Joachim Mayer

List of Publications by Year
in descending order

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382 papers	10,599 citations	31976 53 h-index	53230 85 g-index
398 all docs	398 docs citations	398 times ranked	11526 citing authors

#	Article	IF	Citations
1	TEM Sample Preparation and FIB-Induced Damage. MRS Bulletin, 2007, 32, 400-407.	3.5	723
2	An interface clusters mixture model for the structure of amorphous silicon monoxide (SiO). Journal of Non-Crystalline Solids, 2003, 320, 255-280.	3.1	231
3	Lightâ€Mediated Heterogeneous Cross Dehydrogenative Coupling Reactions: Metal Oxides as Efficient, Recyclable, Photoredox Catalysts in Cï£¿C Bondâ€Forming Reactions. Chemistry - A European Journal, 2012, 18, 3478-3481.	3.3	213
4	One Nanometer Thin Carbon Nanosheets with Tunable Conductivity and Stiffness. Advanced Materials, 2009, 21, 1233-1237.	21.0	201
5	Behavior of Ba(Co, Fe, Nb)O_{3-Î´} Perovskite in CO₂-Containing Atmospheres: Degradation Mechanism and Materials Design. Chemistry of Materials, 2010, 22, 6246-6253.	6.7	180
6	Measurement of crystal growth velocity in a melt-quenched phase-change material. Nature Communications, 2013, 4, 2371.	12.8	176
7	ProbenprÃparation fÃ¼r die Transmissionselektronenmikroskopie: VerlÃ€Ÿliche Methode fÃ¼r Querschnitte und brÃ¼chige Materialien/ Specimen Preparation for Transmission Electron Microscopy: Reliable Method for Cross-Sections and Brittle Materials. Praktische Metallographie/Practical Metallography, 1993, 30, 482-495.	0.3	170
8	Ultrastructural Analysis of Vascular Calcifications in Uremia. Journal of the American Society of Nephrology: JASN, 2010, 21, 689-696.	6.1	157
9	A kinetic study of the decomposition of the cubic perovskite-type oxide BaxSr1â^'xCo0.8Fe0.2O3â^'Î´ (BSCF) (x = 0.1 and 0.5). Physical Chemistry Chemical Physics, 2010, 12, 10320.	2.8	157
10	Nanoionic Resistive Switching Memories: On the Physical Nature of the Dynamic Reset Process. Advanced Electronic Materials, 2016, 2, 1500233.	5.1	141
11	Experimental and Theoretical Understanding of Nitrogen-Doping-Induced Strong Metalâ€“Support Interactions in Pd/TiO₂ Catalysts for Nitrobenzene Hydrogenation. ACS Catalysis, 2017, 7, 1197-1206.	11.2	138
12	Concentrations of Atomic Defects in B2ï£¿Fe_xAl_{1â^'x}. An Abâ€Initio Study. Physica Status Solidi (B): Basic Research, 1995, 191, 283-298.	1.5	133
13	High-resolution electron microscopy studies of Nb/Al2O3 interfaces. Ultramicroscopy, 1990, 33, 51-61.	1.9	130
14	Chain-like assembly of gold nanoparticles on artificial DNA templates via â€˜click chemistryâ€™. Chemical Communications, 2008, , 169-171.	4.1	116
15	Controlled Nucleation of DNA Metallization. Angewandte Chemie - International Edition, 2009, 48, 219-223.	13.8	116
16	Polymer-derived Si-based bulk ceramics, part I: Preparation, processing and properties. Journal of the European Ceramic Society, 1995, 15, 703-715.	5.7	111
17	Structure Analysis and Properties of Siâ€“Câ€“N Ceramics Derived from Polysilazanes. Physica Status Solidi A, 1998, 166, 269-296.	1.7	111
18	The morphology of silicon carbide in C/Câ€“SiC composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2002, 332, 146-152.	5.6	111

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19	Slippery surfaces of pitcher plants: Nepenthes wax crystals minimize insect attachment via microscopic surface roughness. Journal of Experimental Biology, 2010, 213, 1115-1125.	1.7	101
20	Spectromicroscopic insights for rational design of redox-based memristive devices. Nature Communications, 2015, 6, 8610.	12.8	100
21	Influence of sintering conditions on microstructure and oxygen permeation of Ba0.5Sr0.5Co0.8Fe0.2O3â^Î´ (BSCF) oxygen transport membranes. Journal of Membrane Science, 2010, 359, 102-109.	8.2	99
22	Conversion of Self-Assembled Monolayers into Nanocrystalline Graphene: Structure and Electric Transport. ACS Nano, 2011, 5, 3896-3904.	14.6	97
23	Controlled Crystal Growth of Indium Selenide, In₂Se₃, and the Crystal Structures of Î±-In₂Se₃. Inorganic Chemistry, 2018, 57, 11775-11781.	4.0	97
24	Precursor-derived Si-(B-)C-N ceramics: thermolysis, amorphous state and crystallization. Applied Organometallic Chemistry, 2001, 15, 777-793.	3.5	93
25	The effect of yttrium incorporation on the oxidation resistance of Crâ€“Alâ€“N coatings. Surface and Coatings Technology, 2008, 202, 5870-5875.	4.8	90
26	3D Structures of Responsive Nanocompartmentalized Microgels. Nano Letters, 2016, 16, 7295-7301.	9.1	90
27	Temperature effect on deformation mechanisms and mechanical properties of a high manganese C+N alloyed austenitic stainless steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 642, 71-83.	5.6	86
28	Investigations of the chemistry and bonding at niobiumsapphire interfaces. Journal of Materials Research, 1994, 9, 2574-2583.	2.6	84
29	Interface characterization of nanosized B-doped Si3N4/SiC ceramics. Composites Part A: Applied Science and Manufacturing, 1996, 27, 717-721.	7.6	84
30	Atomic structure of epitaxial Nb-Al₂O₃interfaces I. Coherent regions. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1997, 75, 1329-1355.	0.6	82
31	Analysis of local strain in aluminium interconnects by energy filtered CBED. Ultramicroscopy, 2000, 81, 245-262.	1.9	82
32	Elastic properties of Cr2AlC thin films probed by nanoindentation and ab initio molecular dynamics. Scripta Materialia, 2007, 57, 1137-1140.	5.2	82
33	The growth and structure of epitaxial niobium on sapphire. Thin Solid Films, 2001, 401, 7-34.	1.8	80
34	Oxidation of Cr2AlC coatings in the temperature range of 1230 to 1410Â°C. Surface and Coatings Technology, 2011, 206, 591-598.	4.8	80
35	Atomic structure of epitaxial Nb-Al₂O₃interfaces II. Misfit dislocations. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1997, 75, 1357-1382.	0.6	77
36	Electron microscopy investigations of microstructural alterations due to classical Rolling Contact Fatigue (RCF) in martensitic AISI 52100 bearing steel. International Journal of Fatigue, 2017, 98, 142-154.	5.7	77

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37	Detection limits in elemental distribution images produced by energy filtering TEM: case study of grain boundaries in Si3N4. Ultramicroscopy, 1994, 55, 101-112.	1.9	72
38	Theory of atomic defects and diffusion in ordered compounds, and application to B2-FeAl. Intermetallics, 1999, 7, 315-323.	3.9	72
39	Microstructural changes in White Etching Cracks (WECs) and their relationship with those in Dark Etching Region (DER) and White Etching Bands (WEBs) due to Rolling Contact Fatigue (RCF). International Journal of Fatigue, 2017, 100, 148-158.	5.7	72
40	Silicon Nitride Based Ceramic Nanocomposites. Journal of the American Ceramic Society, 1996, 79, 585-590.	3.8	70
41	Nanosized Conducting Filaments Formed by Atomic-Scale Defects in Redox-Based Resistive Switching Memories. Chemistry of Materials, 2017, 29, 3164-3173.	6.7	70
42	On the meaning of effective formation energies, entropies and volumes for atomic defects in ordered compounds. Acta Materialia, 1997, 45, 2207-2211.	7.9	66
43	Influence of Al2O3 nano-dispersions on microstructure features and mechanical properties of cast and T6 heat-treated Al Si hypoeutectic Alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 556, 76-87.	5.6	65
44	Scaling Potential of Local Redox Processes in Memristive SrTiO $_{3}$ Thin-Film Devices. Proceedings of the IEEE, 2012, 100, 1979-1990.	21.3	64
45	Unexpected Geâ€“Ge Contacts in the Twoâ€Dimensional Ge₄Se₃Te Phase and Analysis of Their Chemical Cause with the Density of Energy (DOE) Function. Angewandte Chemie - International Edition, 2017, 56, 10204-10208.	13.8	64
46	Structure and defects of MBE grown NbAl2O3 interfaces. Acta Metallurgica Et Materialia, 1992, 40, S217-S225.	1.8	62
47	Determination of structure factors, lattice strains and accelerating voltage by energy-filtered convergent beam electron diffraction. Ultramicroscopy, 1994, 54, 15-30.	1.9	62
48	Atomic structure of misfit dislocations in metalâ€ceramic interfaces. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1995, 71, 1219-1239.	0.6	60
49	Atomic scale imaging of magnetic circular dichroism by achromatic electron microscopy. Nature Materials, 2018, 17, 221-225.	27.5	60
50	Atomic structure and chemistry of dislocation cores at low-angle tilt grain boundary in SrTiO3 bicrystals. Acta Materialia, 2015, 89, 344-351.	7.9	58
51	Oxygen Exchange Processes between Oxide Memristive Devices and Water Molecules. Advanced Materials, 2018, 30, e1800957.	21.0	57
52	Quantitative analysis of electron spectroscopic imaging series. Micron, 1997, 28, 361-370.	2.2	55
53	Novel ultra-coarse hardmetal grades with reinforced binder for mining and construction. International Journal of Refractory Metals and Hard Materials, 2005, 23, 225-232.	3.8	55
54	An Unconventional Transient Phase with Cycloidal Order of Polarization in Energyâ€Storage Antiferroelectric PbZrO₃. Advanced Materials, 2020, 32, e1907208.	21.0	54

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55	A new carbon modification: â€˜n-diamondâ€™ or face-centred cubic carbon?. Diamond and Related Materials, 2001, 10, 99-102.	3.9	52
56	Individual Multiwall Carbon Nanotubes Spectroscopy by Scanning Transmission X-ray Microscopy. Nano Letters, 2007, 7, 2435-2440.	9.1	51
57	Novel carbon nanosheets as support for ultrahigh-resolution structural analysis of nanoparticles. Ultramicroscopy, 2008, 108, 885-892.	1.9	51
58	Efficient and accurate two-scale FE-FFT-based prediction of the effective material behavior of elasto-viscoplastic polycrystals. Computational Mechanics, 2018, 61, 751-764.	4.0	49
59	Spontaneous Assembly of Miktoarm Stars into Vesicular Interpolyelectrolyte Complexes. Macromolecular Rapid Communications, 2013, 34, 855-860.	3.9	48
60	The STM view of the initial stages of polycrystalline Ag film formation. New Journal of Physics, 2007, 9, 74-74.	2.9	47
61	Hydrogen separation through tailored dual phase membranes with nominal composition BaCe0.8Eu0.2O3-Î´:Ce0.8Y0.2O2-Î´ at intermediate temperatures. Scientific Reports, 2016, 6, 34773.	3.3	46
62	Identification of a new phase formed during the oxidation of Î³-tttanium aluminum. Scripta Materialia, 1996, 34, 707-711.	5.2	45
63	Crystallization Behavior and Microstructure Evolution of (Al,Fe)2O3 Synthesized from Liquid Precursors. Journal of the American Ceramic Society, 1996, 79, 1745-1755.	3.8	45
64	Correlation between growth kinetics and nanoscale resistive switching properties of SrTiO3 thin films. Journal of Applied Physics, 2010, 108, .	2.5	45
65	Size-Selective, Stabilizer-Free, Hydrogenolytic Synthesis of Iridium Nanoparticles Supported on Carbon Nanotubes. Chemistry of Materials, 2011, 23, 2008-2010.	6.7	45
66	Progress on Emerging Ferroelectric Materials for Energy Harvesting, Storage and Conversion. Advanced Energy Materials, 2022, 12, .	19.5	45
67	A model structure for interfacial phase change memories: Epitaxial trigonal Ge1Sb2Te4. Journal of Alloys and Compounds, 2016, 679, 285-292.	5.5	44
68	Quantitative thin film analysis by energy filtering transmission electron microscopy. Ultramicroscopy, 1999, 78, 207-219.	1.9	43
69	Au@Hg Nanoalloy Formation Through Direct Amalgamation: Structural, Spectroscopic, and Computational Evidence for Slow Nanoscale Diffusion. Advanced Functional Materials, 2011, 21, 3259-3267.	14.9	43
70	Elastic properties of face-centred cubic Feâ€“Mnâ€“C studied by nanoindentation and ab initio calculations. Acta Materialia, 2012, 60, 6025-6032.	7.9	43
71	Energy-filtered transmission electron microscopy of SimGen superlattices and Siî—¸Ge heterostructures I. Experimental results. Ultramicroscopy, 1995, 59, 33-45.	1.9	42
72	Effective formation energies of atomic defects in D03î—¸Fe3Al: an ab-initio study. Intermetallics, 1997, 5, 597-600.	3.9	42

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73	Nanoscale X-ray imaging of ageing in automotive lithium ion battery cells. Journal of Power Sources, 2019, 433, 126631.	7.8	42
74	Mapping of ELNES on a nanometre scale by electron spectroscopic imaging. Journal of Microscopy, 1996, 183, 2-8.	1.8	41
75	Structure of nanocrystalline anatase solved and refined from electron powder dataPresented at the microsymposium onElectron Crystallography of Small Molecules and Organic Materials, 19th European Crystallographic Meeting, Nancy, France, 25â€“31 August 2000.. Acta Crystallographica Section A: Foundations and Advances, 2002, 58, 308-315.	0.3	41
76	Plastic deformation behavior of nanostructured CrN/AlN multilayer coatings deposited by hybrid dcMS/HPPMS. Surface and Coatings Technology, 2017, 332, 253-261.	4.8	41
77	Effects of Nb on the microstructure and corrosive property in the Alloy 690â€“SUS 304L weldment. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 397, 229-238.	5.6	40
78	Characterization and Prediction of Flow Behavior in High-Manganese Twinning Induced Plasticity Steels: Part II. Jerky Flow and Instantaneous Strain Rate. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 1705-1723.	2.2	40
79	Smart tungsten alloys as a material for the first wall of a future fusion power plant. Nuclear Fusion, 2017, 57, 066020.	3.5	40
80	Optimization of TEm specimen preparation by double-sided ion beam thinning under low angles. Journal of Electron Microscopy, 1999, 48, 235-244.	0.9	38
81	Modification of alumina scale formation on FeCrAlY alloys by minor additions of group IVa elements. Journal of Materials Science, 2008, 43, 4550-4560.	3.7	38
82	Cargo shuttling by electrochemical switching of coreâ€“shell microgels obtained by a facile one-shot polymerization. Chemical Science, 2019, 10, 1844-1856.	7.4	38
83	Interference experiments with energy filtered electrons. Ultramicroscopy, 1997, 69, 201-209.	1.9	37
84	Wear characteristics of second-phase-reinforced solâ€“gel corundum abrasives. Acta Materialia, 2006, 54, 3605-3615.	7.9	37
85	Influence of chemical composition and magnetic effects on the elastic properties of fcc Feâ€“Mn alloys. Acta Materialia, 2011, 59, 1493-1501.	7.9	36
86	Formation of white etching areas in SAE 52100 bearing steel under rolling contact fatigue â€“ Influence of diffusible hydrogen. Wear, 2018, 414-415, 352-365.	3.1	36
87	Hydroboration of polymethylvinylsilane â€” a novel route to silicon boron carbide ceramics. Journal of Materials Science, 1993, 28, 3931-3938.	3.7	35
88	Quantitative EFTEM study of precursor-derived Siâ€“Bâ€“Câ€“N ceramics. Journal of the European Ceramic Society, 2002, 22, 1621-1629.	5.7	35
89	Influence of wetting and thermophysical properties of diamond-like carbon coatings on the frictional behavior in automobile gearboxes under elasto-hydrodynamic lubrication. Surface and Coatings Technology, 2015, 284, 290-301.	4.8	35
90	Electron microscopy analysis of structural changes within white etching areas. Materials Science and Technology, 2016, 32, 1683-1693.	1.6	35

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91	The carbonization of polyacrylonitrile-derived electrospun carbon nanofibers studied by in situ transmission electron microscopy. RSC Advances, 2019, 9, 6267-6277.	3.6	35
92	Polymer-derived Si-based bulk ceramics, part II: Microstructural characterisation by electron spectroscopic imaging. Journal of the European Ceramic Society, 1995, 15, 717-727.	5.7	34
93	TEM investigations of the superdislocations and their interaction with particles in dispersion strengthened intermetallics. Intermetallics, 1999, 7, 423-436.	3.9	34
94	Achromatic Elemental Mapping Beyond the Nanoscale in the Transmission Electron Microscope. Physical Review Letters, 2013, 110, 185507.	7.8	34
95	Fragmentation, rings and coarsening: structure and transformations of nanocrystal aggregate networks on a liquid surface. Surface Science, 2002, 497, 100-112.	1.9	33
96	Evidence for multifilamentary valence changes in resistive switching SrTiO3 devices detected by transmission X-ray microscopy. APL Materials, 2013, 1, .	5.1	33
97	Hydrophobic superparamagnetic FePt nanoparticles in hydrophilic poly(N-vinylcaprolactam) microgels: a new multifunctional hybrid system. Journal of Materials Chemistry B, 2017, 5, 1284-1292.	5.8	33
98	Using the Hough transform for HOLZ line identification in convergent beam electron diffraction. Journal of Microscopy, 1999, 194, 02-11.	1.8	32
99	Preparation of Nanosized Perovskite-type Oxides via Polyol Method. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2004, 630, 2083-2089.	1.2	32
100	Nanospectroscopy of Infrared Phonon Resonance Enables Local Quantification of Electronic Properties in Doped SrTiO₃ Ceramics. Advanced Functional Materials, 2018, 28, 1802834.	14.9	32
101	The niobium/sapphire interface: Structural studies by HREM. Scripta Metallurgica Et Materialia, 1994, 31, 1097-1102.	1.0	30
102	Analysis of Calcifications in Patients with Coral Reef Aorta. Annals of Vascular Surgery, 2010, 24, 408-414.	0.9	30
103	X-ray and electron diffraction investigations on the liquid-quenched Fe2Al5. Scripta Metallurgica Et Materialia, 1992, 26, 501-504.	1.0	29
104	Quantitative electron spectroscopic imaging studies of microelectronic metallization layers. Journal of Microscopy, 1999, 194, 71-78.	1.8	29
105	Homogeneity and variation of donor doping in Verneuil-grown SrTiO3:Nb single crystals. Scientific Reports, 2016, 6, 32250.	3.3	29
106	Intermetallic phase formation in aluminium and iron thin film systems. Thin Solid Films, 1988, 167, 203-216.	1.8	28
107	Chemical strengthening of a dental lithium disilicate glassâ€“ceramic material. Journal of Biomedical Materials Research - Part A, 2008, 87A, 582-587.	4.0	28
108	Hardness and Wear Behaviour of Semi-Solid Cast A390 Alloy Reinforced with Al2O3 and TiO2 Nanoparticles. Arabian Journal for Science and Engineering, 2014, 39, 5171-5184.	1.1	28

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109	Avalancheâ€Dischargeâ€Induced Electrical Forming in Tantalum Oxideâ€Based Metalâ€“Insulatorâ€“Metal Structures. Advanced Functional Materials, 2015, 25, 7154-7162.	14.9	28
110	Mechanisms of austenite growth during intercritical annealing in medium manganese steels. Scripta Materialia, 2022, 206, 114228.	5.2	27
111	Spinodal ordering in Ni4Mo. Acta Metallurgica, 1985, 33, 539-543.	2.1	26
112	Surface â€œClickâ€•Reaction of DNA followed by Directed Metalization for the Construction of Contactable Conducting Nanostructures. Angewandte Chemie - International Edition, 2012, 51, 7586-7588.	13.8	26
113	On the role of the metal oxide/reactive electrode interface during the forming procedure of valence change ReRAM devices. Nanoscale, 2019, 11, 18201-18208.	5.6	26
114	A new hard allotropic form of carbon: Dream or reality?. International Journal of Refractory Metals and Hard Materials, 2006, 24, 17-23.	3.8	25
115	Ab initio-guided design of twinning-induced plasticity steels. MRS Bulletin, 2016, 41, 320-325.	3.5	25
116	Dielectric Properties and Ion Transport in Layered MoS₂ Grown by Vapor-Phase Sulfurization for Potential Applications in Nanoelectronics. ACS Applied Nano Materials, 2018, 1, 6197-6204.	5.0	25
117	Single-crystal X-ray study of the decagonal phase of the system Alâ€“Mn. Acta Crystallographica Section B: Structural Science, 1989, 45, 355-359.	1.8	24
118	Micro-Analysis of the Contact Zone of Tribologically Loaded Second-Phase Reinforced Sol-Gel-Abrasives. CIRP Annals - Manufacturing Technology, 2002, 51, 245-250.	3.6	24
119	Preparation, structure, and electronic properties ofFe3O4films on theFe(110)/Mo(110)/Al2O3(112Â¯0)substrate. Physical Review B, 2003, 68, .	3.2	24
120	Elemental mapping in achromatic atomic-resolution energy-filtered transmission electron microscopy. Ultramicroscopy, 2014, 147, 98-105.	1.9	24
121	Facile Screening of Various Micellar Morphologies by Blending Miktoarm Stars and Diblock Copolymers. ACS Macro Letters, 2017, 6, 711-715.	4.8	23
122	Observation of Ni8Mo ordered phase in Ni-Mo alloys. Physica Status Solidi A, 1985, 90, 469-475.	1.7	22
123	Interfacial structure of V2AlC thin films deposited on <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mrow><mml:mo		

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127	Impact of Bonding on the Stacking Defects in Layered Chalcogenides. Advanced Functional Materials, 2019, 29, 1902332.	14.9	21
128	Preparation of aluminium based icosahedral thin films by high-temperature vapour deposition. Scripta Metallurgica, 1987, 21, 1535-1540.	1.2	20
129	High-Precision Measurement of Temperature Factors for NiAl by Convergent-Beam Electron Diffraction. Acta Crystallographica Section A: Foundations and Advances, 1998, 54, 147-157.	0.3	20
130	Surface Atomic Structure and Growth Mechanism of Monodisperse {1 0 0}-Faceted Strontium Titanate Zirconate Nanocubes. Chemistry of Materials, 2016, 28, 650-656.	6.7	20
131	Crystalline and quasicrystalline phases formed by interdiffusion in evaporated Alâ€“Mn thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1987, 5, 1733-1734.	2.1	19
132	Electronic band gap of Si/SiO2 quantum wells: Comparison ofab initiocalculations and photoluminescence measurements. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2007, 25, 1500-1504.	2.1	19
133	Low-Ion-Dose FIB Modification of Monomicellar Layers for the Creation of Highly Ordered Metal Nanodot Arrays. Small, 2007, 3, 1368-1373.	10.0	19
134	Quantised double layer charging of monolayer-protected clusters in a room temperature ionic liquid. Electrochimica Acta, 2009, 54, 5006-5010.	5.2	19
135	Fabrication of ultrathin films of Ta2O5 by a solâ€“gel method. Thin Solid Films, 2013, 527, 354-357.	1.8	19
136	Study of subsurface initiation mechanism for white etching crack formation. Materials Science and Technology, 2016, 32, 1170-1178.	1.6	19
137	On the origin of vibrational properties of calcium manganate based thermoelectric compounds. Nano Energy, 2018, 47, 451-462.	16.0	19
138	Analysis of the effects of different carbon coating strategies on structure and electrochemical behavior of LiCoPO4 material as a high-voltage cathode electrode for lithium ion batteries. Electrochimica Acta, 2018, 279, 108-117.	5.2	19
139	Antiphase Boundaries Constitute Fast Cation Diffusion Paths in SrTiO₃ Memristive Devices. Advanced Functional Materials, 2020, 30, 2004118.	14.9	19
140	Morphology-controllable synthesis of LiCoPO4 and its influence on electrochemical performance for high-voltage lithium ion batteries. Journal of Power Sources, 2020, 450, 227726.	7.8	19
141	The T-tubular network and its triads in the sole plate sarcoplasm of the motor end-plate of mammals. Journal of Muscle Research and Cell Motility, 2000, 21, 443-449.	2.0	18
142	Imaging of phase change materials below a capping layer using correlative infrared near-field microscopy and electron microscopy. Applied Physics Letters, 2015, 107, .	3.3	18
143	Atomic Structure of Antiphase Nanodomains in Feâ€Doped SrTiO₃ Films. Advanced Functional Materials, 2015, 25, 6369-6373.	14.9	18
144	Shape without Structure: An Intriguing Formation Mechanism in the Solvothermal Synthesis of the Phaseâ€Change Material Sb₂Te₃. Angewandte Chemie - International Edition, 2015, 54, 6632-6636.	13.8	18

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145	Model-based design and synthesis of ferrocene containing microgels. Polymer Chemistry, 2020, 11, 315-325.	3.9	18
146	Laser micro annealing conditioning for the suppression of statistical scatter in freestanding Sb2Te3 nanowire resistance. FlatChem, 2020, 21, 100164.	5.6	18
147	Combined Î²-carbide precipitation and recovery enables ultra-high strength and ductility in light-weight steels. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 795, 139928.	5.6	18
148	In Situ Observation of Pointâ€Defectâ€Induced Unitâ€Cellâ€Wise Energy Storage Pathway in Antiferroelectric PbZrO‹sub›3‹/sub›. Advanced Functional Materials, 2021, 31, 2008609.	14.9	18
149	Ferroelectric phase-transition frustration near a tricritical composition point. Nature Communications, 2021, 12, 5322.	12.8	18
150	White etching bands formation mechanisms due to rolling contact fatigue. Acta Materialia, 2022, 232, 117932.	7.9	18
151	Electron microscopy studies of Nb-Al2O3 interfaces formed by molecular beam epitaxy. Surface and Coatings Technology, 1990, 43-44, 199-212.	4.8	17
152	Structural investigations of Ptâˆ•TiOx electrode stacks for ferroelectric thin film devices. Journal of Applied Physics, 2006, 99, 114107.	2.5	17
153	Determination of the Young's modulus of the epicuticle of the smooth adhesive organs of ‹i›Carausius morosus‹/i› by tensile testing. Journal of Experimental Biology, 2014, 217, 3677-87.	1.7	17
154	Microstructural insights into the coercivity enhancement of grain-boundary-diffusion-processed Tb-treated Nd-Fe-B sintered magnets beyond the core-shell formation mechanism. Journal of Alloys and Compounds, 2021, 864, 158915.	5.5	17
155	Correlating Nanocrystalline Structure with Electronic Properties in 2D Platinum Diselenide. Advanced Functional Materials, 2021, 31, 2102929.	14.9	17
156	Novel self-epitaxy for inducing superconductivity in the topological insulator ‹mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"›‹mml:mrow›‹mml:mo›(‹/mml:mo›‹mml:msub›‹mml:mi›Bi‹/mml:mi›	2.4	17 ‹mml:m Physical Review Materials, 2020, 4, .
157	Low-Order Structure-Factor Amplitude and Sign Determination of an Unknown Structure AlmFe by Quantitative Convergent-Beam Electron Diffraction. Acta Crystallographica Section A: Foundations and Advances, 1996, 52, 923-936.	0.3	16
158	Time dependence of Mg-incorporation in alumina scales on FeCrAl alloys studied by FIB-prepared TEM cross sections. Materials at High Temperatures, 2003, 20, 413-419.	1.0	16
159	Oxide scale formation on Al containing Niâ€“Cr-based high temperature alloys during application as flame tube material in recirculation oil burners. Materials and Corrosion - Werkstoffe Und Korrosion, 2008, 59, 380-388.	1.5	16
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