

Sandra Van Aert

List of Publications by Year in descending order

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164
papers

6,918
citations

66343

42
h-index

62596

80
g-index

186
all docs

186
docs citations

186
times ranked

7904
citing authors

#	ARTICLE	IF	CITATIONS
1	Highly Emissive Divalent-Ion-Doped Colloidal CsPb _{1-x} M _x Br ₃ Perovskite Nanocrystals through Cation Exchange. <i>Journal of the American Chemical Society</i> , 2017, 139, 4087-4097.	13.7	590
2	Three-dimensional atomic imaging of crystalline nanoparticles. <i>Nature</i> , 2011, 470, 374-377.	27.8	503
3	Electronically coupled complementary interfaces between perovskite band insulators. <i>Nature Materials</i> , 2006, 5, 556-560.	27.5	325
4	Controlled lateral anisotropy in correlated manganite heterostructures by interface-engineered oxygen octahedral coupling. <i>Nature Materials</i> , 2016, 15, 425-431.	27.5	292
5	Smart Align—a new tool for robust non-rigid registration of scanning microscope data. <i>Advanced Structural and Chemical Imaging</i> , 2015, 1, .	4.0	290
6	Direct Observation of Ferrielectricity at Ferroelastic Domain Boundaries in CaTiO ₃ by Electron Microscopy. <i>Advanced Materials</i> , 2012, 24, 523-527.	21.0	225
7	In situ study of the formation mechanism of two-dimensional superlattices from PbSe nanocrystals. <i>Nature Materials</i> , 2016, 15, 1248-1254.	27.5	199
8	Quantitative atomic resolution mapping using high-angle annular dark field scanning transmission electron microscopy. <i>Ultramicroscopy</i> , 2009, 109, 1236-1244.	1.9	195
9	Model based quantification of EELS spectra. <i>Ultramicroscopy</i> , 2004, 101, 207-224.	1.9	174
10	StatSTEM: An efficient approach for accurate and precise model-based quantification of atomic resolution electron microscopy images. <i>Ultramicroscopy</i> , 2016, 171, 104-116.	1.9	170
11	Three-Dimensional Atomic Imaging of Colloidal Core-Shell Nanocrystals. <i>Nano Letters</i> , 2011, 11, 3420-3424.	9.1	134
12	Procedure to count atoms with trustworthy single-atom sensitivity. <i>Physical Review B</i> , 2013, 87, .	3.2	121
13	Advanced Electron Microscopy for Advanced Materials. <i>Advanced Materials</i> , 2012, 24, 5655-5675.	21.0	115
14	Measuring Lattice Strain in Three Dimensions through Electron Microscopy. <i>Nano Letters</i> , 2015, 15, 6996-7001.	9.1	110
15	Monitoring oxygen production on mass-selected iridium-tantalum oxide electrocatalysts. <i>Nature Energy</i> , 2022, 7, 55-64.	39.5	108
16	Optimized fabrication of high-quality La _{0.67} Sr _{0.33} MnO ₃ thin films considering all essential characteristics. <i>Journal Physics D: Applied Physics</i> , 2011, 44, 205001.	2.8	105
17	Atomic scale dynamics of ultrasmall germanium clusters. <i>Nature Communications</i> , 2012, 3, 897.	12.8	101
18	Three-Dimensional Elemental Mapping at the Atomic Scale in Bimetallic Nanocrystals. <i>Nano Letters</i> , 2013, 13, 4236-4241.	9.1	101

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19	Maximum likelihood estimation of structure parameters from high resolution electron microscopy images. Part I: A theoretical framework. Ultramicroscopy, 2005, 104, 83-106.	1.9	98
20	Atom counting in HAADF STEM using a statistical model-based approach: Methodology, possibilities, and inherent limitations. Ultramicroscopy, 2013, 134, 23-33.	1.9	95
21	Three-Dimensional Quantification of the Facet Evolution of Pt Nanoparticles in a Variable Gaseous Environment. Nano Letters, 2019, 19, 477-481.	9.1	93
22	Defect Engineering in Oxide Heterostructures by Enhanced Oxygen Surface Exchange. Advanced Functional Materials, 2013, 23, 5240-5248.	14.9	88
23	Statistical Estimation of Atomic Positions from Exit Wave Reconstruction with a Precision in the Picometer Range. Physical Review Letters, 2006, 96, 096106.	7.8	82
24	Quantitative composition determination at the atomic level using model-based high-angle annular dark field scanning transmission electron microscopy. Ultramicroscopy, 2014, 137, 12-19.	1.9	82
25	Incommensurate Modulation and Luminescence in the $\text{CaGd}_2(1-x)\text{Eu}_2x(\text{MoO}_4)_4(1-y)\text{WO}_4y$ ($0 \leq x \leq 1, 0 \leq y \leq 1$) Red Phosphors. Chemistry of Materials, 2013, 25, 4387-4395.	3.9	79
26	Resolution of coherent and incoherent imaging systems reconsidered - Classical criteria and a statistical alternative. Optics Express, 2006, 14, 3830.	3.4	75
27	Correction of non-linear thickness effects in HAADF STEM electron tomography. Ultramicroscopy, 2012, 116, 8-12.	1.9	75
28	Direct Observation of Ferroelectric Domain Walls in LiNbO_3 : Wall Meanders, Kinks, and Local Electric Charges. Advanced Functional Materials, 2016, 26, 7599-7604.	14.9	72
29	Berry phase engineering at oxide interfaces. Physical Review Research, 2020, 2, .	3.6	64
30	Maximum likelihood estimation of structure parameters from high resolution electron microscopy images. Part II: A practical example. Ultramicroscopy, 2005, 104, 107-125.	1.9	62
31	Thickness Dependent Properties in Oxide Heterostructures Driven by Structurally Induced Metal-Oxygen Hybridization Variations. Advanced Functional Materials, 2017, 27, 1606717.	14.9	61
32	Metal-insulator-transition engineering by modulation tilt-control in perovskite nickelates for room temperature optical switching. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 9515-9520.	7.1	56
33	High-resolution electron microscopy and electron tomography: resolution versus precision. Journal of Structural Biology, 2002, 138, 21-33.	2.8	54
34	Optimal experimental design of STEM measurement of atom column positions. Ultramicroscopy, 2002, 90, 273-289.	1.9	51
35	Progress and new advances in simulating electron microscopy datasets using MULTEM. Ultramicroscopy, 2016, 168, 17-27.	1.9	51
36	Estimation of unknown structure parameters from high-resolution (S)TEM images: What are the limits?. Ultramicroscopy, 2013, 134, 34-43.	1.9	49

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37	Dose limited reliability of quantitative annular dark field scanning transmission electron microscopy for nano-particle atom-counting. <i>Ultramicroscopy</i> , 2015, 151, 56-61.	1.9	47
38	Unscrambling Mixed Elements using High Angle Annular Dark Field Scanning Transmission Electron Microscopy. <i>Physical Review Letters</i> , 2016, 116, 246101.	7.8	45
39	Ligand-Induced Shape Transformation of PbSe Nanocrystals. <i>Chemistry of Materials</i> , 2017, 29, 4122-4128.	6.7	45
40	Alloy CsCd _x Pb _{1-x} Br ₃ Perovskite Nanocrystals: The Role of Surface Passivation in Preserving Composition and Blue Emission. <i>Chemistry of Materials</i> , 2020, 32, 10641-10652.	6.7	45
41	Three-dimensional atomic models from a single projection using Z-contrast imaging: verification by electron tomography and opportunities. <i>Nanoscale</i> , 2017, 9, 8791-8798.	5.6	44
42	Optimal experimental design for nano-particle atom-counting from high-resolution STEM images. <i>Ultramicroscopy</i> , 2015, 151, 46-55.	1.9	42
43	Is atomic resolution transmission electron microscopy able to resolve and refine amorphous structures?. <i>Ultramicroscopy</i> , 2003, 98, 27-42.	1.9	40
44	Model-based quantification of EELS spectra: Including the fine structure. <i>Ultramicroscopy</i> , 2006, 106, 976-980.	1.9	40
45	Electron channelling based crystallography. <i>Ultramicroscopy</i> , 2007, 107, 551-558.	1.9	40
46	Direct structure inversion from exit waves. <i>Ultramicroscopy</i> , 2010, 110, 527-534.	1.9	37
47	Quantitative 3D Characterization of Elemental Diffusion Dynamics in Individual Ag@Au Nanoparticles with Different Shapes. <i>ACS Nano</i> , 2019, 13, 13421-13429.	14.6	37
48	Site occupation of Nb atoms in ternary NiTiNb shape memory alloys. <i>Acta Materialia</i> , 2014, 74, 85-95.	7.9	36
49	Advanced electron crystallography through model-based imaging. <i>IUCr</i> , 2016, 3, 71-83.	2.2	36
50	Atomic-scale quantification of charge densities in two-dimensional materials. <i>Physical Review B</i> , 2018, 98, .	3.2	36
51	Determining oxygen relaxations at an interface: A comparative study between transmission electron microscopy techniques. <i>Ultramicroscopy</i> , 2017, 181, 178-190.	1.9	36
52	Does a monochromator improve the precision in quantitative HRTEM?. <i>Ultramicroscopy</i> , 2001, 89, 275-290.	1.9	32
53	High resolution electron tomography. <i>Current Opinion in Solid State and Materials Science</i> , 2013, 17, 107-114.	11.5	31
54	Electrical Polarization in AlN/GaN Nanodisks Measured by Momentum-Resolved 4D Scanning Transmission Electron Microscopy. <i>Physical Review Letters</i> , 2019, 122, 106102.	7.8	31

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55	Hybrid statistics-simulations based method for atom-counting from ADF STEM images. <i>Ultramicroscopy</i> , 2017, 177, 69-77.	1.9	30
56	Single Atom Detection from Low Contrast-to-Noise Ratio Electron Microscopy Images. <i>Physical Review Letters</i> , 2018, 121, 056101.	7.8	30
57	3D Characterization and Plasmon Mapping of Gold Nanorods Welded by Femtosecond Laser Irradiation. <i>ACS Nano</i> , 2020, 14, 12558-12570.	14.6	30
58	Comparison of first moment STEM with conventional differential phase contrast and the dependence on electron dose. <i>Ultramicroscopy</i> , 2019, 203, 95-104.	1.9	29
59	Controlled growth of hexagonal gold nanostructures during thermally induced self-assembling on Ge(001) surface. <i>Scientific Reports</i> , 2017, 7, 42420.	3.3	28
60	The effect of probe inaccuracies on the quantitative model-based analysis of high angle annular dark field scanning transmission electron microscopy images. <i>Micron</i> , 2014, 63, 57-63.	2.2	26
61	Atomic Structure of Quantum Gold Nanowires: Quantification of the Lattice Strain. <i>ACS Nano</i> , 2014, 8, 599-606.	14.6	26
62	Quantitative STEM normalisation: The importance of the electron flux. <i>Ultramicroscopy</i> , 2015, 159, 46-58.	1.9	26
63	Atomic resolution mapping of phonon excitations in STEM-EELS experiments. <i>Ultramicroscopy</i> , 2014, 147, 1-7.	1.9	25
64	Long-Range Domain Structure and Symmetry Engineering by Interfacial Oxygen Octahedral Coupling at Heterostructure Interface. <i>Advanced Functional Materials</i> , 2016, 26, 6627-6634.	14.9	25
65	Optimal experimental design for the detection of light atoms from high-resolution scanning transmission electron microscopy images. <i>Applied Physics Letters</i> , 2014, 105, .	3.3	24
66	Atomic resolution electron tomography. <i>MRS Bulletin</i> , 2016, 41, 525-530.	3.5	24
67	How to optimize the experimental design of quantitative atomic resolution TEM experiments?. <i>Micron</i> , 2004, 35, 425-429.	2.2	23
68	An efficient way of including thermal diffuse scattering in simulation of scanning transmission electron microscopic images. <i>Ultramicroscopy</i> , 2006, 106, 933-940.	1.9	23
69	High-resolution electron microscopy: from imaging toward measuring. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2002, 51, 611-615.	4.7	20
70	A model based atomic resolution tomographic algorithm. <i>Ultramicroscopy</i> , 2009, 109, 1485-1490.	1.9	20
71	A model based reconstruction technique for depth sectioning with scanning transmission electron microscopy. <i>Ultramicroscopy</i> , 2010, 110, 548-554.	1.9	20
72	Model-based electron microscopy: From images toward precise numbers for unknown structure parameters. <i>Micron</i> , 2012, 43, 509-515.	2.2	20

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73	Measuring Dynamic Structural Changes of Nanoparticles at the Atomic Scale Using Scanning Transmission Electron Microscopy. <i>Physical Review Letters</i> , 2020, 124, 106105.	7.8	20
74	Coupling Charge and Topological Reconstructions at Polar Oxide Interfaces. <i>Physical Review Letters</i> , 2021, 127, 127202.	7.8	20
75	Fully Automated Measurement of the Modulation Transfer Function of Charge-Coupled Devices above the Nyquist Frequency. <i>Microscopy and Microanalysis</i> , 2012, 18, 336-342.	0.4	19
76	Recent Advances in Transmission Electron Microscopy for Materials Science at the EMAT Lab of the University of Antwerp. <i>Materials</i> , 2018, 11, 1304.	2.9	19
77	Statistical Experimental Design for Quantitative Atomic Resolution Transmission Electron Microscopy. <i>Advances in Imaging and Electron Physics</i> , 2004, 130, 1-164.	0.2	17
78	Seeing and measuring in 3D with electrons. <i>Comptes Rendus Physique</i> , 2014, 15, 140-150.	0.9	17
79	The maximum a posteriori probability rule for atom column detection from HAADF STEM images. <i>Ultramicroscopy</i> , 2019, 201, 81-91.	1.9	17
80	Interface Pattern Engineering in Core-Shell Upconverting Nanocrystals: Shedding Light on Critical Parameters and Consequences for the Photoluminescence Properties. <i>Small</i> , 2021, 17, e2104441.	10.0	17
81	Effect of amorphous layers on the interpretation of restored exit waves. <i>Ultramicroscopy</i> , 2009, 109, 237-246.	1.9	16
82	Mapping electronic reconstruction at the metal-insulator interface in $\text{LaVO}_3/\text{SrVO}_3$ heterostructures. <i>Physical Review B</i> , 2013, 88, .	3.2	16
83	Direct structure inversion from exit waves. Part II: A practical example. <i>Ultramicroscopy</i> , 2012, 116, 77-85.	1.9	15
84	Determination of the atomic width of an APB in ordered CoPt using quantified HAADF-STEM. <i>Journal of Alloys and Compounds</i> , 2015, 644, 570-574.	5.5	15
85	Atom column detection from simultaneously acquired ABF and ADF STEM images. <i>Ultramicroscopy</i> , 2020, 219, 113046.	1.9	15
86	Advanced three-dimensional electron microscopy techniques in the quest for better structural and functional materials. <i>Science and Technology of Advanced Materials</i> , 2013, 14, 014206.	6.1	14
87	Control of Knock-On Damage for 3D Atomic Scale Quantification of Nanostructures: Making Every Electron Count in Scanning Transmission Electron Microscopy. <i>Physical Review Letters</i> , 2019, 122, 066101.	7.8	14
88	High precision measurements of atom column positions using model-based exit wave reconstruction. <i>Ultramicroscopy</i> , 2011, 111, 1475-1482.	1.9	13
89	Depth sectioning combined with atom-counting in HAADF STEM to retrieve the 3D atomic structure. <i>Ultramicroscopy</i> , 2017, 177, 36-42.	1.9	13
90	Three-dimensional atomic structure of supported Au nanoparticles at high temperature. <i>Nanoscale</i> , 2021, 13, 1770-1776.	5.6	13

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91	Three-Dimensional Nanoparticle Transformations Captured by an Electron Microscope. <i>Accounts of Chemical Research</i> , 2021, 54, 1189-1199.	15.6	13
92	Unconventional Specimen Preparation Techniques Using High Resolution Low Voltage Field Emission Scanning Electron Microscopy to Study Cell Motility, Host Cell Invasion, and Internal Cell Structures in <i>Toxoplasma gondii</i> . <i>Microscopy and Microanalysis</i> , 2002, 8, 94-103.	0.4	12
93	Throughput maximization of particle radius measurements through balancing size versus current of the electron probe. <i>Ultramicroscopy</i> , 2011, 111, 940-947.	1.9	12
94	Precision of three-dimensional atomic scale measurements from HRTEM images: What are the limits?. <i>Ultramicroscopy</i> , 2012, 114, 20-30.	1.9	12
95	The atomic lensing model: New opportunities for atom-by-atom metrology of heterogeneous nanomaterials. <i>Ultramicroscopy</i> , 2019, 203, 155-162.	1.9	12
96	Do smaller probes in a scanning transmission electron microscope result in more precise measurement of the distances between atom columns?. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 2001, 81, 1833-1846.	0.6	11
97	How to Select the Items for the Shopping List of Future High Resolution Electron Microscopists?. <i>Microscopy and Microanalysis</i> , 2002, 8, 94-95.	0.4	11
98	Detecting and locating light atoms from high-resolution STEM images: The quest for a single optimal design. <i>Ultramicroscopy</i> , 2016, 170, 128-138.	1.9	11
99	Thickness dependence of scattering cross-sections in quantitative scanning transmission electron microscopy. <i>Ultramicroscopy</i> , 2018, 187, 84-92.	1.9	11
100	Recent breakthroughs in scanning transmission electron microscopy of small species. <i>Advances in Physics: X</i> , 2018, 3, 1480420.	4.1	11
101	From 2D to 3D: Bridging Self-Assembled Monolayers to a Substrate-Induced Polymorph in a Molecular Semiconductor. <i>Chemistry of Materials</i> , 2022, 34, 2238-2248.	6.7	11
102	Atomic and electronic structures of BaHfO ₃ -doped TFA-MOD-derived YBa ₂ Cu ₃ O _{7-δ} thin films. <i>Superconductor Science and Technology</i> , 2015, 28, 115009.	3.5	10
103	3D Atomic Scale Dynamics of Laser-Light-Induced Restructuring of Nanoparticles Unraveled by Electron Tomography. <i>Advanced Materials</i> , 2021, 33, 2100972.	21.0	10
104	3D Atomic Structure of Supported Metallic Nanoparticles Estimated from 2D ADF STEM Images: A Combination of Atom Counting and a Local Minima Search Algorithm. <i>Small Methods</i> , 2021, 5, e2101150.	8.6	10
105	Do smaller probes in a scanning transmission electron microscope result in more precise measurement of the distances between atom columns?. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 2001, 81, 1833-1846.	0.6	9
106	Physical Limits on Atomic Resolution. <i>Microscopy and Microanalysis</i> , 2004, 10, 153-157.	0.4	9
107	A memory efficient method for fully three-dimensional object reconstruction with HAADF STEM. <i>Ultramicroscopy</i> , 2014, 141, 22-31.	1.9	9
108	Quantifying a Heterogeneous Ru Catalyst on Carbon Black Using ADF STEM. <i>Particle and Particle Systems Characterization</i> , 2016, 33, 438-444.	2.3	9

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109	Locating light and heavy atomic column positions with picometer precision using ISTEM. Ultramicroscopy, 2017, 172, 75-81.	1.9	9
110	Self-Assembly of Atomically Thin Chiral Copper Heterostructures Templated by Black Phosphorus. Advanced Functional Materials, 2019, 29, 1903120.	14.9	9
111	Linear versus non-linear structural information limit in high-resolution transmission electron microscopy. Ultramicroscopy, 2010, 110, 1404-1410.	1.9	8
112	Exit wave reconstruction from focal series of HRTEM images, single crystal XRD and total energy studies on SbWO_3 ($a \approx 0.11$). Zeitschrift Fur Kristallographie - Crystalline Materials, 2012, 227, 341-349.	0.8	8
113	Thermal Activation of Gold Atom Diffusion in Au@Pt Nanorods. ACS Nano, 2022, 16, 9608-9619.	14.6	8
114	The Notion of Resolution. , 2007, , 1228-1265.		7
115	Functional twin boundaries. Phase Transitions, 2013, 86, 1052-1059.	1.3	7
116	Atom-counting in High Resolution Electron Microscopy: TEM or STEM – That's the question. Ultramicroscopy, 2017, 174, 112-120.	1.9	7
117	How precise can atoms of a nanocluster be located in 3D using a tilt series of scanning transmission electron microscopy images?. Ultramicroscopy, 2017, 181, 134-143.	1.9	6
118	Understanding the Effect of Iodide Ions on the Morphology of Gold Nanorods. Particle and Particle Systems Characterization, 2018, 35, 1800051.	2.3	6
119	Dynamical diffraction of high-energy electrons investigated by focal series momentum-resolved scanning transmission electron microscopy at atomic resolution. Ultramicroscopy, 2022, 233, 113425.	1.9	5
120	A method to determine the local surface profile from reconstructed exit waves. Ultramicroscopy, 2011, 111, 1352-1359.	1.9	4
121	One Step Toward a New Generation of C-MOS Compatible Oxide –N Junctions: Structure of the LSMO/ZnO Interface Elucidated by an Experimental and Theoretical Synergic Work. ACS Applied Materials & Interfaces, 2017, 9, 20974-20980.	8.0	4
122	StatSTEM: An efficient program for accurate and precise model-based quantification of atomic resolution electron microscopy images. Journal of Physics: Conference Series, 2017, 902, 012013.	0.4	4
123	Frozen lattice and absorptive model for high angle annular dark field scanning transmission electron microscopy: A comparison study in terms of integrated intensity and atomic column position measurement. Ultramicroscopy, 2018, 184, 188-198.	1.9	4
124	Nano- and Microcrystal Investigations of Precipitates, Interfaces and Strain Fields in Ni-Ti-Nb by Various TEM Techniques. Materials Science Forum, 2013, 738-739, 65-71.	0.3	3
125	Atom column detection. Advances in Imaging and Electron Physics, 2021, 217, 177-214.	0.2	3
126	Modelling ADF STEM images using elliptical Gaussian peaks and its effects on the quantification of structure parameters in the presence of sample tilt. Ultramicroscopy, 2021, 230, 113391.	1.9	3

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127	Ultra-High Resolution Electron Tomography for Materials Science: a Roadmap. <i>Microscopy and Microanalysis</i> , 2011, 17, 934-935.	0.4	2
128	An alternative approach to determine attainable resolution directly from HREM images. <i>Ultramicroscopy</i> , 2013, 133, 50-61.	1.9	2
129	Lattice deformations in quasi-dynamic strain glass visualised and quantified by aberration corrected electron microscopy. <i>Physica Status Solidi (B): Basic Research</i> , 2014, 251, 2034-2040.	1.5	2
130	Quantification by aberration corrected (S)TEM of boundaries formed by symmetry breaking phase transformations. <i>Ultramicroscopy</i> , 2017, 176, 194-199.	1.9	2
131	Hidden Markov model for atom-counting from sequential ADF STEM images: Methodology, possibilities and limitations. <i>Ultramicroscopy</i> , 2020, 219, 113131.	1.9	2
132	Statistical parameter estimation theory: principles and simulation studies. <i>Advances in Imaging and Electron Physics</i> , 2021, , 29-72.	0.2	2
133	Model-Based Electron Microscopy. <i>Springer Handbooks</i> , 2019, , 605-624.	0.6	2
134	High-Resolution Visualization Techniques: Structural Aspects. <i>Springer Series in Materials Science</i> , 2012, , 135-149.	0.6	2
135	Atomic-scale detection of individual lead clusters confined in Linde Type A zeolites. <i>Nanoscale</i> , 2022, 14, 9323-9330.	5.6	2
136	Structural, Chemical And Electronic Characterization Of Ceramic Materials Using Quantitative (Scanning) Transmission Electron Microscopy.. <i>Microscopy and Microanalysis</i> , 2007, 13, 332-333.	0.4	1
137	Atomic Resolution Mapping Using Quantitative High-angle Annular Dark Field Scanning Transmission Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2009, 15, 464-465.	0.4	1
138	Dedicated TEM on domain boundaries from phase transformations and crystal growth. <i>Phase Transitions</i> , 2013, 86, 15-22.	1.3	1
139	Getting the Best from an Imperfect Detector - an Alternative Normalisation Procedure for Quantitative HAADF STEM. <i>Microscopy and Microanalysis</i> , 2014, 20, 126-127.	0.4	1
140	Novel Approaches for Electron Tomography to Investigate the Structure and Stability of Nanomaterials in 3 Dimensions.. <i>Microscopy and Microanalysis</i> , 2020, 26, 1128-1130.	0.4	1
141	3D Atomic Scale Quantification of Nanostructures and their Dynamics Using Model-based STEM. <i>Microscopy and Microanalysis</i> , 2020, 26, 2606-2608.	0.4	1
142	Atom counting. <i>Advances in Imaging and Electron Physics</i> , 2021, , 91-144.	0.2	1
143	Combining ADF-EDX scattering cross-sections for elemental quantification of nanostructures. <i>Microscopy and Microanalysis</i> , 2021, 27, 600-602.	0.4	1
144	High resolution electron microscopy from imaging towards measuring. , 0, , .		0

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145	Obstacles on the Road Towards Atomic Resolution Tomography. <i>Microscopy and Microanalysis</i> , 2005, 11, .	0.4	0
146	Computational Aspects in Quantitative EELS. <i>Microscopy and Microanalysis</i> , 2010, 16, 240-241.	0.4	0
147	Beyond the limits of imaging: advances and applications of model-based scanning transmission electron microscopy. <i>Microscopy and Microanalysis</i> , 2012, 18, 356-357.	0.4	0
148	Materials Science Applications of Aberration Corrected TEM and/or STEM. <i>Microscopy and Microanalysis</i> , 2015, 21, 1131-1132.	0.4	0
149	Quantitative annular dark field scanning transmission electron microscopy for nanoparticle atom-counting: What are the limits?. <i>Journal of Physics: Conference Series</i> , 2015, 644, 012034.	0.4	0
150	Quantification of ADF STEM Image Data for Nanoparticle Structure and Strain Measurements. <i>Microscopy and Microanalysis</i> , 2016, 22, 896-897.	0.4	0
151	Direct Methods for Images Interpretation. , 2016, , 267-281.		0
152	Recent Advances of the Open Source MULTEM Program to Provide Accurate and Fast Electron Microscopy Simulations. <i>Microscopy and Microanalysis</i> , 2017, 23, 206-207.	0.4	0
153	Quantitative STEM of Catalyst Nanoparticles using ADF Imaging with Simultaneous EDS and EELS Spectroscopy.. <i>Microscopy and Microanalysis</i> , 2017, 23, 1888-1889.	0.4	0
154	Quantification of 3D Atomic Structures and Their Dynamics by Atom-Counting from an ADF STEM Image. <i>Microscopy and Microanalysis</i> , 2019, 25, 1808-1809.	0.4	0
155	Efficient fitting algorithm. <i>Advances in Imaging and Electron Physics</i> , 2021, 217, 73-90.	0.2	0
156	Optimal experiment design for nanoparticle atom counting from ADF STEM images. <i>Advances in Imaging and Electron Physics</i> , 2021, 217, 145-175.	0.2	0
157	General conclusions and future perspectives. <i>Advances in Imaging and Electron Physics</i> , 2021, , 243-253.	0.2	0
158	Image-quality evaluation and model selection with maximum a posteriori probability. <i>Advances in Imaging and Electron Physics</i> , 2021, 217, 215-242.	0.2	0
159	Phase Retrieval From 4-Dimensional Electron Diffraction Datasets. , 2021, , .		0
160	Argand plot: a sensitive fingerprint for electron channelling. , 2008, , 167-168.		0
161	The benefits of statistical parameter estimation theory for quantitative interpretation of electron microscopy data. , 2008, , 97-98.		0
162	Present state of the composition evaluation of ternary semiconductor nanostructures by lattice fringe analysis. , 2018, , 19-22.		0

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163	Interface Pattern Engineering in Coreâ€Shell Upconverting Nanocrystals: Shedding Light on Critical Parameters and Consequences for the Photoluminescence Properties (Small 47/2021). Small, 2021, 17, 2170246.	10.0	0
164	Atomic resolution electron tomography: a dream?. International Journal of Materials Research, 2022, 97, 872-879.	0.3	0