

Ferdinand Hofer

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2387847/publications.pdf>

Version: 2024-02-01

239
papers

7,971
citations

53751

45
h-index

66879

78
g-index

247
all docs

247
docs citations

247
times ranked

8655
citing authors

#	ARTICLE	IF	CITATIONS
1	Silver Nanowires as Surface Plasmon Resonators. <i>Physical Review Letters</i> , 2005, 95, 257403.	2.9	950
2	Electron microscopy of nanoemulsions: An essential tool for characterisation and stability assessment. <i>Micron</i> , 2012, 43, 85-103.	1.1	246
3	Dark Plasmonic Breathing Modes in Silver Nanodisks. <i>Nano Letters</i> , 2012, 12, 5780-5783.	4.5	198
4	Imaging of nanometer-sized precipitates in solids by electron spectroscopic imaging. <i>Ultramicroscopy</i> , 1995, 59, 15-31.	0.8	186
5	Quantitative analysis of EFTEM elemental distribution images. <i>Ultramicroscopy</i> , 1997, 67, 83-103.	0.8	182
6	Microstructure and properties of nanocomposite Ti ₄ N and Ti ₄ C coatings. <i>Surface and Coatings Technology</i> , 1999, 120-121, 405-411.	2.2	170
7	Electron energy-loss near-edge structures of 3d transition metal oxides recorded at high-energy resolution. <i>Ultramicroscopy</i> , 2003, 96, 469-480.	0.8	161
8	High-resolution surface plasmon imaging of gold nanoparticles by energy-filtered transmission electron microscopy. <i>Physical Review B</i> , 2009, 79, .	1.1	154
9	Precipitation of NbC in a model austenitic steel. <i>Acta Materialia</i> , 2002, 50, 735-747.	3.8	132
10	Solute adsorption and entrapment during eutectic Si growth in Al-Si-based alloys. <i>Acta Materialia</i> , 2015, 83, 187-202.	3.8	119
11	Morphing a Plasmonic Nanodisk into a Nanotriangle. <i>Nano Letters</i> , 2014, 14, 4810-4815.	4.5	112
12	Investigation of Cu ₂ ZnSnS ₄ Formation from Metal Salts and Thioacetamide. <i>Chemistry of Materials</i> , 2010, 22, 3399-3406.	3.2	109
13	A Direct Route Towards Polymer/Copper Indium Sulfide Nanocomposite Solar Cells. <i>Advanced Energy Materials</i> , 2011, 1, 1046-1050.	10.2	102
14	Quantitative Elemental Mapping at Atomic Resolution Using X-Ray Spectroscopy. <i>Physical Review Letters</i> , 2014, 112, .	2.9	102
15	Universal dispersion of surface plasmons in flat nanostructures. <i>Nature Communications</i> , 2014, 5, 3604.	5.8	96
16	Activation and Deactivation of a Chemical Transformation by an Electromagnetic Field: Evidence for Specific Microwave Effects in the Formation of Grignard Reagents. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 7636-7640.	7.2	95
17	Determination of inner-shell cross-sections for EELS-quantification. <i>Microscopy Microanalysis Microstructures</i> , 1991, 2, 215-230.	0.4	92
18	Nucleation kinetics of entrained eutectic Si in Al ₅ Si alloys. <i>Acta Materialia</i> , 2014, 72, 80-98.	3.8	90

#	ARTICLE	IF	CITATIONS
19	Formation of bimetallic clusters in superfluid helium nanodroplets analysed by atomic resolution electron tomography. <i>Nature Communications</i> , 2015, 6, 8779.	5.8	90
20	Investigation of the Formation of CuInS_2 Nanoparticles by the Oleylamine Route: Comparison of Microwave-Assisted and Conventional Syntheses. <i>Inorganic Chemistry</i> , 2011, 50, 193-200.	1.9	84
21	$\text{SiC/Si}_3\text{N}_4$ nano/micro-composite " processing, RT and HT mechanical properties. <i>Journal of the European Ceramic Society</i> , 2000, 20, 453-462.	2.8	82
22	Order vs. disorder" a huge increase in ionic conductivity of nanocrystalline LiAlO_2 embedded in an amorphous-like matrix of lithium aluminate. <i>Journal of Materials Chemistry A</i> , 2014, 2, 20295-20306.	5.2	79
23	Electron energy-loss near-edge structures at the oxygen K edges of titanium(IV) oxygen compounds. <i>Journal of Physics Condensed Matter</i> , 1992, 4, 3429-3437.	0.7	78
24	Advantages of a monochromator for bandgap measurements using electron energy-loss spectroscopy. <i>Micron</i> , 2005, 36, 185-189.	1.1	77
25	New examples for near-edge fine structures in electron energy loss spectroscopy. <i>Ultramicroscopy</i> , 1987, 21, 379-383.	0.8	69
26	A study on electrolyte interactions with graphite anodes exhibiting structures with various amounts of rhombohedral phase. <i>Journal of Power Sources</i> , 2003, 119-121, 528-537.	4.0	69
27	Influence of the reductive preparation conditions on the morphology and on the electrochemical performance of Sn/SnSb . <i>Solid State Ionics</i> , 2004, 168, 51-59.	1.3	69
28	Negative electrodes in rechargeable lithium ion batteries " Influence of graphite surface modification on the formation of the solid electrolyte interphase. <i>Ionics</i> , 2000, 6, 172-179.	1.2	67
29	Nanocrystalline hard coatings within the quasi-binary system TiN-TiB_2 . <i>Vacuum</i> , 1998, 50, 313-318.	1.6	66
30	Formation of bimetallic core-shell nanowires along vortices in superfluid He nanodroplets. <i>Physical Review B</i> , 2014, 90, .	1.1	66
31	Sulphur poisoning of the SOFC cathode material $\text{La}_{0.6}\text{Sr}_{0.4}\text{CoO}_{3-\delta}$. <i>Solid State Ionics</i> , 2013, 238, 15-23.	1.3	64
32	Monitoring dynamics of electrode reactions in Li-ion batteries by in situ ESEM. <i>Ionics</i> , 2006, 12, 253-255.	1.2	62
33	Improved imaging of secondary phases in solids by energy-filtering TEM. <i>Ultramicroscopy</i> , 1996, 63, 21-25.	0.8	61
34	Synthesis and characterization of copper zinc tin chalcogenide nanoparticles: Influence of reactants on the chemical composition. <i>Solar Energy Materials and Solar Cells</i> , 2012, 101, 87-94.	3.0	61
35	Optimization of the Signal to Noise Ratio in EFTEM Elemental Maps with Regard to Different Ionization Edge Types. <i>Micron</i> , 1998, 29, 349-357.	1.1	57
36	On the application of energy-filtering TEM in materials science: III. Precipitates in steel. <i>Micron</i> , 1998, 29, 63-72.	1.1	54

#	ARTICLE	IF	CITATIONS
37	Optimization of postgrowth electron-beam curing for focused electron-beam-induced Pt deposits. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2011, 29, .	0.6	54
38	Thermal instabilities and Rayleigh breakup of ultrathin silver nanowires grown in helium nanodroplets. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 24570-24575.	1.3	54
39	Comparison of EFTEM and STEM EELS plasmon imaging of gold nanoparticles in a monochromated TEM. <i>Ultramicroscopy</i> , 2010, 110, 1087-1093.	0.8	53
40	Bismuth sulphide-polymer nanocomposites from a highly soluble bismuth xanthate precursor. <i>Journal of Materials Chemistry C</i> , 2013, 1, 7825.	2.7	52
41	Co-sputtered films within the quasi-binary system TiN-TiB ₂ . <i>Surface and Coatings Technology</i> , 1997, 94-95, 297-302.	2.2	51
42	Fundamental Proximity Effects in Focused Electron Beam Induced Deposition. <i>ACS Nano</i> , 2012, 6, 286-294.	7.3	51
43	The influence of beam defocus on volume growth rates for electron beam induced platinum deposition. <i>Nanotechnology</i> , 2008, 19, 485302.	1.3	50
44	L _{2,3} edges of tetrahedrally coordinated d ⁰ transition-metal oxyanions XO ₄ ⁿ⁻ . <i>Journal of Physics Condensed Matter</i> , 1993, 5, 9379-9392.	0.7	49
45	CuInS ₂ -Poly(3-(ethyl-4-butanoate)thiophene) nanocomposite solar cells: Preparation by an in situ formation route, performance and stability issues. <i>Solar Energy Materials and Solar Cells</i> , 2011, 95, 1354-1361.	3.0	45
46	Fundamentals of electron energy-loss spectroscopy. <i>IOP Conference Series: Materials Science and Engineering</i> , 2016, 109, 012007.	0.3	45
47	The stoichiometry of single nanoparticles of copper zinc tin selenide. <i>Chemical Communications</i> , 2011, 47, 2050-2052.	2.2	44
48	Impact of lattice dynamics on the phase stability of metamagnetic FeRh: Bulk and thin films. <i>Physical Review B</i> , 2016, 94, .	1.1	44
49	Stability of Core-Shell Nanoparticles for Catalysis at Elevated Temperatures: Structural Inversion in the Ni-Au System Observed at Atomic Resolution. <i>Chemistry of Materials</i> , 2018, 30, 1113-1120.	3.2	44
50	Mesoporous ZnS Thin Films Prepared by a Nanocasting Route. <i>Chemistry of Materials</i> , 2012, 24, 1837-1845.	3.2	43
51	Post-test analysis of silicon poisoning and phase decomposition in the SOFC cathode material La _{0.58} Sr _{0.4} Co _{0.2} Fe _{0.8} O _{3-δ} by transmission electron microscopy. <i>Solid State Ionics</i> , 2013, 230, 7-11.	1.3	43
52	Correlative characterization of primary Al ₃ (Sc,Zr) phase in an Al-Zn-Mg based alloy. <i>Materials Characterization</i> , 2015, 102, 62-70.	1.9	43
53	High resolution EELS using monochromator and high performance spectrometer: comparison of V ₂ O ₅ ELNES with NEXAFS and band structure calculations. <i>Micron</i> , 2003, 34, 235-238.	1.1	41
54	Contribution to the Development of Indirect Atomic Absorption Methods: Application of the Ion Pair 1,10-phenanthroline-mercury(II)-iodide to Iodide Determination in Water and Infant Formulae Samples. <i>Mikrochimica Acta</i> , 1999, 131, 145-151.	2.5	40

#	ARTICLE	IF	CITATIONS
55	Preparation of Pd-coated polymer electrolyte membranes and their application in direct methanol fuel cells. <i>Journal of Power Sources</i> , 2005, 140, 21-27.	4.0	39
56	Quantitative microanalysis using electron energy-loss spectrometry. I. Li and Be in oxides. <i>Microscopy Microanalysis Microstructures</i> , 1993, 4, 539-560.	0.4	39
57	Energy-filtering TEM at high magnification: spatial resolution and detection limits. <i>Ultramicroscopy</i> , 2003, 96, 481-489.	0.8	38
58	The tattoos of the Tyrolean Iceman: a light microscopical, ultrastructural and element analytical study. <i>Journal of Archaeological Science</i> , 2009, 36, 2335-2341.	1.2	38
59	Silicon: The key element in early stages of biocalcification. <i>Journal of Structural Biology</i> , 2011, 174, 180-186.	1.3	38
60	Quantification of electron energy-loss spectra with K and L shell ionization cross-sections. <i>Micron and Microscopica Acta</i> , 1988, 19, 73-86.	0.2	36
61	EELS quantification of the elements Sr to W by means of M45 edges. <i>Ultramicroscopy</i> , 1988, 25, 81-84.	0.8	36
62	A Polymorph Crystal Structure of Hexaphenyl Observed in Thin Films. <i>Crystal Research and Technology</i> , 2001, 36, 47-54.	0.6	36
63	The impact of doping rates on the morphologies of silver and gold nanowires grown in helium nanodroplets. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 1451-1459.	1.3	36
64	Electron energy loss near edge structure on the nitrogen K-edge in vanadium nitrides. <i>Journal of Microscopy</i> , 2002, 204, 166-171.	0.8	35
65	Flexible polymer/copper indium sulfide hybrid solar cells and modules based on the metal xanthate route and low temperature annealing. <i>Solar Energy Materials and Solar Cells</i> , 2014, 124, 117-125.	3.0	35
66	Correlated 3D Nanoscale Mapping and Simulation of Coupled Plasmonic Nanoparticles. <i>Nano Letters</i> , 2015, 15, 7726-7730.	4.5	35
67	Self-organized Sr leads to solid state twinning in nano-scaled eutectic Si phase. <i>Scientific Reports</i> , 2016, 6, 31635.	1.6	34
68	On the application of energy filtering TEM in materials science: I. Precipitates in a Ni/Cr-alloy. <i>Micron</i> , 1995, 26, 377-390.	1.1	33
69	Electron energy loss-near edge structure as a fingerprint for identifying chromium nitrides. <i>Solid State Communications</i> , 2004, 130, 209-213.	0.9	33
70	EELS quantification of M edges by using oxidic standards. <i>Ultramicroscopy</i> , 1987, 21, 63-68.	0.8	32
71	On the detection of MX-precipitates in microalloyed steels using energy-filtering TEM. <i>Journal of Microscopy</i> , 1996, 184, 163-174.	0.8	32
72	Deposits of different origin in the lungs of the 5,300-year-old Tyrolean Iceman. <i>American Journal of Physical Anthropology</i> , 1998, 107, 1-12.	2.1	32

#	ARTICLE	IF	CITATIONS
73	EELS microanalysis of the elements Ca to Cu using M23 edges. <i>Ultramicroscopy</i> , 1993, 49, 189-197.	0.8	31
74	3D Imaging of Gap Plasmons in Vertically Coupled Nanoparticles by EELS Tomography. <i>Nano Letters</i> , 2017, 17, 6773-6777.	4.5	31
75	Room temperature synthesis of CuInS ₂ nanocrystals. <i>RSC Advances</i> , 2016, 6, 106120-106129.	1.7	30
76	Thermally induced alloying processes in a bimetallic system at the nanoscale: AgAu sub-5 nm core-shell particles studied at atomic resolution. <i>Nanoscale</i> , 2018, 10, 2017-2024.	2.8	30
77	How Dark Are Radial Breathing Modes in Plasmonic Nanodisks?. <i>ACS Photonics</i> , 2018, 5, 861-866.	3.2	30
78	Formation of niobium nitride by rapid thermal processing. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2001, 57, 2077-2089.	2.0	28
79	Effects of the Core Location on the Structural Stability of Ni@Au Core-Shell Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2019, 123, 20037-20043.	1.5	28
80	Nano/macro-hardness and fracture resistance of Si ₃ N ₄ /SiC composites with up to 13wt.% of SiC nano-particles. <i>Journal of the European Ceramic Society</i> , 2007, 27, 2145-2152.	2.8	27
81	Monochromated, spatially resolved electron energy-loss spectroscopic measurements of gold nanoparticles in the plasmon range. <i>Micron</i> , 2009, 40, 269-273.	1.1	27
82	Solution-processed copper zinc tin sulfide thin films from metal xanthate precursors. <i>Monatshefte für Chemie</i> , 2013, 144, 273-283.	0.9	27
83	Influence of morphology and polymer:nanoparticle ratio on device performance of hybrid solar cells—an approach in experiment and simulation. <i>Nanotechnology</i> , 2013, 24, 484005.	1.3	27
84	Preparation, structure, and use of platinum-graphite in hydrogenation reactions. <i>Journal of Catalysis</i> , 1989, 118, 502-506.	3.1	26
85	Production and characterisation of electrolytically doped manganese dioxide. <i>Journal of Power Sources</i> , 1998, 70, 1-7.	4.0	26
86	Seasonal- and age-dependent changes of the structure and chemical composition of the spherites in the midgut gland of the harvestmen <i>Gyas annulatus</i> (Opiliones). <i>Micron</i> , 2002, 33, 647-654.	1.1	26
87	Solution-processed small molecule/copper indium sulfide hybrid solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2013, 114, 38-42.	3.0	26
88	Energy-filtering transmission electron microscopy on the nanometer length scale. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2005, 143, 139-147.	0.8	25
89	Morphology determination of functional poly[2-methoxy-5-(3,7-dimethyloctyloxy)-1,4-phenylenevinylene]/poly[oxa-1,4-phenylene-1,2-(1-cyanovinylene)-2-methoxy,5-(3,7-dimethyloctyloxy)] blends as used for all-polymer solar cells. <i>Journal of Applied Polymer Science</i> , 2005, 97, 1001-1007.	0.8	25
90	Metal sulfide-polymer nanocomposite thin films prepared by a direct formation route for photovoltaic applications. <i>Thin Solid Films</i> , 2011, 519, 4201-4206.	0.8	24

#	ARTICLE	IF	CITATIONS
91	Direct extreme UV-lithographic conversion of metal xanthates into nanostructured metal sulfide layers for hybrid photovoltaics. <i>Journal of Materials Chemistry A</i> , 2013, 1, 11135.	5.2	24
92	Phase decomposition in the chromium- and silicon-poisoned IT-SOFC cathode materials $\text{La}_{0.6}\text{Sr}_{0.4}\text{CoO}_{3-\delta}$ and $\text{La}_2\text{NiO}_{4+\delta}$. <i>Solid State Ionics</i> , 2016, 288, 14-21.	1.3	24
93	Presence of silver in the strengthening particles of an Al-Cu-Mg-Si-Zr-Ti-Ag alloy during severe overaging and creep. <i>Acta Materialia</i> , 2017, 125, 50-57.	3.8	24
94	Diffraction effects in inner-shell ionization edges. <i>Journal of Microscopy</i> , 1996, 183, 18-26.	0.8	23
95	Structure of the Malpighian tubule cells and annual changes in the structure and chemical composition of their spherites in the cave cricket <i>Troglophilus neglectus</i> Krauss, 1878 (Rhopidophoridae, Saltatoria). <i>Arthropod Structure and Development</i> , 2009, 38, 315-327.	0.8	23
96	Chemical tuning of PtC nanostructures fabricated via focused electron beam induced deposition. <i>Nanotechnology</i> , 2013, 24, 175305.	1.3	23
97	Focused electron beam induced deposition as a tool to create electron vortices. <i>Micron</i> , 2016, 80, 34-38.	1.1	23
98	Synthesis and Characterization of a Conjugated Polymer with Stable Radicals in the Side Groups. <i>Macromolecules</i> , 1995, 28, 4255-4259.	2.2	22
99	Comparative investigation of the morphology of nickel- and copper-graphite. <i>Carbon</i> , 1991, 29, 915-919.	5.4	21
100	Long-term degradation of $\text{La}_{0.6}\text{Sr}_{0.4}\text{Co}_{0.2}\text{Fe}_{0.8}\text{O}_{3-\delta}$ IT-SOFC cathodes due to silicon poisoning. <i>Solid State Ionics</i> , 2016, 288, 22-27.	1.3	21
101	Thermally induced breakup of metallic nanowires: experiment and theory. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 9402-9408.	1.3	21
102	A comparison of theoretical and experimental L and M cross sections. <i>Ultramicroscopy</i> , 1989, 30, 365-370.	0.8	20
103	Quantitative chemical phase analysis of EFTEM elemental maps using scatter diagrams. <i>Micron</i> , 1998, 29, 43-51.	1.1	20
104	Transport properties of $\text{La}_{0.4}\text{Sr}_{0.6}\text{CoO}_{3-\delta}$. <i>Solid State Ionics</i> , 2001, 141-142, 375-380.	1.3	20
105	Elemental occurrence maps: a starting point for quantitative EELS spectrum image processing. <i>Ultramicroscopy</i> , 2003, 96, 491-508.	0.8	20
106	An Introduction to High-resolution EELS in Transmission Electron Microscopy. <i>Topics in Catalysis</i> , 2008, 50, 200-207.	1.3	20
107	Different staining substances were used in decorative and therapeutic tattoos in a 1000-year-old Peruvian mummy. <i>Journal of Archaeological Science</i> , 2010, 37, 3256-3262.	1.2	20
108	Analysis of native structures of soft materials by cryo scanning probe tomography. <i>Soft Matter</i> , 2012, 8, 9756.	1.2	20

#	ARTICLE	IF	CITATIONS
109	Oxygen exchange kinetics of La _{0.6} Sr _{0.4} CoO _{3-δ} affected by changes of the surface composition due to chromium and silicon poisoning. <i>Solid State Ionics</i> , 2017, 299, 26-31.	1.3	20
110	EELS performance measurements on a new high energy resolution imaging filter. <i>Micron</i> , 2003, 34, 211-218.	1.1	19
111	Electrically conductive SiC ^o “(Nb,Ti)ss ^o “(Nb,Ti)C _{ss} cermet. <i>Journal of the European Ceramic Society</i> , 2006, 26, 1259-1266.	2.8	19
112	Fourier-ratio deconvolution and its Bayesian equivalent. <i>Micron</i> , 2008, 39, 642-647.	1.1	19
113	Application of analytical electron microscopic methods to investigate the function of spherites in the midgut of the larval antlion <i>Euroleon nostras</i> (Neuroptera: Myrmeleontidae). <i>Microscopy Research and Technique</i> , 2012, 75, 397-407.	1.2	19
114	Synthesis and morphology of iron ^o “iron oxide core ^o “shell nanoparticles produced by high pressure gas condensation. <i>Nanotechnology</i> , 2016, 27, 215703.	1.3	19
115	Modelling electron beam induced dynamics in metallic nanoclusters. <i>Ultramicroscopy</i> , 2018, 192, 69-79.	0.8	19
116	Analytical electron microscopy discloses actual structure of zinc ^o “graphite. <i>Journal of the Chemical Society Dalton Transactions</i> , 1988, , 2023-2026.	1.1	18
117	Thin-film zinc/manganese dioxide electrodes based on microporous polymer foils. <i>Journal of Power Sources</i> , 1999, 79, 271-276.	4.0	18
118	Quantitative Energy-filtering Transmission Electron Microscopy in Materials Science. <i>Microscopy and Microanalysis</i> , 2000, 6, 161-172.	0.2	18
119	Investigation of CuInS ₂ Thin Film Formation by a Low-Temperature Chemical Deposition Method. <i>ACS Applied Materials & Interfaces</i> , 2012, 4, 382-390.	4.0	18
120	Linking TEM Analytical Spectroscopies for an Assumptionless Compositional Analysis. <i>Microscopy and Microanalysis</i> , 2014, 20, 678-686.	0.2	18
121	Niobium nitride films formed by rapid thermal processing (RTP): a study of depth profiles and interface reactions by complementary analytical techniques. <i>Analytical and Bioanalytical Chemistry</i> , 2004, 379, 554-67.	1.9	17
122	Comprehensive Investigation of Silver Nanoparticle/Aluminum Electrodes for Copper Indium Sulfide/Polymer Hybrid Solar Cells. <i>Journal of Physical Chemistry C</i> , 2012, 116, 19191-19196.	1.5	17
123	Copper zinc tin sulfide layers prepared from solution processable metal dithiocarbamate precursors. <i>Materials Chemistry and Physics</i> , 2012, 136, 582-588.	2.0	17
124	Inner-Shell Ionization. <i>Springer Series in Optical Sciences</i> , 1995, , 225-268.	0.5	17
125	Characterization of Nanocomposite Coatings in the System Ti-B-N by Analytical Electron Microscopy and X-Ray Photoelectron Spectroscopy. <i>Monatshefte für Chemie</i> , 2002, 133, 837-848.	0.9	16
126	Cross-section analysis of organic light-emitting diodes. <i>Ultramicroscopy</i> , 2004, 101, 123-128.	0.8	15

#	ARTICLE	IF	CITATIONS
127	Development of an Al ^{1/4} Mn ^{1/4} Be ^{1/4} Cu alloy with improved quasicrystalline forming ability. Zeitschrift Für Kristallographie, 2008, 223, 735-738.	1.1	15
128	Edge Mode Coupling within a Plasmonic Nanoparticle. Nano Letters, 2016, 16, 5152-5155.	4.5	15
129	EELS quantification of the elements Ba to Tm by means of N ₄₅ edges. Journal of Microscopy, 1989, 156, 279-283.	0.8	14
130	Ionization cross-sections for the L ₂₃ -edges of the elements Sr to Mo for quantitative EELS analysis. Ultramicroscopy, 1996, 63, 239-245.	0.8	14
131	A comparison between quantitative EELS and APFIM microanalysis of carbonitride grains in cermets. Ultramicroscopy, 1999, 79, 273-281.	0.8	14
132	Silica-Titania Mesostructured Films. Journal of Sol-Gel Science and Technology, 2003, 26, 615-619.	1.1	14
133	Vanadium Nitride Films Formed by Rapid Thermal Processing (RTP): Depth Profiles and Interface Reactions Studied by Complementary Analytical Techniques. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2003, 629, 1769-1777.	0.6	14
134	On the occurrence of Z-phase in a creep-tested 10% Cr steel. International Journal of Materials Research, 2004, 95, 18-21.	0.8	14
135	Thermally Induced Diffusion and Restructuring of Iron Triade (Fe, Co, Ni) Nanoparticles Passivated by Several Layers of Gold. Journal of Physical Chemistry C, 2020, 124, 16680-16688.	1.5	14
136	New Solar Cell-Battery Hybrid Energy System: Integrating Organic Photovoltaics with Li-Ion and Na-Ion Technologies. ACS Sustainable Chemistry and Engineering, 2020, 8, 19155-19168.	3.2	14
137	Thermodynamic properties of solid rhodium-nickel alloys. Journal of Solid State Chemistry, 1982, 45, 303-308.	1.4	13
138	Structural development and properties of SiC-Si ₃ N ₄ nano/microcomposites. Journal of Materials Science Letters, 1996, 15, 72-76.	0.5	13
139	On the application of energy filtering TEM in materials science II: Study of a fibre-reinforced metal matrix composite. Micron, 1996, 27, 107-120.	1.1	13
140	Combined XPS, AFM, TEM and ellipsometric studies on nanoscale layers in organic light emitting diodes. Surface Science, 2002, 507-510, 473-479.	0.8	13
141	Phase decomposition of La ₂ NiO ₄ + δ under Cr- and Si-poisoning conditions. Solid State Ionics, 2018, 322, 44-53.	1.3	13
142	Microstructural changes induced by Er and Zr additions to A356 alloy investigated by thermal analyses and STEM observations. Materials Characterization, 2020, 161, 110117.	1.9	13
143	Influence of the bridging atom in fluorene analogue low-bandgap polymers on photophysical and morphological properties of copper indium sulfide/polymer nanocomposite solar cells. Journal of Polymer Science, Part B: Polymer Physics, 2013, 51, 1400-1410.	2.4	12
144	Electron microscopy of barium ortho-titanate and the products of its reaction with carbon dioxide. Reactivity of Solids, 1988, 6, 217-230.	0.3	11

#	ARTICLE	IF	CITATIONS
145	Towards a practical method for EELS quantification. <i>Ultramicroscopy</i> , 1991, 38, 159-167.	0.8	11
146	Preparation of mixtures of silicon oxynitride and silicon nitride by the reaction of calcium silicide with ammonium chloride. <i>Advanced Materials</i> , 1992, 4, 501-504.	11.1	11
147	Rubber-brass bonding: morphology of cross-sections through the bonding layers as a possible basis for classification. <i>Journal of Adhesion Science and Technology</i> , 1996, 10, 461-471.	1.4	11
148	Microstructural characterization of TiN/CNx gradient-multilayered coatings. <i>Surface and Coatings Technology</i> , 2004, 180-181, 526-532.	2.2	11
149	Advances in the segmentation of multi-component microanalytical images. <i>Ultramicroscopy</i> , 2005, 103, 141-152.	0.8	11
150	Elemental Mapping Using Energy Filtered Imaging. , 2005, , 159-222.		11
151	Effects of trace elements (Y and Ca) on the eutectic Ge in Al-Ge based alloys. <i>Acta Materialia</i> , 2016, 111, 85-95.	3.8	11
152	Elucidation of Donor:Acceptor Phase Separation in Nonfullerene Organic Solar Cells and Its Implications on Device Performance and Charge Carrier Mobility. <i>ACS Applied Energy Materials</i> , 2019, 2, 7535-7545.	2.5	11
153	Structural characterization of poly-Si Films crystallized by Ni Metal Induced Lateral Crystallization. <i>Scientific Reports</i> , 2019, 9, 2844.	1.6	11
154	Helium droplet assisted synthesis of plasmonic Ag@ZnO core@shell nanoparticles. <i>Nano Research</i> , 2020, 13, 2979-2986.	5.8	11
155	Benefits of direct electron detection and PCA for EELS investigation of organic photovoltaics materials. <i>Micron</i> , 2021, 140, 102981.	1.1	11
156	Characterization of deposits in human lung tissue by a combination of different methods of analytical electron microscopy. <i>Micron</i> , 1998, 29, 7-15.	1.1	10
157	The evidence on the degradation processes in the midgut epithelial cells of the larval antlion <i>Euroleon nostras</i> (Geoffroy in Fourcroy, 1785) (Myrmeleontidae, Neuroptera). <i>Micron</i> , 2012, 43, 651-665.	1.1	10
158	Modification of Eutectic Si in Al-Si Based Alloys. <i>Materials Science Forum</i> , 0, 794-796, 130-136.	0.3	10
159	Island-type growth of Au-Pt heterodimers: direct visualization of misfit dislocations and strain-relief mechanisms. <i>RSC Advances</i> , 2015, 5, 55262-55268.	1.7	10
160	Inclusions in Si whiskers grown by Ni metal induced lateral crystallization. <i>Journal of Applied Physics</i> , 2017, 121, .	1.1	10
161	Transformation dynamics of Ni clusters into NiO rings under electron beam irradiation. <i>Ultramicroscopy</i> , 2017, 176, 105-111.	0.8	10
162	On the passivation of iron particles at the nanoscale. <i>Nanoscale Advances</i> , 2019, 1, 2276-2283.	2.2	10

#	ARTICLE	IF	CITATIONS
163	An EFTEM and conical dark field investigation of co-sputtered CoPt+Yttria stabilized zirconia thin films. <i>Micron</i> , 1998, 29, 33-41.	1.1	9
164	Imaging of the Core-Shell Structure of Doped BaTiO ₃ Ceramics by Energy Filtering TEM. <i>Physica Status Solidi A</i> , 1998, 166, 315-325.	1.7	9
165	EFTEM and EELS Analysis of a Pt/NiO Interface. <i>Mikrochimica Acta</i> , 2000, 133, 125-129.	2.5	9
166	Visualization of Compositional Fluctuations in Complex Oxides Using Energy-Filtering Transmission Electron Microscopy. <i>Chemistry of Materials</i> , 2002, 14, 135-143.	3.2	9
167	Crystal structure of La _{0.4} Sr _{0.6} Co ₂ O _{7.1} investigated by TEM and XRD. <i>Journal of Solid State Chemistry</i> , 2008, 181, 2976-2982.	1.4	9
168	Application of elemental microanalysis to elucidate the role of spherites in the digestive gland of the helcid snail <i>Chilostoma lefeburiana</i> . <i>Journal of Microscopy</i> , 2008, 231, 38-46.	0.8	9
169	Adatom dynamics and the surface reconstruction of Si(110) revealed using time-resolved electron microscopy. <i>Applied Physics Letters</i> , 2018, 113, .	1.5	9
170	Long-Term Stability of Pr ₂ NiO _{4+δ} Air Electrodes for Solid Oxide Cells against Chromium Poisoning. <i>Journal of the Electrochemical Society</i> , 2021, 168, 014509.	1.3	9
171	Quantitative chemical phase imaging by means of energy filtering transmission electron microscopy. <i>Mikrochimica Acta</i> , 1997, 125, 13-19.	2.5	8
172	Mapping the chemistry in nanostructured materials by energy-filtering transmission electron microscopy (EFTEM). <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2001, 57, 2061-2069.	2.0	8
173	Spectrum image analysis tool – A flexible MATLAB solution to analyze EEL and CL spectrum images. <i>Micron</i> , 2017, 93, 43-51.	1.1	8
174	Elemental Nanoanalysis of Interfacial Alumina-Aryl Fluoride Interactions in Fullerene-Free Organic Tandem Solar Cells. <i>Advanced Materials Interfaces</i> , 2019, 6, 1901053.	1.9	8
175	Ultra-thin h-BN substrates for nanoscale plasmon spectroscopy. <i>Journal of Applied Physics</i> , 2019, 125, .	1.1	8
176	Characterization of rubber-brass bonding layers by analytical electron microscopy (AEM). <i>Journal of Adhesion Science and Technology</i> , 1996, 10, 473-490.	1.4	7
177	Width determination of SiO ₂ -films in Si-based devices using low-loss EFTEM: image contrast as a function of sample thickness. <i>Micron</i> , 2003, 34, 1-7.	1.1	7
178	Structural and optical properties of nanoparticulate Y ₂ O ₃ :Eu ₂ O ₃ made by microwave plasma synthesis. <i>Applied Physics A: Materials Science and Processing</i> , 2011, 105, 709-712.	1.1	6
179	Real time X-ray scattering study of the formation of ZnS nanoparticles using synchrotron radiation. <i>Materials Chemistry and Physics</i> , 2014, 144, 310-317.	2.0	6
180	Investigation on the formation of copper zinc tin sulphide nanoparticles from metal salts and dodecanethiol. <i>Materials Chemistry and Physics</i> , 2015, 149-150, 94-98.	2.0	6

#	ARTICLE	IF	CITATIONS
181	High-quality imaging in environmental scanning electron microscopy – optimizing the pressure limiting system and the secondary electron detection of a commercially available ESEM. <i>Journal of Microscopy</i> , 2016, 262, 85-91.	0.8	6
182	Copper-alumina nanocomposites derived from CuAlO_2 : Phase transformation and microstructural coarsening. <i>Journal of the American Ceramic Society</i> , 2018, 101, 5801-5810.	1.9	6
183	Synthesis of nanosized vanadium (V) oxide clusters below 10 nm. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 21104-21108.	1.3	6
184	The impact of swift electrons on the segregation of Ni-Au nanoalloys. <i>Applied Physics Letters</i> , 2019, 115, 123103.	1.5	6
185	Self-Sensing and –Actuating Probes for Tapping Mode AFM Measurements of Soft Polymers at a Wide Range of Temperatures. <i>Journal of Modern Physics</i> , 2011, 02, 72-78.	0.3	6
186	Thermodynamic Properties of Solid Gold-Nickel Alloys. <i>Zeitschrift Fur Physikalische Chemie</i> , 1982, 130, 229-239.	1.4	5
187	Investigation of multi-layer coatings on cemented carbide cutting tools by analytical electron microscopy. <i>Mikrochimica Acta</i> , 1990, 101, 243-249.	2.5	5
188	Characterisation of thick film Ti/Al nanolaminates. <i>Micron</i> , 1998, 29, 17-31.	1.1	5
189	Chromium interaction with TiO_2 dispersoids in oxide dispersion strengthened ferritic steel. <i>Materials Science and Technology</i> , 1999, 15, 1425-1432.	0.8	5
190	Experiences and Possibilities with a 200 kV Monochromated (S)TEM. <i>Microscopy and Microanalysis</i> , 2003, 9, 846-847.	0.2	5
191	Electron-irradiation damage in chromium nitrides and chromium oxynitride thin films. <i>Micron</i> , 2006, 37, 385-388.	1.1	5
192	Application of high-resolution EFTEM SI in an AEM. <i>Analytical and Bioanalytical Chemistry</i> , 2008, 390, 1439-1445.	1.9	5
193	Plasmon modes of a silver thin film taper probed with STEM-EELS. <i>Optics Letters</i> , 2015, 40, 5670.	1.7	5
194	Quantitative Microanalysis Using Electron Energy-Loss Spectrometry: II. Compounds with Heavier Elements. <i>Microscopy Microanalysis Microstructures</i> , 1996, 7, 265-277.	0.4	5
195	Ultrastructure of spherites in the midgut diverticula and Malpighian tubules of the harvestman <i>Amilenus aurantiacus</i> during the winter diapause. <i>Histochemistry and Cell Biology</i> , 2022, 157, 107-118.	0.8	5
196	AEM-Untersuchungen von Keramikschtzuschichten auf Hartmetallwerkzeugen / AEM-Investigations of Ceramic Protective Coatings on Hard Metal Tools. <i>Praktische Metallographie/Practical Metallography</i> , 1989, 26, 506-517.	0.1	5
197	Investigation of the rubber-metal bonding system by means of analytical electron microscopy and comparison with results of technical tear strength measurements. <i>Fresenius' Journal of Analytical Chemistry</i> , 1994, 349, 235-236.	1.5	4
198	Patterned modification of polymer surfaces employing UV sensitive gases. <i>Synthetic Metals</i> , 2001, 121, 1371-1372.	2.1	4

#	ARTICLE	IF	CITATIONS
199	Hyperspectral Imaging in TEM: New Ways of Information Extraction and Display. <i>Microscopy and Microanalysis</i> , 2008, 14, 70-71.	0.2	4
200	Ultrashort XUV pulse absorption spectroscopy of partially oxidized cobalt nanoparticles. <i>Journal of Applied Physics</i> , 2020, 127, 184303.	1.1	4
201	Characterization of Nanocomposite Coatings in the System Ti-B-N by Analytical Electron Microscopy and X-Ray Photoelectron Spectroscopy. , 2002, , 101-112.		4
202	The formation of silicon carbide films from disilane derivatives. <i>Advanced Materials</i> , 1994, 6, 584-587.	11.1	3
203	Quantitative Energy-Filtering Transmission Electron Microscopy (EFTEM) In Materials Science. <i>Microscopy and Microanalysis</i> , 1998, 4, 128-129.	0.2	3
204	Experimental evaluation of environmental scanning electron microscopes at high chamber pressure. <i>Journal of Microscopy</i> , 2015, 260, 133-139.	0.8	3
205	Single grain analysis on a nanoscale in ZrO ₂ :Al ₂ O ₃ nano-composites by means of high-resolution scanning transmission electron Microscopy. <i>Materials Research Express</i> , 2016, 3, 125009.	0.8	3
206	Precipitation of Long-Period Stacking Ordered Structure in Mg-Gd-Zn-Mn Alloy. <i>Advanced Engineering Materials</i> , 2017, 19, 1600705.	1.6	3
207	A method for a column-by-column EELS quantification of barium lanthanum ferrate. <i>Ultramicroscopy</i> , 2022, 234, 113477.	0.8	3
208	Application of EELS to the microanalysis of materials. <i>Mikrochimica Acta</i> , 1987, 91, 125-134.	2.5	2
209	Microstructure Of Fe-Nd-B Alloys Tailored To Approach Theoretical Coercivity Limits. <i>Microscopy and Microanalysis</i> , 1999, 5, 26-27.	0.2	2
210	AEM Investigation of Strontium Substituted La-Co-Perovskites. <i>Microscopy and Microanalysis</i> , 2002, 8, 618-619.	0.2	2
211	EELS Spectrum Imaging: The Next Steps. <i>Microscopy and Microanalysis</i> , 2005, 11, .	0.2	2
212	Polymer - CuInS ₂ hybrid solar cells obtained by an in-situ formation route. , 2010, , .		2
213	Modeling the Microstructural and Yield Strength Evolution of an Age-Hardenable Al Alloy for High Temperature Applications. <i>Materials Science Forum</i> , 2016, 879, 380-385.	0.3	2
214	Properties of nitrocarburised and oxidised steel surfaces and the correlation with their tribological behaviour under unlubricated sliding conditions. <i>Wear</i> , 2018, 410-411, 127-141.	1.5	2
215	Correlating whole sample EDS and Raman mappings – A case study of a Chelyabinsk meteorite fragment. <i>Micron</i> , 2022, 153, 103177.	1.1	2
216	Si ₃ N ₄ Nanocomposite Prepared by the Addition of SiO ₂ + C. <i>International Journal of Materials Research</i> , 2022, 92, 937-941.	0.1	2

#	ARTICLE	IF	CITATIONS
217	Mapping the Distribution of Doping Elements in Electrolytically Doped Manganese Dioxide by EFTEM and EELS. Monatshefte für Chemie, 2001, 132, 541-549.	0.9	1
218	Formation of interfacial nano-layers in the system Pt–Ni–O. Solid State Ionics, 2001, 141-142, 177-183.	1.3	1
219	New Developments in Energy-filtering Transmission Electron Microscopy. Microscopy and Microanalysis, 2005, 11, .	0.2	1
220	Volcano effect in open through silicon via (TSV) technology. , 2012, , .		1
221	Quantitative EDX and EELS Elemental Mapping at Atomic Resolution. Microscopy and Microanalysis, 2014, 20, 570-571.	0.2	1
222	Heterogeneous nucleation of entrained eutectic Si in high purity melt spun Al-Si alloys investigated by entrained droplet technique and DSC. IOP Conference Series: Materials Science and Engineering, 2016, 117, 012006.	0.3	1
223	Publisher's Note. Ultramicroscopy, 2017, 174, 1.	0.8	1
224	Attosecond Spectroscopy of Ultrafast Carrier Dynamics in Nanoparticles. , 2020, , .		1
225	Compositional Mapping with Energy Filtering TEM: The Present Status. Microscopy and Microanalysis, 2001, 7, 1136-1137.	0.2	0
226	Difference Spectrum Images: Numerical Filters Applied to EELS 3D Data Sets. Microscopy and Microanalysis, 2001, 7, 1160-1161.	0.2	0
227	Thin-Film Zinc/Manganese Dioxide Electrodes. Monatshefte für Chemie, 2001, 132, 465-472.	0.9	0
228	Microstructural Aspects of the Ionic Transport Properties of Strontium-Substituted Lanthanum Cobaltites. Materials Research Society Symposia Proceedings, 2002, 756, 1.	0.1	0
229	Electron Energy-Loss Spectroscopy with a Monochromated TEM. Microscopy and Microanalysis, 2006, 12, 1146-1147.	0.2	0
230	The Effect of Ion / Electron Irradiation on Polymer Based Organic Optoelectronic Devices. Microscopy and Microanalysis, 2006, 12, 1300-1301.	0.2	0
231	Solar Cells based on Cu ₂ ZnSnS ₄ Thin Films Prepared from Metal Salts and Thioacetamide. Materials Research Society Symposia Proceedings, 2010, 1247, 1.	0.1	0
232	Manufacturing of Precision Forgings by Radial Forging. , 2011, , .		0
233	Comparing photovoltaic parameters of conventional cathodes with a novel silver nanoparticle/aluminum cathode in polymer based solar cells. , 2013, , .		0
234	Universal Scaling of Surface Plasmon Modes. Microscopy and Microanalysis, 2014, 20, 624-625.	0.2	0

#	ARTICLE	IF	CITATIONS
235	An In Situ Synchrotron Dilatometry and Atomistic Study of Martensite and Carbide Formation during Partitioning and Tempering. <i>Materials</i> , 2021, 14, 3849.	1.3	0
236	Thin-Film Zinc/Manganese Dioxide Electrodes. , 2001, , 45-52.		0
237	Mapping the Distribution of Doping Elements in Electrolytically Doped Manganese Dioxide by EFTEM and EELS. , 2001, , 121-129.		0
238	Inter-Wire Antiferromagnetic Exchange Interaction in Ni/Si-Ferromagnetic/Semiconductor Nanocomposites. <i>AIP Conference Proceedings</i> , 2007, , .	0.3	0
239	AEM-investigations disclose the structure of metal-graphite reagents. <i>Proceedings Annual Meeting Electron Microscopy Society of America</i> , 1990, 48, 304-305.	0.0	0