

Gerd Duscher

List of Publications by Year in descending order

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224
papers

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citations

53789

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69246

77
g-index

226
all docs

226
docs citations

226
times ranked

10288
citing authors

#	ARTICLE	IF	CITATIONS
1	Time-resolved imaging of gas phase nanoparticle synthesis by laser ablation. Applied Physics Letters, 1998, 72, 2987-2989.	3.3	318
2	Surface plasmon resonance in conducting metal oxides. Journal of Applied Physics, 2006, 100, 054905.	2.5	258
3	Interlayer Coupling in Twisted WSe ₂ /WS ₂ Bilayer Heterostructures Revealed by Optical Spectroscopy. ACS Nano, 2016, 10, 6612-6622.	14.6	249
4	Perovskite Solar Cells with Near 100% Internal Quantum Efficiency Based on Large Single Crystalline Grains and Vertical Bulk Heterojunctions. Journal of the American Chemical Society, 2015, 137, 9210-9213.	13.7	246
5	Bismuth-induced embrittlement of copper grain boundaries. Nature Materials, 2004, 3, 621-626.	27.5	242
6	Void formation during early stages of passivation: Initial oxidation of iron nanoparticles at room temperature. Journal of Applied Physics, 2005, 98, 094308.	2.5	238
7	Synthesis of Millimeter-Size Hexagon-Shaped Graphene Single Crystals on Resolidified Copper. ACS Nano, 2013, 7, 8924-8931.	14.6	178
8	Nonstoichiometry and the Electrical Activity of Grain Boundaries in SrTiO ₃ . Physical Review Letters, 2001, 86, 4056-4059.	7.8	176
9	Structure and Formation Mechanism of Black TiO ₂ Nanoparticles. ACS Nano, 2015, 9, 10482-10488.	14.6	170
10	Transition layers at the SiO ₂ /SiC interface. Applied Physics Letters, 2008, 93, .	3.3	140
11	Topological Defects: Origin of Nanopores and Enhanced Adsorption Performance in Nanoporous Carbon. Small, 2012, 8, 3283-3288.	10.0	139
12	Universal Formation of Compositionally Graded Bulk Heterojunction for Efficiency Enhancement in Organic Photovoltaics. Advanced Materials, 2014, 26, 3068-3075.	21.0	139
13	Low Energy Implantation into Transition-Metal Dichalcogenide Monolayers to Form Janus Structures. ACS Nano, 2020, 14, 3896-3906.	14.6	136
14	Direct observation of dislocation dissociation and Suzuki segregation in a Mg-Zn-Y alloy by aberration-corrected scanning transmission electron microscopy. Acta Materialia, 2013, 61, 350-359.	7.9	126
15	Tailoring Vacancies Far Beyond Intrinsic Levels Changes the Carrier Type and Optical Response in Monolayer MoSe ₂ Crystals. Nano Letters, 2016, 16, 5213-5220.	9.1	121
16	Photoluminescence from gas-suspended SiOx nanoparticles synthesized by laser ablation. Applied Physics Letters, 1998, 73, 438-440.	3.3	108
17	Impurity-Induced Structural Transformation of a MgO Grain Boundary. Physical Review Letters, 1998, 81, 3675-3678.	7.8	108
18	Pulsed Laser Deposition of Photoresponsive Two-Dimensional GaSe Nanosheet Networks. Advanced Functional Materials, 2014, 24, 6365-6371.	14.9	108

#	ARTICLE	IF	CITATIONS
19	High-performance multilayer WSe ₂ field-effect transistors with carrier type control. Nano Research, 2018, 11, 722-730.	10.4	101
20	Focused helium-ion beam irradiation effects on electrical transport properties of few-layer WSe ₂ : enabling nanoscale direct write homo-junctions. Scientific Reports, 2016, 6, 27276.	3.3	99
21	The influence of atomic structure on the formation of electrical barriers at grain boundaries in SrTiO ₃ . Applied Physics Letters, 1999, 74, 2638-2640.	3.3	90
22	Electronic structure of a grain-boundary model in SrTiO ₃ . Physical Review B, 1999, 60, 2416-2424.	3.2	86
23	Excitonic Dynamics in Janus MoSSe and WSSe Monolayers. Nano Letters, 2021, 21, 931-937.	9.1	86
24	Relationship between 4H-SiC/SiO ₂ transition layer thickness and mobility. Applied Physics Letters, 2009, 95, 032108.	3.3	85
25	Atomic Column Resolved Electron Energy-Loss Spectroscopy. Physica Status Solidi A, 1998, 166, 327-342.	1.7	84
26	Suppression of Defects and Deep Levels Using Isoelectronic Tungsten Substitution in Monolayer MoSe ₂ . Advanced Functional Materials, 2017, 27, 1603850.	14.9	84
27	Two-Dimensional Palladium Diselenide with Strong In-Plane Optical Anisotropy and High Mobility Grown by Chemical Vapor Deposition. Advanced Materials, 2020, 32, e1906238.	21.0	81
28	Spatially Mapping Energy Transfer from Single Plasmonic Particles to Semiconductor Substrates via STEM/EELS. Nano Letters, 2015, 15, 3465-3471.	9.1	77
29	Excitonic Effects in Core-Excitation Spectra of Semiconductors. Physical Review Letters, 2000, 85, 2168-2171.	7.8	76
30	Core-hole effects on energy-loss near-edge structure. Ultramicroscopy, 2001, 86, 355-362.	1.9	65
31	Oxidation Resistance of Reactive Atoms in Graphene. Nano Letters, 2012, 12, 4651-4655.	9.1	64
32	Unusual role of epilayer-substrate interactions in determining orientational relations in van der Waals epitaxy. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 16670-16675.	7.1	64
33	Gold and Silica-Coated Gold Nanoparticles as Thermographic Labels for DNA Detection. Analytical Chemistry, 2006, 78, 3282-3288.	6.5	63
34	Tandem laser ablation synthesis in solution-galvanic replacement reaction (LASIS-GRR) for the production of PtCo nanoalloys as oxygen reduction electrocatalysts. Journal of Power Sources, 2016, 306, 413-423.	7.8	63
35	Guided crystallization of P3HT in ternary blend solar cell based on P3HT:PCPDTBT:PCBM. Energy and Environmental Science, 2014, 7, 3782-3790.	30.8	60
36	The mechanism for polarity inversion of GaN via a thin AlN layer: Direct experimental evidence. Applied Physics Letters, 2007, 91, 203115.	3.3	59

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37	Self-organized bimetallic Ag-Co nanoparticles with tunable localized surface plasmons showing high environmental stability and sensitivity. <i>Nanotechnology</i> , 2012, 23, 275604.	2.6	55
38	Si/SiO ₂ and SiC/SiO ₂ ; Interfaces for MOSFETs – Challenges and Advances. <i>Materials Science Forum</i> , 2006, 527-529, 935-948.	0.3	54
39	Correlating high power conversion efficiency of PTB7:PC ₇₁ BM inverted organic solar cells with nanoscale structures. <i>Nanoscale</i> , 2015, 7, 15576-15583.	5.6	54
40	Observation of Nanoscale Morphological and Structural Degradation in Perovskite Solar Cells by in Situ TEM. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 32333-32340.	8.0	54
41	High Conduction Hopping Behavior Induced in Transition Metal Dichalcogenides by Percolating Defect Networks: Toward Atomically Thin Circuits. <i>Advanced Functional Materials</i> , 2017, 27, 1702829.	14.9	52
42	Silicon and zinc telluride nanoparticles synthesized by pulsed laser ablation: size distributions and nanoscale structure. <i>Applied Surface Science</i> , 1998, 127-129, 355-361.	6.1	51
43	Oxidation-Resistant Silver Nanostructures for Ultrastable Plasmonic Applications. <i>Advanced Materials</i> , 2013, 25, 2045-2050.	21.0	51
44	Silicon and zinc telluride nanoparticles synthesized by low energy density pulsed laser ablation into ambient gases. <i>Journal of Materials Research</i> , 1999, 14, 359-370.	2.6	48
45	Digital Transfer Growth of Patterned 2D Metal Chalcogenides by Confined Nanoparticle Evaporation. <i>ACS Nano</i> , 2014, 8, 11567-11575.	14.6	47
46	Ferroplasmons: Intense Localized Surface Plasmons in Metal-Ferromagnetic Nanoparticles. <i>ACS Nano</i> , 2014, 8, 9790-9798.	14.6	46
47	Ultrathin GaN quantum disk nanowire LEDs with sub-250 nm electroluminescence. <i>Nanoscale</i> , 2016, 8, 8024-8032.	5.6	44
48	Graphitic coated Al nanoparticles manufactured as superior energetic materials via laser ablation synthesis in organic solvents. <i>Applied Surface Science</i> , 2019, 473, 156-163.	6.1	44
49	Controllable Growth of Perovskite Films by Room-Temperature Air Exposure for Efficient Planar Heterojunction Photovoltaic Cells. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 14862-14865.	13.8	41
50	Z-contrast imaging of dislocation cores at the GaAs/Si interface. <i>Applied Physics Letters</i> , 2002, 81, 2728-2730.	3.3	40
51	Evaluation of the microstructure of dry and hydrated perfluorosulfonic acid ionomers: microscopy and simulations. <i>Journal of Materials Chemistry A</i> , 2013, 1, 938-944.	10.3	39
52	The reaction between a TiNi shape memory thin film and silicon. <i>Journal of Materials Research</i> , 1997, 12, 1734-1740.	2.6	38
53	Scanning transmission electron microscope observations of defects in as-grown and pre-strained Mo alloy fibers. <i>Acta Materialia</i> , 2011, 59, 2172-2179.	7.9	37
54	Structure characterization and strain relief analysis in CVD growth of boron phosphide on silicon carbide. <i>Applied Surface Science</i> , 2015, 327, 7-12.	6.1	36

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55	Multiscale characterization of irradiation behaviour of ion-irradiated SiC/SiC composites. Acta Materialia, 2018, 161, 207-220.	7.9	36
56	Plasma plume characteristics and properties of pulsed laser deposited diamond-like carbon films. Journal of Applied Physics, 2003, 93, 3627-3634.	2.5	34
57	Effect of Pb on the mechanical properties of nanocrystalline Al. Scripta Materialia, 2006, 55, 155-158.	5.2	34
58	Tungsten Diselenide Patterning and Nanoribbon Formation by Gas-Assisted Focused Helium Ion Beam-Induced Etching. Small Methods, 2017, 1, 1600060.	8.6	33
59	Nonequilibrium Synthesis of TiO ₂ Nanoparticle "Building Blocks" for Crystal Growth by Sequential Attachment in Pulsed Laser Deposition. Nano Letters, 2017, 17, 4624-4633.	9.1	33
60	Synthesis and atomic-level characterization of Ni nanoparticles in Al ₂ O ₃ matrix. Applied Physics Letters, 2002, 81, 4204-4206.	3.3	32
61	Effect of microstructure on diffusion of copper in TiN films. Journal of Applied Physics, 2003, 93, 5210-5214.	2.5	32
62	Direct Observation of Inversion Domain Boundaries of GaN on c-Sapphire at Sub-Ångstrom Resolution. Advanced Materials, 2008, 20, 2162-2165.	21.0	31
63	Feature extraction via similarity search: application to atom finding and denoising in electron and scanning probe microscopy imaging. Advanced Structural and Chemical Imaging, 2018, 4, 3.	4.0	31
64	Non-Equilibrium Synthesis of Highly Active Nanostructured, Oxygen-Incorporated Amorphous Molybdenum Sulfide HER Electrocatalyst. Small, 2020, 16, e2004047.	10.0	29
65	Ab Initio Identification of the Nitrogen Diffusion Mechanism in Silicon. Physical Review Letters, 2005, 95, 025901.	7.8	28
66	Focused helium and neon ion beam induced etching for advanced extreme ultraviolet lithography mask repair. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2014, 32, .	1.2	28
67	Excess carbon in silicon carbide. Journal of Applied Physics, 2010, 108, 123705.	2.5	26
68	Dose dependence of helium bubble formation in nano-engineered SiC at 700 Å°C. Journal of Nuclear Materials, 2016, 472, 153-160.	2.7	26
69	Distribution and segregation of arsenic at the SiO ₂ /Si interface. Journal of Applied Physics, 2008, 104, 023518.	2.5	25
70	Continuous Wave Resonant Photon Stimulated Electron Energy-Gain and Electron Energy-Loss Spectroscopy of Individual Plasmonic Nanoparticles. ACS Photonics, 2019, 6, 2499-2508.	6.6	25
71	Nb on (110) TiO ₂ (rutile): growth, structure, and chemical composition of the interface. Surface Science, 2000, 446, 219-228.	1.9	24
72	Microstructure of precipitated Au nanoclusters in TiO ₂ . Journal of Applied Physics, 2004, 95, 8185-8193.	2.5	24

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73	Low-Temperature Resistance Anomaly at SrTiO ₃ Grain Boundaries: Evidence for an Interface-Induced Phase Transition. <i>Physical Review Letters</i> , 2005, 95, 197601.	7.8	23
74	Bottom up synthesis of boron-doped graphene for stable intermediate temperature fuel cell electrodes. <i>Carbon</i> , 2017, 123, 605-615.	10.3	23
75	Analyzing line scan EELS data with neural pattern recognition. <i>Ultramicroscopy</i> , 1995, 59, 229-239.	1.9	21
76	Exploring Photothermal Pathways via in Situ Laser Heating in the Transmission Electron Microscope: Recrystallization, Grain Growth, Phase Separation, and Dewetting in Ag _{0.5} Ni _{0.5} Thin Films. <i>Microscopy and Microanalysis</i> , 2018, 24, 647-656.	0.4	21
77	Detailed arsenic concentration profiles at Si/SiO ₂ interfaces. <i>Journal of Applied Physics</i> , 2008, 104, 043507.	2.5	20
78	Investigating the atomic scale structure and chemistry of grain boundaries in high- T _c superconductors. <i>Micron</i> , 1999, 30, 425-436.	2.2	19
79	Cu, Nb and V on (110) TiO ₂ (rutile): epitaxy and chemical reactions. <i>Thin Solid Films</i> , 2001, 398-399, 419-426.	1.8	19
80	Copper Segregation to the $\hat{A}5$ (310)/[001] Symmetric Tilt Grain Boundary in Aluminum. <i>Journal of Materials Science</i> , 2004, 12, 165-174.	1.2	19
81	Transient Growth Bands in Silicon Nitride Cooled in Rare-Earth-Based Glass. <i>Journal of the American Ceramic Society</i> , 1997, 80, 1397-1404.	3.8	19
82	Electron energy loss spectroscopy of polytetrafluoroethylene: experiment and first principles calculations. <i>Microscopy (Oxford, England)</i> , 2014, 63, 73-83.	1.5	19
83	Strain-Induced Growth of Twisted Bilayers during the Coalescence of Monolayer MoS ₂ Crystals. <i>ACS Nano</i> , 2021, 15, 4504-4517.	14.6	19
84	Aberration-Corrected Scanning Transmission Electron Microscopy: The Potential for Nano- and Interface Science. <i>International Journal of Materials Research</i> , 2003, 94, 350-357.	0.8	18
85	The Role of Selection Pressure in RNA-Mediated Evolutionary Materials Synthesis. <i>Journal of the American Chemical Society</i> , 2007, 129, 15340-15346.	13.7	18
86	The impact of selective solvents on the evolution of structure and function in solvent annealed organic photovoltaics. <i>RSC Advances</i> , 2014, 4, 27931-27938.	3.6	18
87	Atomic structures of interfacial solute gateways to \hat{A}^2 precipitates in Al-Cu alloys. <i>Acta Materialia</i> , 2021, 212, 116891.	7.9	18
88	The Electronic Structure of Pristine and Doped (100) Tilt Grain Boundaries in SrTiO ₃ . <i>Journal of Materials Science</i> , 2000, 8, 199-208.	1.2	16
89	Transmission electron microscopy studies of regrown GaN Ohmic contacts on patterned substrates for metal oxide semiconductor field effect transistor applications. <i>Applied Physics Letters</i> , 2007, 90, 204106.	3.3	16
90	Quantitative Phase Fraction Detection in Organic Photovoltaic Materials through EELS Imaging. <i>Polymers</i> , 2015, 7, 2446-2460.	4.5	16

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91	Integration of amorphous ferromagnetic oxides with multiferroic materials for room temperature magnetoelectric spintronics. <i>Scientific Reports</i> , 2020, 10, 3583.	3.3	16
92	A combined experimental and theoretical approach to grain boundary structure and segregation. <i>Physica B: Condensed Matter</i> , 1999, 273-274, 453-457.	2.7	15
93	Characterization of chain conformations in perfluorosulfonic acid membranes using electron energy loss spectroscopy. <i>RSC Advances</i> , 2015, 5, 2368-2373.	3.6	15
94	Black Anatase Formation by Annealing of Amorphous Nanoparticles and the Role of the Ti_2O_3 Shell in Self-Organized Crystallization by Particle Attachment. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 22018-22025.	8.0	15
95	Recent progress in characterization of the core-shell structure of black titania. <i>Journal of Materials Research</i> , 2019, 34, 1138-1153.	2.6	15
96	Oxide precipitation at silicon grain boundaries. <i>Applied Physics Letters</i> , 1997, 70, 327-329.	3.3	14
97	Interfacial and Solvent Effects Govern the Formation of Tris(dibenzylideneacetone)dipalladium(0) Microstructures. <i>Langmuir</i> , 2008, 24, 7803-7809.	3.5	14
98	In situ laser reflectivity to monitor and control the nucleation and growth of atomically thin 2D materials*. <i>2D Materials</i> , 2020, 7, 025048.	4.4	14
99	Selective Antisite Defect Formation in WS_2 Monolayers via Reactive Growth on Dilute W-Au Alloy Substrates. <i>Advanced Materials</i> , 2022, 34, e2106674.	21.0	14
100	Stabilized Synthesis of 2D Verbeekite: Monoclinic $PdSe_2$ Crystals with High Mobility and In-Plane Optical and Electrical Anisotropy. <i>ACS Nano</i> , 2022, 16, 13900-13910.	14.6	14
101	Roughness of the SiC/SiO ₂ vicinal interface and atomic structure of the transition layers. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2014, 32, .	2.1	13
102	Experimentally determined edge orientation of triangular crystals of hexagonal boron nitride. <i>Physica Status Solidi (B): Basic Research</i> , 2017, 254, 1700069.	1.5	13
103	Atomic structure of a Ca-doped [001] tilt grain boundary in MgO. <i>Journal of Electron Microscopy</i> , 1998, 47, 115-120.	0.9	12
104	Formation of nanoscale voids and related metallic impurity gettering in high-energy ion-implanted and annealed epitaxial silicon. <i>Applied Physics Letters</i> , 2003, 83, 1367-1369.	3.3	11
105	Precipitation of Au nanoclusters in SrTiO ₃ by ion implantation. <i>Journal of Applied Physics</i> , 2004, 95, 5060-5068.	2.5	11
106	Modeling and characterization of atomically sharp ϵ -perfect-Ge/SiO ₂ interfaces. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2004, 114-115, 156-161.	3.5	10
107	Quantitative nanoscale local strain profiling in embedded SiGe metal-oxide-semiconductor structures. <i>Applied Physics Letters</i> , 2007, 90, 191907.	3.3	10
108	High-temperature transformation of Fe-decorated single-wall carbon nanohorns to nanoysters: a combined experimental and theoretical study. <i>Nanoscale</i> , 2013, 5, 1849-1857.	5.6	10

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109	Laser-Induced Self-Assembled Nanostructures on Electron-Transparent Substrates. Particle and Particle Systems Characterization, 2015, 32, 476-482.	2.3	10
110	Localized surface plasmon sensing based investigation of nanoscale metal oxidation kinetics. Nanotechnology, 2015, 26, 205701.	2.6	10
111	Direct imaging of the nitrogen-rich edge in monolayer hexagonal boron nitride and its band structure tuning. Nanoscale, 2019, 11, 20676-20684.	5.6	10
112	Atomic-Scale Engineering of the SiC-SiO ₂ Interface. Materials Science Forum, 2000, 338-342, 1133-1136.	0.3	9
113	Atomic level imaging of Au nanocluster dispersed in TiO ₂ and SrTiO ₃ . Nuclear Instruments & Methods in Physics Research B, 2006, 242, 380-382.	1.4	9
114	Novel Iron-based ternary amorphous oxide semiconductor with very high transparency, electronic conductivity and mobility. Scientific Reports, 2015, 5, 18157.	3.3	9
115	Two-Dimensionally Ordered Plasmonic and Magnetic Nanostructures on Transferable Electron-Transparent Substrates. Particle and Particle Systems Characterization, 2015, 32, 970-978.	2.3	9
116	Controlling the exciton emission of gold coated GaAs-AlGaAs core-shell nanowires with an organic spacer layer. Nanotechnology, 2016, 27, 485204.	2.6	9
117	Decomposition of the ZrO ₂ electrolyte in contact with Ni: Structure and chemical composition of the Ni-electrolyte interface. Journal of Materials Research, 1999, 14, 3340-3345.	2.6	8
118	Cathodoluminescent properties at nanometer resolution through Z-contrast scanning transmission electron microscopy. Applied Physics Letters, 2000, 77, 594-596.	3.3	8
119	Nano-scale analysis of precipitates in nitrogen-doped Czochralski silicon. Microelectronic Engineering, 2003, 66, 305-313.	2.4	8
120	Investigating the Structure-Property Relationships at Grain Boundaries in MgO Using Bond-Valence Pair Potentials and Multiple Scattering Analysis. Journal of the American Ceramic Society, 1999, 82, 366-372.	3.8	8
121	Direct imaging of quantum antidots in MgO dispersed with Au nanoclusters. Applied Physics Letters, 2005, 87, 153104.	3.3	8
122	Mapping the layer count of few-layer hexagonal boron nitride at high lateral spatial resolutions. 2D Materials, 2018, 5, 015007.	4.4	8
123	Consequence of Nanometer-Scale Property Variations to Macroscopic Properties of CrOCN Thin Films. Journal of the American Ceramic Society, 2001, 84, 2873-2881.	3.8	7
124	Atomic Resolution Imaging of Au Nanocluster Dispersed in TiO ₂ , SrTiO ₃ , and MgO. Journal of the American Ceramic Society, 2005, 88, 3184-3191.	3.8	7
125	Self-assembled three-dimensional Cu-Ge nanoweb composite. Nanotechnology, 2008, 19, 135603.	2.6	7
126	Enhanced absorption in ultrathin Si by NiSi ₂ nanoparticles. Nanomaterials and Energy, 2013, 2, 11-19.	0.2	7

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127	Surface Mechanoengineering of a Zr-Based Bulk Metallic Glass via Ar-Nanobubble Doping To Probe Cell Sensitivity to Rigid Materials. ACS Applied Materials & Interfaces, 2017, 9, 43429-43437.	8.0	7
128	Measuring the areal density of nanomaterials by electron energy-loss spectroscopy. Ultramicroscopy, 2019, 196, 154-160.	1.9	7
129	Understanding Substrate-Guided Assembly in van der Waals Epitaxy by <i>in Situ</i> Laser Crystallization within a Transmission Electron Microscope. ACS Nano, 2021, 15, 8638-8652.	14.6	7
130	Dispersion forces and Hamaker constants for intergranular films in silicon nitride from spatially resolved-valence electron energy loss spectrum imaging. Acta Materialia, 1998, 46, 2271-2287.	7.9	7
131	Investigation of the local superconducting properties in Ag-sheathed BSCCO tapes by STEM. Physica C: Superconductivity and Its Applications, 1998, 298, 1-9.	1.2	6
132	Fe ₁₆ Al ₁₄ B ₂ phase in Fe-Al alloys. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 2000, 80, 2737-2745.	0.6	6
133	In Situ Point Defect Generation and Agglomeration during Electron-Beam Irradiation of Nitrogen-Doped Czochralski Silicon. Electrochemical and Solid-State Letters, 2003, 6, G134.	2.2	6
134	Direct observation of substitutional Au atoms in SrTiO ₃ . Physical Review B, 2004, 70, .	3.2	6
135	A new understanding of near-threshold damage for 200 keV irradiation in silicon. Journal of Materials Science, 2005, 40, 3639-3650.	3.7	6
136	Exciton emission from hybrid organic and plasmonic polytype InP nanowire heterostructures. Materials Research Express, 2015, 2, 045001.	1.6	6
137	Emission dynamics of hybrid plasmonic gold/organic GaN nanorods. Nanotechnology, 2017, 28, 505710.	2.6	6
138	Local and Global Bonding at the Si-SiO ₂ Interface. Springer Series in Materials Science, 2001, , 193-218.	0.6	6
139	Interfacial Electronic Structure and Full Spectral Hamaker Constants of Si ₃ N ₄ Intergranular Films from VUV and Sr-VEEL Spectroscopy. Materials Research Society Symposia Proceedings, 1994, 357, 243.	0.1	5
140	Self-assembling of nanocavities in TiO ₂ dispersed with Au nanoclusters. Physical Review B, 2005, 72, .	3.2	5
141	Three-Dimensional Geometry of Nanometer-Scale AlN Pits: A New Template for Quantum Dots?. Advanced Materials, 2008, 20, 134-137.	21.0	5
142	Peculiar Plasmon Peak Position in Electron Energy Loss Spectrum of Hexagonal Boron Nitride/Graphene Double Layer. Microscopy and Microanalysis, 2015, 21, 985-986.	0.4	5
143	Transmission Electron Microscopy: Overview and Challenges. AIP Conference Proceedings, 2003, , .	0.4	4
144	Segregation and enhanced diffusion of nitrogen in silicon induced by low energy ion bombardment. Journal of Applied Physics, 2005, 97, 083534.	2.5	4

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145	Thermal annealing effect on the interface structure of high- \hat{n} LaScO ₃ on silicon. Applied Physics Letters, 2007, 91, 152906.	3.3	4
146	Characterization of the Segregation of Arsenic at the Interface SiO ₂ /Si. Materials Research Society Symposia Proceedings, 2007, 994, 1.	0.1	4
147	Carbon Clusters as Possible Defects in the Si-C-SiO ₂ Interface. Journal of Computational and Theoretical Nanoscience, 2009, 6, 1305-1310.	0.4	4
148	Reliable Quantification of EELS Spectra with a Simple Model-Based Approach. Microscopy and Microanalysis, 2009, 15, 446-447.	0.4	4
149	Optimization of homoepitaxially grown AlGaIn/GaN heterostructures. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 2292-2299.	1.8	4
150	Versatile Tunability of the Metal Insulator Transition in (TiO ₂) _m /(VO ₂) _m Superlattices. Advanced Functional Materials, 2020, 30, 2004914.	14.9	4
151	Direct Detection of Highly Localized Metal-Metal Interface Plasmons from Bimetallic Nanoparticles. Plasmonics, 2021, 16, 957-964.	3.4	4
152	Laser Interactions for the Synthesis and In Situ Diagnostics of Nanomaterials. Springer Series in Materials Science, 2014, , 143-173.	0.6	4
153	Amorphous SiO ₂ Precipitates at Silicon Grain Boundaries. Materials Science Forum, 1996, 207-209, 713-716.	0.3	3
154	The Si/SiO ₂ Interface: Atomic Structures, Composition, Strain And Energetics. Microscopy and Microanalysis, 1999, 5, 122-123.	0.4	3
155	Correlating Atomic Scale Experimental Observations to Develop Three-Dimensional Structural Models for Grain Boundaries in Oxides. Microscopy and Microanalysis, 1999, 5, 48-57.	0.4	3
156	“Umbrella”-like precipitates in nitrogen-doped Czochralski silicon wafers. Applied Physics Letters, 2004, 84, 1889-1891.	3.3	3
157	Quantum stability and superconducting properties of ultrathin alloy films made from bulk immiscible elements: Pb and Ga. Physical Review B, 2011, 84, .	3.2	3
158	Nanoporous Carbon: Topological Defects: Origin of Nanopores and Enhanced Adsorption Performance in Nanoporous Carbon (Small 21/2012). Small, 2012, 8, 3282-3282.	10.0	3
159	The effect of zirconium implantation on the structure of sapphire. Nuclear Instruments & Methods in Physics Research B, 2012, 286, 190-195.	1.4	3
160	Plasmon Excitations in Bimetallic Ag Nanostructures by Monochromated E-Beam. Microscopy and Microanalysis, 2013, 19, 1510-1511.	0.4	3
161	Transition Metal Dichalcogenides: Suppression of Defects and Deep Levels Using Isoelectronic Tungsten Substitution in Monolayer MoSe ₂ (Adv. Funct. Mater. 19/2017). Advanced Functional Materials, 2017, 27, .	14.9	3
162	Explosive vaporization of metallic nanostructures on a surface by nanosecond laser heating under fluids. Journal of Applied Physics, 2021, 129, .	2.5	3

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