015**, 10, 361-9	28.7	62
269	The rapidly changing face of electron microscopy. *Chemical Physics Letters*, **2015**, 631-632, 103-113	2.5	17
268	Multicomponent signal unmixing from nanoheterostructures: overcoming the traditional challenges of nanoscale X-ray analysis via machine learning. *Nano Letters*, **2015**, 15, 2716-20	11.5	39
267	Eigenmode Tomography of Surface Charge Oscillations of Plasmonic Nanoparticles by Electron Energy Loss Spectroscopy. *ACS Photonics*, **2015**, 2, 1628-1635	6.3	45
266	Scanning precession electron tomography for three-dimensional nanoscale orientation imaging and crystallographic analysis. *Nature Communications*, **2015**, 6, 7267	17.4	62
265	The Dark Side of EDX Tomography: Modeling Detector Shadowing to Aid 3D Elemental Signal Analysis. *Microscopy and Microanalysis*, **2015**, 21, 759-64	0.5	12
264	Precession electron diffraction - a topical review. *IUCrJ*, **2015**, 2, 126-36	4.7	89
263	Three-dimensional Surface Charge Reconstructions of Surface Plasmon Modes of Silver Right Bipyramids. *Microscopy and Microanalysis*, **2015**, 21, 2225-2226	0.5	
262	Resonances of nanoparticles with poor plasmonic metal tips. *Scientific Reports*, **2015**, 5, 17431	4.9	35
261	Overcoming Traditional Challenges in Nano-scale X-ray Characterization Using Independent Component Analysis. *Microscopy and Microanalysis*, **2015**, 21, 1227-1228	0.5	
260	Machine learning as a tool for classifying electron tomographic reconstructions. *Advanced Structural and Chemical Imaging*, **2015**, 1,	3.9	14
259	Multi-Dimensional Machine Learning Aided Analysis of a Nickel-Based Superalloy. *Microscopy and Microanalysis*, **2015**, 21, 2173-2174	0.5	0
258	Focused Ion Beam Nanotomography of Chondritic Meteorites: Closing the Mesoscale Length Gap in Paleomagnetic Studies. *Microscopy and Microanalysis*, **2015**, 21, 2261-2262	0.5	

257	Decomposing Electron Diffraction Signals in Multi-Component Microstructures. *Microscopy and Microanalysis*, **2015**, 21, 1241-1242	0.5	
256	Reduced-dose and high-speed acquisition strategies for multi-dimensional electron microscopy. *Advanced Structural and Chemical Imaging*, **2015**, 1,	3.9	34
255	Enhanced quantification for 3D SEM-EDS: using the full set of available X-ray lines. *Ultramicroscopy*, **2015**, 148, 158-167	3.1	15
254	Laser treatment of Ag@ZnO nanorods as long-life-span SERS surfaces. *ACS Applied Materials & Interfaces*, **2015**, 7, 2331-9	9.5	41
253	Chapter 6:Electron Tomography. *RSC Nanoscience and Nanotechnology*, **2015**, 211-299		1
252	Electron tomography provides a direct link between the Payne effect and the inter-particle spacing of rubber composites. *Scientific Reports*, **2014**, 4, 7389	4.9	15
251	Microstructural analysis of Au/TiO2-SBA-15 nanocomposite. *Microscopy and Microanalysis*, **2014**, 20, 1001-7	0.5	2
250	Multi-dimensional electron microscopy. *Angewandte Chemie - International Edition*, **2014**, 53, 8614-7	16.4	19
249	Exploring the benefits of electron tomography to characterize the precise morphology of core-shell Au@Ag nanoparticles and its implications on their plasmonic properties. *Nanoscale*, **2014** , 6, 12696-702	7.7	13
248	High resolution orientation mapping of secondary phases in ATI 718Plus alloy. *MATEC Web of Conferences*, **2014**, 14, 11002	0.3	
247	Formation of Intergranular M23C6 in Sensitized Type-347 Stainless Steel. *ISIJ International*, **2014**, 54, 148-152	1.7	18
246	Quantitative Electron Tomography of Rubber Composites. *Journal of Physics: Conference Series*, **2014**, 522, 012042	0.3	1
245	Enhanced data generated with electrons (EDGE) special issue introduction. *Microscopy and Microanalysis*, **2014**, 20, 647-8	0.5	
244	Excitation dependent Fano-like interference effects in plasmonic silver nanorods. *Physical Review B*, **2014**, 90,	3.3	25
243	Mehrdimensionale Elektronenmikroskopie. *Angewandte Chemie*, **2014**, 126, 8758-8761	3.6	0
242	On the precipitation of delta phase in ALLVAC 718Plus. *Philosophical Magazine*, **2014**, 94, 1132-1152	1.6	47
241	Plasmon and compositional mapping of plasmonic nanostructures **2014**,		2
240	Surfactant-free coating of thiols on gold nanoparticles using sonochemistry: a study of competing processes. *Ultrasonics Sonochemistry*, **2014**, 21, 1886-92	8.9	6

239	6D electron microscopy: combining real-space and reciprocal-space tomography. *Acta Crystallographica Section A: Foundations and Advances*, **2014**, 70, C368-C368	1.7	2
238	Measurement of molecular motion in organic semiconductors by thermal diffuse electron scattering. *Nature Materials*, **2013**, 12, 1045-9	27	75
237	Nanoscale electron tomography and atomic scale high-resolution electron microscopy of nanoparticles and nanoclusters: A short surveyNanoscale electron tomography and atomic scale high-resolution electron microscopy of nanoparticles and nanoclusters: A short surveyretain-->. *Progress in Natural Science: Materials International*, **2013**, 23, 222-234	3.6	21
236	Three-dimensional imaging of localized surface plasmon resonances of metal nanoparticles. *Nature*, **2013**, 502, 80-4	50.4	370
235	Surface plasmon excitations in metal spheres: Direct comparison of light scattering and electron energy-loss spectroscopy by modal decomposition. *Physical Review B*, **2013**, 87,	3.3	13
234	Compressed sensing electron tomography. *Ultramicroscopy*, **2013**, 131, 70-91	3.1	209
233	Self-assembly of one-pot synthesized CexZr1−xO2–BaO–hAl2O3 nanocomposites promoted by site-selective doping of alumina with barium. *Journal of Materials Chemistry A*, **2013**, 1, 3645	13	10
232	Finite element simulations of electrostatic dopant potentials in thin semiconductor specimens for electron holography. *Ultramicroscopy*, **2013**, 134, 160-6	3.1	19
231	A new approach to the investigation of nanoparticles: electron tomography with compressed sensing. *Journal of Colloid and Interface Science*, **2013**, 392, 7-14	9.3	26
230	Ultrafast electron diffraction pattern simulations using GPU technology. Applications to lattice vibrations. *Ultramicroscopy*, **2013**, 134, 44-7	3.1	13
229	Learning from nature to improve the heat generation of iron-oxide nanoparticles for magnetic hyperthermia applications. *Scientific Reports*, **2013**, 3, 1652	4.9	369
228	Some Turning Points in the Chemical Electron Microscopic Study of Heterogeneous Catalysts. *ChemCatChem*, **2013**, 5, 2560-2579	5.2	19
227	Revealing the Atomic Structure of Intermetallic GaPd2 Nanocatalysts by using Aberration-Corrected Scanning Transmission Electron Microscopy. *ChemCatChem*, **2013**, 5, 2599-2609	5.2	14
226	Controlled 3D-coating of the pores of highly ordered mesoporous antiferromagnetic Co3O4 replicas with ferrimagnetic Fe(x)Co(3-x)O4 nanolayers. *Nanoscale*, **2013**, 5, 5561-7	7.7	12
225	Magnetic structure of individual flux vortices in superconducting MgB2 derived using transmission electron microscopy. *Physical Review B*, **2013**, 87,	3.3	9
224	Poster: Spin-Related Phenomena **2013**, 589-632		
223	Aberration-corrected and energy-filtered precession electron diffraction. *Zeitschrift Fur Kristallographie - Crystalline Materials*, **2013**, 228, 43-50	1	1
222	Low voltage STEM imaging of multi-walled carbon nanotubes. *Micron*, **2012**, 43, 428-34	2.3	8

221	Imaging flux vortices in MgB2 using transmission electron microscopy. *Physica C: Superconductivity and Its Applications*, **2012**, 474, 18-20	1.3	6
220	Refining structures against reflection rank: an alternative metric for electron crystallography. *Acta Crystallographica Section A: Foundations and Advances*, **2012**, 68, 352-8		31
219	Nanoconfinement of Ni clusters towards a high sintering resistance of steam methane reforming catalysts. *Catalysis Science and Technology*, **2012**, 2, 2476	5.5	17
218	Superhydrophobic supported Ag-NPs@ZnO-nanorods with photoactivity in the visible range. *Journal of Materials Chemistry*, **2012**, 22, 1341-1346		34
217	Recent advances in the application of electron tomography to materials chemistry. *Accounts of Chemical Research*, **2012**, 45, 1782-91	24.3	64
216	Precession Electron Diffraction. *Advances in Imaging and Electron Physics*, **2012**, 170, 1-63	0.2	14
215	Direct visualization of symmetry breaking during janus nanoparticle formation. *Small*, **2012**, 8, 2698-703	11	16
214	Electron Tomography in the (S)TEM: From Nanoscale Morphological Analysis to 3D Atomic Imaging. *Annual Review of Materials Research*, **2012**, 42, 59-79	12.8	62
213	Quantitative High-Angle Annular Dark-Field Scanning Transmission Electron Microscope (HAADF-STEM) Tomography and High-Resolution Electron Microscopy of Unsupported Intermetallic GaPd2 Catalysts. *Journal of Physical Chemistry C*, **2012**, 116, 13343-13352	3.8	34
212	NETWORKS OF NANOPARTICLES IN ORGANIC □INORGANIC COMPOSITES: ALGORITHMIC EXTRACTION AND STATISTICAL ANALYSIS. *Image Analysis and Stereology*, **2012**, 31, 27	1	9
211	Electron Tomography **2012**, 253-279		3
210	Quantitative Imaging of Flux Vortices in Superconductors. *Journal of Physics: Conference Series*, **2012**, 391, 012117	0.3	
209	Quantitative HAADF-STEM tomography of unsupported intermetallic Ga-Pd catalysts. *Journal of Physics: Conference Series*, **2012**, 371, 012024	0.3	4
208	Structural Variations of BiMnO3+xRevealed by Electron Diffraction. *Journal of Physics: Conference Series*, **2012**, 371, 012033	0.3	
207	Determination of the Nature of the Structural Phase Transitions in 122 Pnictide Systems. *Journal of Physics: Conference Series*, **2012**, 391, 012134	0.3	
206	STEM Tomography **2011**, 353-392		5
205	The structure of two new non-centrosymmetric phases of oxygen deficient bismuth manganite. *Journal of Materials Chemistry*, **2011**, 21, 15417		9
204	Surface plasmon modes of a single silver nanorod: an electron energy loss study. *Optics Express*, **2011**, 19, 15371-9	3.3	116

203	Morphological study of nanoparticle-polymer solar cells using high-angle annular dark-field electron tomography. *Nano Letters*, **2011**, 11, 904-9	11.5	66
202	Extended ptychography in the transmission electron microscope: possibilities and limitations. *Ultramicroscopy*, **2011**, 111, 1117-23	3.1	38
201	High-angle triple-axis specimen holder for three-dimensional diffraction contrast imaging in transmission electron microscopy. *Ultramicroscopy*, **2011**, 111, 1168-75	3.1	58
200	Formation of M23C6-type precipitates and chromium-depleted zones in austenite stainless steel. *Scripta Materialia*, **2011**, 65, 509-512	5.6	135
199	Three-dimensional morphology of iron oxide nanoparticles with reactive concave surfaces. A compressed sensing-electron tomography (CS-ET) approach. *Nano Letters*, **2011**, 11, 4666-73	11.5	133
198	Advanced Electron Microscopy Investigation of Ceria□irconia-Based Catalysts. *ChemCatChem*, **2011**, 3, 1015-1027	5.2	11
197	Three-dimensional electron backscattered diffraction analysis of deformation in MgO micropillars. *Acta Materialia*, **2011**, 59, 7241-7254	8.4	38
196	The location of gold nanoparticles on titania: A study by high resolution aberration-corrected electron microscopy and 3D electron tomography. *Catalysis Today*, **2011**, 160, 165-169	5.3	36
195	The modern electron microscope: A cornucopia of chemico-physical insights. *Chemical Physics*, **2011** , 385, 1-10	2.3	23
194	Soft plasma processing of organic nanowires: a route for the fabrication of 1D organic heterostructures and the template synthesis of inorganic 1D nanostructures. *Nanoscale*, **2011**, 3, 4554-9	7.7	17
193	Low-temperature thermal decomposition of crystalline partly and completely deuterated ammonium perchlorate. *Chemical Physics Letters*, **2011**, 504, 185-188	2.5	7
192	Materials science. Electronic bonding revealed by electron diffraction. *Science*, **2011**, 331, 1528-9	33.3	17
191	Electron tomography of III-V quantum dots using dark field 002 imaging conditions. *Journal of Microscopy*, **2010**, 237, 148-54	1.9	5
190	Structure determination of the intermediate tin oxide Sn3O4 by precession electron diffraction. *Zeitschrift F□ Kristallographie*, **2010**, 225, 56-66		26
189	Wave-front phase retrieval in transmission electron microscopy via ptychography. *Physical Review B* , **2010**, 82,	3.3	69
188	Determination of the nature of the tetragonal to orthorhombic phase transition in SrFe2As2 by measurement of the local order parameter. *Physical Review B*, **2010**, 81,	3.3	14
187	The absence of charge-density-wave sliding in epitaxial charge-ordered Pr(0.48)Ca(0.52)MnO(3) films. *Journal of Physics Condensed Matter*, **2010**, 22, 275602	1.8	3
186	Using highly accurate 3D nanometrology to model the optical properties of highly irregular nanoparticles: a powerful tool for rational design of plasmonic devices. *Nano Letters*, **2010**, 10, 2097-104	11.5	50

185	Dislocation electron tomography and precession electron diffraction minimising the effects of dynamical interactions in real and reciprocal space. *Philosophical Magazine*, **2010**, 90, 4711-4730	1.6	34
184	Fabrication and characterization of TiN nanocomposite powders fabricated by DC arc-plasma method. *Journal of Alloys and Compounds*, **2010**, 492, 685-690	5.7	10
183	Site-selective dopant profiling of p-n junction specimens in the dual-beam FIB/SEM system. *Journal of Physics: Conference Series*, **2010**, 209, 012069	0.3	4
182	Obstacles and optimisation in weak-beam dark-field tomography of defects. *Journal of Physics: Conference Series*, **2010**, 241, 012007	0.3	1
181	A practical approach to test the scope of FIB-SEM 3D reconstruction. *Journal of Physics: Conference Series*, **2010**, 241, 012081	0.3	6
180	Reconstruction strategies for structure solution using precession electron diffraction data from hybrid inorganic-organic framework materials. *Journal of Physics: Conference Series*, **2010**, 241, 012025	0.3	1
179	Three-dimensional analysis of BaZrO3 pinning centers gives isotropic superconductivity in GdBa2Cu3O7 *Journal of Applied Physics*, **2010**, 108, 063901	2.5	23
178	Is precession electron diffraction kinematical? Part II A practical method to determine the optimum precession angle. *Ultramicroscopy*, **2010**, 110, 771-7	3.1	24
177	Is precession electron diffraction kinematical? Part I: "Phase-scrambling" multislice simulations. *Ultramicroscopy*, **2010**, 110, 763-70	3.1	32
176	Cs corrected STEM EELS: Analysing beam sensitive carbon nanomaterials in cellular structures. *Ultramicroscopy*, **2010**, 110, 946-51	3.1	2
175	Towards Routine Structure Solution using Precession Electron Diffraction. *Microscopy and Microanalysis*, **2009**, 15, 738-739	0.5	
174	Nanostructural characterization and catalytic analysis of hybridized platinum/phthalocyanine nanocomposites. *Microscopy (Oxford, England)*, **2009**, 58, 289-94	1.3	5
173	3 D characterization of gold nanoparticles supported on heavy metal oxide catalysts by HAADF-STEM electron tomography. *Angewandte Chemie - International Edition*, **2009**, 48, 5313-5	16.4	70
172	Imaging flux vortices in type II superconductors with a commercial transmission electron microscope. *Ultramicroscopy*, **2009**, 109, 700-29	3.1	7
171	Toxicity and imaging of multi-walled carbon nanotubes in human macrophage cells. *Biomaterials*, **2009**, 30, 4152-60	15.6	174
170	Microstructure and Solidification Sequence of the Interdendritic Region in a Third Generation Single-Crystal Nickel-Base Superalloy. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2009**, 40, 1660-1669	2.3	43
169	Symmetry-modified charge flipping. *Acta Crystallographica Section A: Foundations and Advances*, **2009**, 65, 120-7		15
168	Quantitative off-axis electron holography of GaAs p-n junctions prepared by focused ion beam milling. *Journal of Microscopy*, **2009**, 233, 102-13	1.9	25

167	Electron tomography and holography in materials science. *Nature Materials*, **2009**, 8, 271-80	27	669
166	Fabrication and characterization of TiN-Ag nano-dice. *Micron*, **2009**, 40, 308-12	2.3	20
165	3D imaging of nanomaterials by discrete tomography. *Ultramicroscopy*, **2009**, 109, 730-40	3.1	230
164	Visualization of the three-dimensional microstructure of TiO2 nanotubes by electron tomography. *Catalysis Today*, **2009**, 143, 225-229	5.3	21
163	Scanning Transmission Electron Microscopy Investigation of Differences in the High Temperature Redox Deactivation Behavior of CePrOx Particles Supported on Modified Alumina. *Chemistry of Materials*, **2009**, 21, 1035-1045	9.6	17
162	Single-step process to prepare CeO2 nanotubes with improved catalytic activity. *Nano Letters*, **2009**, 9, 1395-400	11.5	108
161	Uptake of noncytotoxic acid-treated single-walled carbon nanotubes into the cytoplasm of human macrophage cells. *ACS Nano*, **2009**, 3, 1485-92	16.7	121
160	Morphology of SBA-15-directed by association processes and surface energies. *Physical Chemistry Chemical Physics*, **2009**, 11, 10973-82	3.6	34
159	Large dielectric response to the paramagnetic-ferromagnetic transition (TC~100 K) in multiferroic BiMnO3 epitaxial thin films. *Physical Review B*, **2009**, 79,	3.3	29
158	Developments in Techniques and Algorithms for Materials-Based Electron Tomography. *Microscopy and Microanalysis*, **2009**, 15, 40-41	0.5	
157	Toward three-dimensional nanoengineering of heterogeneous catalysts. *Journal of the American Chemical Society*, **2008**, 130, 5716-9	16.4	58
156	Dislocation tomography made easy: a reconstruction from ADF STEM images obtained using automated image shift correction. *Journal of Physics: Conference Series*, **2008**, 126, 012013	0.3	32
155	Very weak electron-phonon coupling and strong strain coupling in manganites. *Physical Review B*, **2008**, 78,	3.3	14
154	Limited local electron-lattice coupling in manganites: An electron diffraction study. *Physical Review B*, **2008**, 77,	3.3	8
153	3D characterization and metrology of nanostructures by electron tomography. *Microscopy and Microanalysis*, **2008**, 14, 284-285	0.5	1
152	Electron tomography using compositional-sensitive diffraction contrast for 3D characterization of self-assembled semiconductor quantum dots. *Microscopy and Microanalysis*, **2008**, 14, 1052-1053	0.5	
151	3-D characterization of CdSe nanoparticles attached to carbon nanotubes. *Nano Research*, **2008**, 1, 89-97	10	37
150	The frontiers of microscopy. *Materials Today*, **2008**, 11, 8-11	21.8	10

149	Mapping the electrical properties of semiconductor junctions--the electron holographic approach. *Scanning*, **2008**, 30, 299-309	1.6	7
148	Electron Tomography Imaging and Analysis of □ and □Domains in Ni-based Superalloys. *Advanced Materials*, **2008**, 20, 1905-1909	24	27
147	Low-temperature thermal decomposition of large single crystals of ammonium perchlorate. *Chemical Physics Letters*, **2008**, 454, 233-236	2.5	13
146	TEM characterization of Ge precipitates in an Al-1.6at% Ge alloy. *Ultramicroscopy*, **2008**, 108, 210-20	3.1	47
145	Quantitative electron holographic tomography for the 3D characterisation of semiconductor device structures. *Ultramicroscopy*, **2008**, 108, 1401-7	3.1	40
144	3□ Characterisation of the Electrostatic Potential in an Electrically Biased Silicon Device. *Springer Proceedings in Physics*, **2008**, 379-382	0.2	
143	Dopant Profiling in the TEM: Progress Towards Quantitative Electron Holography. *Springer Proceedings in Physics*, **2008**, 391-394	0.2	
142	Advanced Focused Ion Beam Specimen Preparation for Examination by Off-Axis Electron Holography. *Springer Proceedings in Physics*, **2008**, 441-444	0.2	
141	Critical Thickness for Semiconductor Specimens Prepared using Focused Ion Beam Milling. *Springer Proceedings in Physics*, **2008**, 446-448	0.2	
140	Structure solution of intermediate tin oxide, SnO2□, by electron precession **2008**, 235-236		
139	□Phase-scrambling□multislice simulations of precession electron diffraction **2008**, 237-238		
138	STEM electron tomography of gold nanostructures **2008**, 311-312		1
137	Precession electron diffraction: application to organic crystals and hybrid inorganic-organic materials **2008**, 177-178		
136	Towards a quantitative understanding of precession electron diffraction **2008**, 189-190		
135	APPLICATIONS OF ELECTRON TOMOGRAPHY **2008**, 335-372		3
134	High-Resolution Three-Dimensional Mapping of Semiconductor Dopant Potentials. *Nano Letters*, **2007**, 7, 2020-2023	11.5	65
133	Visualizing the uptake of C60 to the cytoplasm and nucleus of human monocyte-derived macrophage cells using energy-filtered transmission electron microscopy and electron tomography. *Environmental Science & Technology*, **2007**, 41, 3012-7	10.3	101
132	Structure□Activity Relationship in Nanostructured Copper□Ceria-Based Preferential CO Oxidation Catalysts. *Journal of Physical Chemistry C*, **2007**, 111, 11026-11038	3.8	266

131	Impedance spectroscopy of epitaxial multiferroic thin films. *Physical Review B*, **2007**, 75,	3.3	110
130	Structural and morphological characterization of cerium oxide nanocrystals prepared by hydrothermal synthesis. *Nano Letters*, **2007**, 7, 421-5	11.5	203
129	Surface Structure, Hydration, and Cationic Sites of Nanohydroxyapatite: UHR-TEM, IR, and Microgravimetric Studies. *Journal of Physical Chemistry C*, **2007**, 111, 4027-4035	3.8	99
128	Bimetallic Ru-Sn nanoparticle catalysts for the solvent-free selective hydrogenation of 1,5,9-cyclododecatriene to cyclododecene. *Angewandte Chemie - International Edition*, **2007**, 46, 8182-5	16.4	76
127	Incorporation of platinum nanoparticles in ordered mesoporous carbon. *Journal of Colloid and Interface Science*, **2007**, 305, 204-8	9.3	31
126	Direct imaging of single-walled carbon nanotubes in cells. *Nature Nanotechnology*, **2007**, 2, 713-7	28.7	476
125	Bimetallic Cluster Provides a Higher Activity Electrocatalyst for Methanol Oxidation. *Journal of Cluster Science*, **2007**, 18, 121-130	3	24
124	The influence of electron irradiation on electron holography of focused ion beam milled GaAs p-n junctions. *Journal of Applied Physics*, **2007**, 101, 094508	2.5	28
123	Nanotomography in the chemical, biological and materials sciences. *Chemical Society Reviews*, **2007**, 36, 1477-94	58.5	181
122	Three-Dimensional Nanoparticle Distribution and Local Curvature of Heterogeneous Catalysts Revealed by Electron Tomography. *Journal of Physical Chemistry C*, **2007**, 111, 11501-11505	3.8	60
121	Structural Surface Investigations of Cerium□irconium Mixed Oxide Nanocrystals with Enhanced Reducibility. *Journal of Physical Chemistry C*, **2007**, 111, 9001-9004	3.8	33
120	Uptake of C60 by human monocyte macrophages, its localization and implications for toxicity: studied by high resolution electron microscopy and electron tomography. *Acta Biomaterialia*, **2006**, 2, 409-19	10.8	137
119	Highly anisotropic distribution of iron nanoparticles within MCM-41 Mesoporous Silica. *Micron*, **2006**, 37, 52-6	2.3	29
118	Nanoscale analysis of three-dimensional structures by electron tomography. *Scripta Materialia*, **2006**, 55, 29-33	5.6	59
117	Single-step conversion of dimethyl terephthalate into cyclohexanedimethanol with Ru5PtSn, a trimetallic nanoparticle catalyst. *Angewandte Chemie - International Edition*, **2006**, 45, 4782-5	16.4	138
116	Single-Step Conversion of Dimethyl Terephthalate into Cyclohexanedimethanol with Ru5PtSn, a Trimetallic Nanoparticle Catalyst. *Angewandte Chemie*, **2006**, 118, 4900-4903	3.6	15
115	Local study of the magnetism of Co-doped ZnO thin films. *Journal Physics D: Applied Physics*, **2006**, 39, 1739-1742	3	8
114	Comparison of the ferromagnetic phase transitions in La0.7Ca0.3MnO3 and single crystal nickel by micromagnetic imaging. *Philosophical Magazine*, **2006**, 86, 2941-2956	1.6	2

113	Three-dimensional analysis of dislocation networks in GaN using weak-beam dark-field electron tomography. *Philosophical Magazine*, **2006**, 86, 4901-4922	1.6	44
112	Comparison of off-axis and in-line electron holography as quantitative dopant-profiling techniques. *Philosophical Magazine*, **2006**, 86, 5805-5823	1.6	18
111	Improvement in electron holographic phase images of focused-ion-beam-milled GaAs and Si p-n junctions by in situ annealing. *Applied Physics Letters*, **2006**, 88, 063510	3.4	56
110	Weak-beam dark-field electron tomography of dislocations in GaN. *Journal of Physics: Conference Series*, **2006**, 26, 247-250	0.3	16
109	Electron tomography of Pt nanocatalyst particles and their carbon support. *Journal of Physics: Conference Series*, **2006**, 26, 203-206	0.3	8
108	Strain control of superlattice implies weak charge-lattice coupling in La0.5Ca0.5MnO3. *Physical Review B*, **2006**, 73,	3.3	26
107	Micromagnetic imaging to determine the nature of the ferromagnetic phase transition in La(0.7)Ca(0.3)MnO3. *Physical Review Letters*, **2006**, 96, 027214	7.4	23
106	Four-dimensional spectral tomography of carbonaceous nanocomposites. *Nano Letters*, **2006**, 6, 376-9	11.5	104
105	Improved CO oxidation activity in the presence and absence of hydrogen over cluster-derived PtFe/SiO2 catalysts. *Langmuir*, **2006**, 22, 5160-7	4	63
104	A novel dual-axis iterative algorithm for electron tomography. *Journal of Structural Biology*, **2006**, 153, 55-63	3.4	60
103	Nano-metrology of platinum-ruthenium bimetallic catalysts and the cluster-to-crystal transformation. *Journal of Physics: Conference Series*, **2006**, 26, 207-210	0.3	3
102	High Resolution STEM Tomography of Nanomaterials. *Microscopy and Microanalysis*, **2006**, 12, 1548-1549	0.5	
101	Three-dimensional electrostatic potential of a Sip-njunction revealed using tomographic electron holography. *Journal of Physics: Conference Series*, **2006**, 26, 29-32	0.3	9
100	A novel dual-axis reconstruction algorithm for electron tomography. *Journal of Physics: Conference Series*, **2006**, 26, 33-36	0.3	6
99	Crystal size and shape analysis of Pt nanoparticles in two and three dimensions. *Journal of Physics: Conference Series*, **2006**, 26, 367-370	0.3	15
98	Nitrogen in highly crystalline carbon nanotubes. *Journal of Physics: Conference Series*, **2006**, 26, 199-202	0.3	2
97	Crystallographic order in multi-walled carbon nanotubes synthesized in the presence of nitrogen. *Small*, **2006**, 2, 774-84	11	43
96	Nanoscale scanning transmission electron tomography. *Journal of Microscopy*, **2006**, 223, 185-90	1.9	39

95	Severe local strain and the plastic deformation of Guinier□Preston zones in the Al□Ag system revealed by three-dimensional electron tomography. *Acta Materialia*, **2006**, 54, 2957-2963	8.4	31
94	Characterization of the magnetic properties of a GdBa2Cu3O7/La0.75Sr0.25MnO3 superlattice using off-axis electron holography. *Applied Surface Science*, **2006**, 252, 3977-3983	6.7	6
93	Three-dimensional real-space crystallography of MCM-48 mesoporous silica revealed by scanning transmission electron tomography. *Chemical Physics Letters*, **2006**, 418, 540-543	2.5	46
92	As□As dimerization, Fermi surfaces and the anomalous electrical transport properties of UAsSe and ThAsSe. *Journal of Solid State Chemistry*, **2006**, 179, 2190-2198	3.3	5
91	Reducing the missing wedge: High-resolution dual axis tomography of inorganic materials. *Ultramicroscopy*, **2006**, 106, 994-1000	3.1	133
90	High-resolution three-dimensional imaging of dislocations. *Science*, **2006**, 313, 319	33.3	121
89	On the microstructure of the charge density wave observed in La1□x Ca x MnO3. *Philosophical Magazine*, **2005**, 85, 999-1015	1.6	16
88	Room temperature ferromagnetism in bulk Mn-Doped Cu2O. *Applied Physics Letters*, **2005**, 86, 072514	3.4	108
87	Direct visualisation, by aberration-corrected electron microscopy, of the crystallisation of bimetallic nanoparticle catalysts. *Chemical Communications*, **2005**, 5805-7	5.8	18
86	Real-space imaging of coexisting charge-ordered and monoclinic phases in La1□CaxMnO3 (x=0.67 and 0.71). *Physical Review B*, **2005**, 71,	3.3	15
85	Electronic structure of tin oxides by electron energy loss spectroscopy and real-space multiple scattering calculations. *Physical Review B*, **2005**, 71,	3.3	34
84	Advances in High Resolution Elemental Analysis Using Image-Spectroscopy **2005**, 163-168		
83	Off-axis electron holography of unbiased and reverse-biased focused ion beam milled Si p-n junctions. *Microscopy and Microanalysis*, **2005**, 11, 66-78	0.5	31
82	Conventional and back-side focused ion beam milling for off-axis electron holography of electrostatic potentials in transistors. *Ultramicroscopy*, **2005**, 103, 67-81	3.1	39
81	Embedded nanostructures revealed in three dimensions. *Science*, **2005**, 309, 2195-8	33.3	151
80	Resputtering and morphological changes of Au nanoparticles in nanocomposites as a function of the deposition conditions of the oxide capping layer. *Nanotechnology*, **2005**, 16, 718-723	3.4	17
79	Crystal structure of the superconducting layered cobaltate NaxCoO2□yD2O. *Journal of Physics Condensed Matter*, **2005**, 17, 3293-3304	1.8	13
78	Weak charge-lattice coupling requires reinterpretation of stripes of charge order in La1-xCaxMnO3. *Physical Review Letters*, **2005**, 94, 097202	7.4	108

77	Titanium fullerenoid oxides. *Applied Physics Letters*, **2005**, 87, 201906	3.4	12
76	Tomography Using the Transmission Electron Microscope **2005**, 601-627		2
75	Towards quantitative electron holography of electrostatic potentials in doped semiconductors **2005**, 225-228		
74	Three-dimensional analysis of the dopant potential of a silicon p-n junction by holographic tomography **2005**, 229-232		
73	Off-axis electron holography of focused ion beam milled GaAs and Si p-n junctions. *Springer Proceedings in Physics*, **2005**, 221-224	0.2	
72	Electron holography of doped semiconductors: when does it work and is it quantitative? **2005**, 203-212		1
71	Quantitative electron holography of biased semiconductor devices. *Journal of Physics Condensed Matter*, **2004**, 16, S181-S192	1.8	16
70	Differentiation of tin oxides using electron energy-loss spectroscopy. *Physical Review B*, **2004**, 69,	3.3	60
69	STEM Electron Tomography for Nanoscale Materials Science. *Microscopy and Microanalysis*, **2004**, 10, 148-149	0.5	4
68	Ruthenium-coated ruthenium oxide nanorods. *Applied Physics Letters*, **2004**, 85, 5385-5387	3.4	14
67	Growth and Overgrowth of Ge/Si Quantum Dots: An Observation by Atomic Resolution HAADF-STEM Imaging. *Materials Research Society Symposia Proceedings*, **2004**, 832, 221		1
66	Simulations of the electrostatic potential in a thin silicon specimen containing a p-n junction. *Materials Research Society Symposia Proceedings*, **2004**, 839, 60		3
65	An Ultra-High-Tilt Two-Contact Electrical Biasing Specimen Holder for Electron Holography and Electron Tomography of Semiconductor Devices. *Microscopy and Microanalysis*, **2004**, 10, 1012-1013	0.5	4
64	Zinc Vanadates in Vanadium Oxide-Doped Zinc Oxide Varistors. *Journal of the American Ceramic Society*, **2004**, 84, 435-41	3.8	15
63	Off-axis electron holography of electrostatic potentials in unbiased and reverse biased focused ion beam milled semiconductor devices. *Journal of Microscopy*, **2004**, 214, 287-96	1.9	39
62	Direct evidence of phase coexistence in La0.5Ca0.5MnO3. *Journal of Magnetism and Magnetic Materials*, **2004**, 272-276, 13-14	2.8	6
61	Electron tomography. *Materials Today*, **2004**, 7, 32-40	21.8	386
60	The chemical application of high-resolution electron tomography: bright field or dark field?. *Angewandte Chemie - International Edition*, **2004**, 43, 6745-7	16.4	57

59	The Chemical Application of High-Resolution Electron Tomography: Bright Field or Dark Field?. *Angewandte Chemie*, **2004**, 116, 6913-6915	3.6	18
58	High-Resolution Scanning Transmission Electron Tomography and Elemental Analysis of Zeptogram Quantities of Heterogeneous Catalyst. *Journal of Physical Chemistry B*, **2004**, 108, 4590-4592	3.4	53
57	High-resolution transmission electron microscopy: the ultimate nanoanalytical technique. *Chemical Communications*, **2004**, 1253-67	5.8	64
56	Analyzing the 3-D Structural Properties of Quantum Dots. *Microscopy and Microanalysis*, **2004**, 10, 1192-1193		6
55	Structural Elucidation of Pt-Ru Heterogeneous Catalysts by Electron Tomography. *Microscopy and Microanalysis*, **2004**, 10, 34-35	0.5	8
54	Examining the Possibilities and Pitfalls of Three Dimensional Energy Filtered Transmission Electron Microscopy (3D-EFTEM). *Microscopy and Microanalysis*, **2003**, 9, 148-149	0.5	4
53	3-D Analysis of Nanomaterials using Electron Tomography. *Microscopy and Microanalysis*, **2003**, 9, 4-5	0.5	1
52	Energy Filtered Transmission Electron Microscopy (EFTEM) and the use of Image-Spectroscopy. *Microscopy and Microanalysis*, **2003**, 9, 1574-1575	0.5	1
51	Z-contrast HAADF-STEM Tomography. *Microscopy and Microanalysis*, **2003**, 9, 178-179	0.5	2
50	High-Performance Nanocatalysts for Single-Step Hydrogenations. *ChemInform*, **2003**, 34, no		2
49	3D electron microscopy in the physical sciences: the development of Z-contrast and EFTEM tomography. *Ultramicroscopy*, **2003**, 96, 413-31	3.1	863
48	High-performance nanocatalysts for single-step hydrogenations. *Accounts of Chemical Research*, **2003**, 36, 20-30	24.3	515
47	Extending energy-filtered transmission electron microscopy (EFTEM) into three dimensions using electron tomography. *Microscopy and Microanalysis*, **2003**, 9, 542-55	0.5	59
46	The Determination and Interpretation of Electrically Active Charge Density Profiles at Reverse Biased p-n Junctions from Electron Holograms. *Microscopy and Microanalysis*, **2002**, 8, 42-43	0.5	1
45	Quantitative Examination of Reverse-Biased Semiconductor Devices using Off- Axis Electron Holography. *Microscopy and Microanalysis*, **2002**, 8, 518-519	0.5	0
44	Probing the Spatial Distribution and Morphology of Supported Nanoparticles Using Rutherford-Scattered Electron Imaging. *Angewandte Chemie*, **2002**, 114, 3958-3961	3.6	3
43	Probing the spatial distribution and morphology of supported nanoparticles using rutherford-scattered electron imaging. *Angewandte Chemie - International Edition*, **2002**, 41, 3804-7	16.4	16
42	Measurement of magnetic domain wall width using energy-filtered Fresnel images. *Journal of Microscopy*, **2002**, 207, 118-28	1.9	16

41	Charge-ordered ferromagnetic phase in La(0.5)Ca(0.5)MnO3. *Nature*, **2002**, 420, 797-800	50.4	260
40	An Introduction to Energy-Filtered Transmission Electron Microscopy. *Topics in Catalysis*, **2002**, 21, 109-128	2.8	32
39	Quantitative electron holography of biased semiconductor devices. *Physical Review Letters*, **2002**, 88, 238302	7.4	141
38	Image-spectroscopy--I. The advantages of increased spectral information for compositional EFTEM analysis. *Ultramicroscopy*, **2001**, 88, 179-86	3.1	55
37	Image-spectroscopy--II. The removal of plural scattering from extended energy-filtered series by Fourier deconvolution. *Ultramicroscopy*, **2001**, 88, 187-94	3.1	31
36	An introduction to off-axis electron holography. *Micron*, **2001**, 32, 167-84	2.3	90
35	Magnetic domain-wall width in La0.7Ca0.3MnO3 thin films measured using Fresnel imaging. *Physical Review B*, **2001**, 64,	3.3	34
34	Magnetite morphology and life on Mars. *Proceedings of the National Academy of Sciences of the United States of America*, **2001**, 98, 13490-5	11.5	133
33	Z-Contrast tomography: a technique inthree-dimensional nanostructural analysis based on Rutherfordscattering. *Chemical Communications*, **2001**, 907-908	5.8	207
32	Electron Tomography of Nanoparticle Catalysts on Porous Supports:A New Technique Based on Rutherford Scattering. *Journal of Physical Chemistry B*, **2001**, 105, 7882-7886	3.4	107
31	Three Dimensional Energy Filtered Transmission Electron Microscopy (3D-EFTEM). *Microscopy and Microanalysis*, **2001**, 7, 1162-1163	0.5	3
30	High Angle Annular Dark Field (HAADF) STEM Tomography of Nanostructured Catalysts. *Microscopy and Microanalysis*, **2001**, 7, 1104-1105	0.5	1
29	X-Ray Mapping of Bimetallic Catalysts in Mesoporous Silica. *Microscopy and Microanalysis*, **1999**, 5, 622-623	0.5	
28	Image-Spectroscopy: New Developments and Applications. *Microscopy and Microanalysis*, **1999**, 5, 618-619	0.5	2
27	A simple new method to obtain high angular resolution patterns. *Ultramicroscopy*, **1999**, 76, 91-96	3.1	36
26	Quantitative zone-axis convergent-beam electron diffraction (CBED) studies of metals. I. Structure-factor measurements. *Acta Crystallographica Section A: Foundations and Advances*, **1999**, 55, 471-479		19
25	Quantitative zone-axis convergent-beam electron diffraction (CBED) studies of metals. II. Debye-Waller-factor measurements. *Acta Crystallographica Section A: Foundations and Advances*, **1999**, 55, 480-488		13
24	High-resolution imaging of nanoparticle bimetallic catalysts supported on mesoporous silica. *Catalysis Letters*, **1999**, 60, 113-120	2.8	48

23	Measurement of three-dimensional intensity data in electron diffraction by the precession technique. *Ultramicroscopy*, **1998**, 74, 147-157	3.1	36
22	Measurement of Debye□Waller factors by electron precession. *Ultramicroscopy*, **1998**, 75, 61-67	3.1	23
21	Debye-Waller Factor Measurements by Quantitative Convergent Beam Electron Diffraction (CBED). *Microscopy and Microanalysis*, **1997**, 3, 1011-1012	0.5	
20	Quantitative Convergent Beam Electron Diffraction (CBED) Measurements of Low-Order Structure Factors in Nickel. *Microscopy and Microanalysis*, **1997**, 3, 1013-1014	0.5	
19	Quantitative electron diffraction: From atoms to bonds. *Contemporary Physics*, **1996**, 37, 441-456	3.3	22
18	The Structure of a Metastable Au□n Phase Determined by Convergent Beam Electron Diffraction. *Journal of Solid State Chemistry*, **1996**, 124, 132-142	3.3	14
17	The use of Bethe potentials in zone-axis CBED pattern matching. *Ultramicroscopy*, **1996**, 65, 45-52	3.1	16
16	Comment on "Flux Quantization in Magnetic Nanowires Imaged by Electron Holography". *Physical Review Letters*, **1996**, 77, 977	7.4	3
15	Energy-filtered convergent-beam diffraction: examples and future prospects. *Ultramicroscopy*, **1995**, 59, 1-13	3.1	19
14	Single-crystal magnetic metal films on GaAs grown by electrodeposition. *Applied Physics Letters*, **1995**, 67, 1316-1318	3.4	24
13	Coherent electron diffraction and holography **1995**, 277-286		
12	Double conical beam-rocking system for measurement of integrated electron diffraction intensities. *Ultramicroscopy*, **1994**, 53, 271-282	3.1	558
11	Application of High Spatial Resolution Electron Diffraction Techniques to the Study of Local Properties of Crystalline Solids. *Materials Research Society Symposia Proceedings*, **1994**, 332, 129		
10	Observation of Hexatic Vortex Glass in Al-Doped YBa2Cu3O7-xSingle Crystals. *Japanese Journal of Applied Physics*, **1993**, 32, L990-L993	1.4	6
9	Superconductivity and the incommensurate structural modulation in the heavy fermion UPt3. *Physical Review Letters*, **1993**, 70, 678-681	7.4	74
8	Coherent overlapping LACBED patterns in 6H SiC. *Ultramicroscopy*, **1993**, 50, 365-376	3.1	10
7	{110} twinning in YBa2Cu3O7-x. *Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties*, **1992**, 66, 237-256		5
6	Direct observation of the flux line lattice in Al-doped YBa2Cu3O7□*Physica C: Superconductivity and Its Applications*, **1992**, 199, 73-83	1.3	9

5	Characteristics of mixed phase superconductivity in oxygenated La2CuO4+ *Physica C: Superconductivity and Its Applications*, **1991**, 173, 9-24	1.3	70
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