

Laurence D Marks

List of Publications by Year in descending order

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233
papers

10,932
citations

44069

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32842

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234
all docs

234
docs citations

234
times ranked

11297
citing authors

#	ARTICLE	IF	CITATIONS
1	CO Adsorption and Disproportionation on Smooth and Defect-Rich Ir(111). Journal of Physical Chemistry C, 2022, 126, 6578-6589.	3.1	3
2	Shape, thermodynamics and kinetics of nanoparticles. , 2022, , .		0
3	Band Bending and Ratcheting Explain Triboelectricity in a Flexoelectric Contact Diode. Nano Letters, 2022, 22, 3914-3921.	9.1	16
4	When Flexoelectricity Drives Triboelectricity. Nano Letters, 2022, 22, 3939-3945.	9.1	17
5	Experimental determination of flexoelectric coefficients in SrTiO_3 and YAlO_3 . Physical Review Materials, 2022, 6, .	2.4	5
6	The role of surfaces in flexoelectricity. Journal of Applied Physics, 2021, 129, .	2.5	10
7	Twin-boundary-mediated flexoelectricity in LaAlO_3 . Physical Review Materials, 2021, 5, .	2.4	5
8	Predictive Mixing for Density Functional Theory (and Other Fixed-Point Problems). Journal of Chemical Theory and Computation, 2021, 17, 5715-5732.	5.3	10
9	Submonolayer Is Enough: Switching Reaction Channels on Pt/SiO ₂ by Atomic Layer Deposition. Journal of Physical Chemistry C, 2021, 125, 18725-18733.	3.1	2
10	Identifying Support Effects in Au-Catalyzed CO Oxidation. ACS Catalysis, 2021, 11, 11921-11928.	11.2	4
11	ScO _x rich surface terminations on lanthanide scandate nanoparticles. Physical Review Materials, 2021, 5, .	2.4	1
12	Crystallographic anisotropy of nonequilibrium solute capture. Acta Materialia, 2020, 198, 223-229.	7.9	8
13	WIEN2k: An APW+lo program for calculating the properties of solids. Journal of Chemical Physics, 2020, 152, 074101.	3.0	1,185
14	Chemisorption-Driven Roughening of Hydrothermally Grown $\text{KTa}_{1-x}\text{Nb}_x\text{O}_3$ Nanoparticles. Journal of Physical Chemistry C, 2020, 124, 7988-7993.	3.1	3
15	Modified Winterbottom Construction Including Boundaries. Journal of Physical Chemistry C, 2020, 124, 28038-28043.	3.1	7
16	Structure of the (110) Sc_2O_3 surfaces. Physical Review Materials, 2020, 4, .		
17	Complex Fluorine Chemical Potential Effects on the Shape and Compositional Heterogeneity of $\text{KTa}_{1-x}\text{Nb}_x\text{O}_3$ Nanoparticles. Journal of Physical Chemistry C, 2020, 124, 26012-26017.	3.1	1
18	Direct Visualization of Independent Ta Centers Supported on Two-Dimensional TiO ₂ Nanosheets. Nano Letters, 2019, 19, 8103-8108.	9.1	10

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19	Does Flexoelectricity Drive Triboelectricity?. <i>Physical Review Letters</i> , 2019, 123, 116103.	7.8	77
20	New Insights on the Role of Chloride During the Onset of Local Corrosion: TEM, APT, Surface Energy, and Morphological Instability. <i>Corrosion</i> , 2019, 75, 616-627.	1.1	15
21	Controlled Two-Step Formation of Faceted Perovskite Rare-Earth Scandate Nanoparticles. <i>Crystals</i> , 2019, 9, 218.	2.2	7
22	Early-stage NiCrMo oxidation revealed by cryo-transmission electron microscopy. <i>Ultramicroscopy</i> , 2019, 200, 6-11.	1.9	3
23	How heteroepitaxy occurs on strontium titanate. <i>Science Advances</i> , 2019, 5, eaav0764.	10.3	18
24	The Vacancy-Induced Electronic Structure of the SrTiO ₃ Surface. <i>Advanced Electronic Materials</i> , 2019, 5, 1800460.	5.1	15
25	Charging ain't all bad: Complex physics in DyScO ₃ . <i>Ultramicroscopy</i> , 2019, 203, 119-124.	1.9	5
26	Combining the Physics of Metal/Oxide Heterostructure, Interface Dipole, Band Bending, Crystallography, and Surface State to Understand Heterogeneity Contrast in Oxidation and Corrosion. <i>Corrosion</i> , 2019, 75, 152-166.	1.1	12
27	Morphology and CO Oxidation Activity of Pd Nanoparticles on SrTiO ₃ Nanopolyhedra. <i>ACS Catalysis</i> , 2018, 8, 4751-4760.	11.2	38
28	Development of a hybrid molecular beam epitaxy deposition system for in situ surface x-ray studies. <i>Review of Scientific Instruments</i> , 2018, 89, 033905.	1.3	6
29	All Roads Lead to TiO ₂ : TiO ₂ -Rich Surfaces of Barium and Strontium Titanate Prepared by Hydrothermal Synthesis. <i>Chemistry of Materials</i> , 2018, 30, 841-846.	6.7	29
30	Layer-by-Layer Epitaxial Growth of Defect-Engineered Strontium Cobaltites. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 5949-5958.	8.0	16
31	Single-layer TiO _x reconstructions on SrTiO ₃ (111): (√7×√7)R19.1°, (√13×√13)R13.9°, and related structures. <i>Surface Science</i> , 2018, 675, 36-41.	1.9	8
32	Synthesis of Gadolinium Scandate from a Hydroxide Hydrogel. <i>Inorganic Chemistry</i> , 2018, 57, 4104-4108.	4.0	17
33	In situ observations of graphitic staples in crumpled graphene. <i>Carbon</i> , 2018, 132, 760-765.	10.3	10
34	Nonequilibrium Solute Capture in Passivating Oxide Films. <i>Physical Review Letters</i> , 2018, 121, 145701.	7.8	67
35	Ab Initio Predictions of Double-Layer TiO ₂ -Terminated SrTiO ₃ (001) Surface Reconstructions. <i>Journal of Physical Chemistry C</i> , 2018, 122, 21991-21997.	3.1	11
36	Pauling's rules for oxide surfaces. <i>Surface Science Reports</i> , 2018, 73, 213-232.	7.2	31

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37	In Situ Observations of Early Stage Oxidation of Ni-Cr and Ni-Cr-Mo Alloys. <i>Corrosion</i> , 2018, 74, 939-946.	1.1	39
38	Direct Observation of Large Flexoelectric Bending at the Nanoscale in Lanthanide Scandates. <i>Nano Letters</i> , 2018, 18, 3850-3856.	9.1	27
39	Al rich (111) and (110) surfaces of LaAlO ₃ . <i>Surface Science</i> , 2018, 677, 99-104.	1.9	3
40	Kinetic Growth Regimes of Hydrothermally Synthesized Potassium Tantalate Nanoparticles. <i>Nano Letters</i> , 2018, 18, 5186-5191.	9.1	14
41	Replication of SMSI via ALD: TiO ₂ Overcoats Increase Pt-Catalyzed Acrolein Hydrogenation Selectivity. <i>Catalysis Letters</i> , 2018, 148, 2223-2232.	2.6	17
42	Competitive Chloride Chemisorption Disrupts Hydrogen Bonding Networks: DFT, Crystallography, Thermodynamics, and Morphological Consequences. <i>Corrosion</i> , 2018, 74, 295-311.	1.1	13
43	Electronic structure of lanthanide scandates. <i>Physical Review Materials</i> , 2018, 2, .	2.4	12
44	Stabilizing Single-Atom and Small-Domain Platinum via Combining Organometallic Chemisorption and Atomic Layer Deposition. <i>Organometallics</i> , 2017, 36, 818-828.	2.3	34
45	Nucleation and growth process of atomic layer deposition platinum nanoparticles on strontium titanate nanocuboids. <i>Nanotechnology</i> , 2017, 28, 185704.	2.6	13
46	Surface heterogeneity in KTaO ₃ (001). <i>Surface Science</i> , 2017, 657, 15-19.	1.9	5
47	Controllable ALD synthesis of platinum nanoparticles by tuning different synthesis parameters. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 415301.	2.8	12
48	Direct Observation of ϵ -Pac-Man ϵ -Coarsening. <i>Nano Letters</i> , 2017, 17, 4661-4664.	9.1	3
49	Engineering the oxygen coordination in digital superlattices. <i>APL Materials</i> , 2017, 5, 126101.	5.1	2
50	Growth Regimes of Hydrothermally Synthesized Potassium Tantalate Nanoparticles. <i>Microscopy and Microanalysis</i> , 2017, 23, 1914-1915.	0.4	0
51	Douglas (Doug) Dorset (1942–2016). <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2017, 73, 157-158.	0.1	1
52	Transition from Reconstruction toward Thin Film on the (110) Surface of Strontium Titanate. <i>Nano Letters</i> , 2016, 16, 2407-2412.	9.1	28
53	Complex surface structure of (110) terminated strontium titanate nanododecahedra. <i>Nanoscale</i> , 2016, 8, 16606-16611.	5.6	17
54	When does atomic resolution plan view imaging of surfaces work?. <i>Ultramicroscopy</i> , 2016, 170, 35-42.	1.9	3

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55	Grain Boundary Assisted Crevice Corrosion in CoCrMo Alloys. <i>Corrosion</i> , 2016, 72, 1445-1461.	1.1	13
56	Direct observation of incommensurate structure in Mo ₃ Si. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2016, 72, 660-666.	0.1	3
57	Soft Interface Fracture Transfer in Nanoscale MoS ₂ . <i>Tribology Letters</i> , 2016, 64, 1.	2.6	9
58	Graphitic Carbon Films Across Systems. <i>Tribology Letters</i> , 2016, 63, 1.	2.6	19
59	Compositional Inhomogeneity and Corner Enrichment of Pt in Pt/Pd Bimetallic Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2016, 120, 21069-21075.	3.1	6
60	Direct Synthesis of Low-Coordinate Pd Catalysts Supported on SiO ₂ via Surface Organometallic Chemistry. <i>ACS Catalysis</i> , 2016, 6, 8380-8388.	11.2	21
61	Atomic Surface Structures of Oxide Nanoparticles with Well-defined Shapes. <i>Microscopy and Microanalysis</i> , 2016, 22, 360-361.	0.4	0
62	Nanoparticle shape, thermodynamics and kinetics. <i>Journal of Physics Condensed Matter</i> , 2016, 28, 053001.	1.8	186
63	Morphology and oxidation state of ALD-grown Pd nanoparticles on TiO ₂ - and SrO-terminated SrTiO ₃ nanocuboids. <i>Surface Science</i> , 2016, 648, 291-298.	1.9	14
64	Classifying the Severity of Grain Boundary Corrosion in CoCrMo Biomedical Implants. <i>Microscopy and Microanalysis</i> , 2015, 21, 773-774.	0.4	0
65	Transition from Order to Configurational Disorder for Surface Reconstructions on SrTiO_3 . <i>Physical Review Letters</i> , 2015, 114, 226101.	7.8	34
66	Direct Observation of Layer-by-Layer Wear. <i>Tribology Letters</i> , 2015, 59, 1.	2.6	9
67	Wulff shape of strontium titanate nanocuboids. <i>Surface Science</i> , 2015, 632, L22-L25.	1.9	18
68	The effect of contact load on CoCrMo wear and the formation and retention of tribofilms. <i>Wear</i> , 2015, 332-333, 643-649.	3.1	51
69	Adhesion and Atomic Structures of Gold on Ceria Nanostructures: The Role of Surface Structure and Oxidation State of Ceria Supports. <i>Nano Letters</i> , 2015, 15, 5375-5381.	9.1	98
70	Surface determination through atomically resolved secondary-electron imaging. <i>Nature Communications</i> , 2015, 6, 7358.	12.8	41
71	Nanoscale Abrasive Wear of CoCrMo in In Situ TEM Sliding. <i>Tribology Letters</i> , 2015, 57, 1.	2.6	9
72	Strain-Induced Segregation in Bimetallic Multiply Twinned Particles. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 1930-1934.	4.6	16

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73	Segregation in bimetallic nanoparticles. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 27940-27951.	2.8	75
74	Applications of Electron Microscopy in Heterogeneous Catalysis. , 2015, , 193-238.		1
75	Solid oxide cells with zirconia/ceria Bi-Layer electrolytes fabricated by reduced temperature firing. <i>Journal of Materials Chemistry A</i> , 2015, 3, 9955-9964.	10.3	66
76	Are Nanoparticle Corners Round?. <i>Journal of Physical Chemistry C</i> , 2015, 119, 21018-21023.	3.1	27
77	Monolayer Transfer Layers During Sliding at the Atomic Scale. <i>Tribology Letters</i> , 2015, 59, 1.	2.6	8
78	Identification of active sites in CO oxidation and water-gas shift over supported Pt catalysts. <i>Science</i> , 2015, 350, 189-192.	12.6	948
79	Electron-induced Ti-rich surface segregation on SrTiO ₃ nanoparticles. <i>Micron</i> , 2015, 68, 152-157.	2.2	14
80	Defects on Strontium Titanate. <i>Springer Series in Surface Sciences</i> , 2015, , 327-349.	0.3	11
81	Imaging the Atomic Surface Structures of CeO ₂ Nanoparticles. <i>Nano Letters</i> , 2014, 14, 191-196.	9.1	183
82	Influence of the Metal Oxide Substrate Structure on Vanadium Oxide Monomer Formation. <i>Topics in Catalysis</i> , 2014, 57, 177-187.	2.8	10
83	Modeling Secondary Electron Imaging at Atomic Resolution Using a Focused Coherent Electron Probe. <i>Microscopy and Microanalysis</i> , 2014, 20, 82-83.	0.4	0
84	Direct Observation of Atomic Surface Structures of CeO ₂ Nanoparticles. <i>Microscopy and Microanalysis</i> , 2014, 20, 1918-1919.	0.4	0
85	When is Z-Contrast D-Contrast?. <i>Microscopy Today</i> , 2014, 22, 65-65.	0.3	4
86	Thermodynamic Analysis of Multiply Twinned Particles: Surface Stress Effects. <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 3089-3094.	4.6	37
87	Epitaxial Stabilization of Face Selective Catalysts. <i>Topics in Catalysis</i> , 2013, 56, 1829-1834.	2.8	20
88	CoCrMo metal-on-metal hip replacements. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 746-756.	2.8	124
89	Direct Observation of Tribochemically Assisted Wear on Diamond-Like Carbon Thin Films. <i>Tribology Letters</i> , 2013, 49, 351-356.	2.6	19
90	SrTiO ₃ Nanocuboids from a Lamellar Microemulsion. <i>Chemistry of Materials</i> , 2013, 25, 378-384.	6.7	38

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91	Structure refinement from precession electron diffraction data. Acta Crystallographica Section A: Foundations and Advances, 2013, 69, 171-188.	0.3	69
92	Fixed-Point Optimization of Atoms and Density in DFT. Journal of Chemical Theory and Computation, 2013, 9, 2786-2800.	5.3	48
93	Kinetic and Thermodynamic Modified Wulff Constructions for Twinned Nanoparticles. Journal of Physical Chemistry C, 2013, 117, 15859-15870.	3.1	113
94	Elastic Strain Energy Effects in Faceted Decahedral Nanoparticles. Journal of Physical Chemistry C, 2013, 117, 1485-1494.	3.1	48
95	Synthesis-Dependent Atomic Surface Structures of Oxide Nanoparticles. Physical Review Letters, 2013, 111, 156101.	7.8	58
96	Tribochemical Reactions in Metal-on-Metal Hip Joints Influence Wear and Corrosion. , 2013, , 292-309.		10
97	Structure and composition of linear TiO_x nanostructures on SrTiO ₃ (001). Physical Review B, 2012, 86, 045408.	3.2	18
98	$\text{c}(4\text{Å}^2)$ and related structural units on the SrTiO ₃ (001) surface: Scanning tunneling microscopy, density functional theory, and atomic structure. Journal of Chemical Physics, 2012, 136, 214701.	3.0	23
99	Modeling of Phonon Wind Shielding Effects on Moving Dislocation Arrays. Tribology Letters, 2012, 47, 431-434.	2.6	1
100	A chemical approach to understanding oxide surfaces. Surface Science, 2012, 606, 344-355.	1.9	39
101	New insights into hard phases of CoCrMo metal-on-metal hip replacements. Journal of the Mechanical Behavior of Biomedical Materials, 2012, 12, 39-49.	3.1	93
102	Plasmon Length: A Universal Parameter to Describe Size Effects in Gold Nanoparticles. Journal of Physical Chemistry Letters, 2012, 3, 1479-1483.	4.6	191
103	On the alignment for precession electron diffraction. Ultramicroscopy, 2012, 117, 1-6.	1.9	13
104	Graphitic Tribological Layers in Metal-on-Metal Hip Replacements. Science, 2011, 334, 1687-1690.	12.6	199
105	Correlated Structure and Optical Property Studies of Plasmonic Nanoparticles. Journal of Physical Chemistry C, 2011, 115, 9291-9305.	3.1	217
106	Oriented Catalytic Platinum Nanoparticles on High Surface Area Strontium Titanate Nanocuboids. Nano Letters, 2011, 11, 993-997.	9.1	109
107	Wulff Construction for Alloy Nanoparticles. Nano Letters, 2011, 11, 3399-3403.	9.1	160
108	Propane Oxidation over Pt/SrTiO ₃ Nanocuboids. ACS Catalysis, 2011, 1, 629-635.	11.2	153

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109	Operational inhomogeneities in $\text{La}_{0.9}\text{Sr}_{0.1}\text{Ga}_{0.8}\text{Mg}_{0.2}\text{O}_{3-\delta}$ Electrolytes and $\text{La}_{0.8}\text{Sr}_{0.2}\text{Cr}_{0.82}\text{Ru}_{0.18}\text{O}_{3-\delta}$ "Ce _{0.9} Gd _{0.1} Composite Anodes for Solid Oxide Fuel Cells. Fuel Cells, 2011, 11, 635-641.	2.4	4
110	The (2 \times 2) reconstructions on the SrTiO ₃ (001) surface: A combined scanning tunneling microscopy and density functional theory study. Surface Science, 2011, 605, L51-L55.	1.9	41
111	Vacant Site Octahedral Fillings on SrTiO_3 (001), the $\sqrt{13}\sqrt{13}\sqrt{13}$ Physical Review Letters, 2011, 106, 176102.	7.8	80
112	Temperature activated self-lubrication in CrN/Mo ₂ N nanolayer coatings. Surface and Coatings Technology, 2010, 204, 1359-1365.	4.8	32
113	Modeling of Thermal-Assisted Dislocation Friction. Tribology Letters, 2010, 37, 283-288.	2.6	6
114	A Dislocation-Based Analytical Model for the Nanoscale Processes of Shear and Plowing Friction. Tribology Letters, 2010, 39, 163-167.	2.6	13
115	A homologous series of structures on the surface of SrTiO ₃ (110). Nature Materials, 2010, 9, 245-248.	27.5	145
116	Characteristics of precession electron diffraction intensities from dynamical simulations. Zeitschrift für Kristallographie, 2010, 225, 47-55.	1.1	16
117	Diffraction refinement of localized antibonding at the Si(111) surface. Physical Review B, 2009, 79, .	3.2	14
118	The Fe ₃ O ₄ origin of the "Biphase" reconstruction on Fe_2O_3 (0001). Surface Science, 2009, 603, 2574-2579.	1.9	45
119	The small unit cell reconstructions of SrTiO ₃ (111). Surface Science, 2009, 603, 2179-2187.	1.9	33
120	Water-driven structural evolution of the polar MgO (111) surface: An integrated experimental and theoretical approach. Physical Review B, 2009, 79, .	3.2	52
121	A quantitative analysis of the cone-angle dependence in precession electron diffraction. Ultramicroscopy, 2008, 108, 514-522.	1.9	35
122	Force calculation for orbital-dependent potentials with FP-(L)APW+lo basis sets. Computer Physics Communications, 2008, 179, 784-790.	7.5	25
123	Time, temperature, and oxygen partial pressure-dependent surface reconstructions on SrTiO ₃ (111): A systematic study of oxygen-rich conditions. Surface Science, 2008, 602, 3018-3025.	1.9	23
124	Liquid-like tribology of gold studied by in situ TEM. Wear, 2008, 265, 1864-1869.	3.1	77
125	Synthesis-Dependent First-Order Raman Scattering in SrTiO ₃ Nanocubes at Room Temperature. Chemistry of Materials, 2008, 20, 5628-5635.	6.7	159
126	Tribology in Full View. MRS Bulletin, 2008, 33, 1168-1173.	3.5	29

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127	Cone-angle Dependence of Ab-initio Structure Solutions Using Precession Electron Diffraction. AIP Conference Proceedings, 2008, , .	0.4	2
128	Robust mixing for <i>ab initio</i> quantum mechanical calculations. Physical Review B, 2008, 78, .	3.2	45
129	Friction in full view. Applied Physics Letters, 2007, 90, 064101.	3.3	58
130	Surface Reconstruction with a Fractional Hole: $(5\sqrt{5}-5)R26.6\text{\AA}^{\circ}\text{LaAlO}_3(001)$. Physical Review Letters, 2007, 98, 086102.	7.8	45
131	Atomic-scale structure of the SrTiO_3 surface. Physical Review B, 2007, 76, .	3.2	55
132	Comment on "Friction between incommensurate crystals". Philosophical Magazine Letters, 2007, 87, 527-532.	1.2	17
133	Enhancing structure relaxations for first-principles codes: An approximate Hessian approach. Computational Materials Science, 2007, 40, 345-353.	3.0	10
134	Synthesis and characterization of CrN/Mo2N multilayers and phases of Molybdenum nitride. Surface and Coatings Technology, 2007, 202, 1123-1128.	4.8	43
135	A predictive analytical friction model from basic theories of interfaces, contacts and dislocations. Tribology Letters, 2007, 26, 73-84.	2.6	43
136	Prospects for aberration corrected electron precession. Ultramicroscopy, 2007, 107, 534-542.	1.9	18
137	Experimental surface charge density of the $\text{Si}(100)2\times 1$ surface. Physical Review B, 2006, 74, .	3.2	15
138	Fitting valence charge densities at a crystal surface. Acta Crystallographica Section A: Foundations and Advances, 2006, 62, 309-315.	0.3	8
139	Precession electron diffraction 1: multislice simulation. Acta Crystallographica Section A: Foundations and Advances, 2006, 62, 434-443.	0.3	40
140	Rapid structure determination of a metal oxide from pseudo-kinematical electron diffraction data. Ultramicroscopy, 2006, 106, 114-122.	1.9	38
141	EDM 1.0: Electron direct methods. Ultramicroscopy, 2005, 102, 233-237.	1.9	26
142	Impurity stabilized near-surface phase on ion bombarded $\text{Fe}_2\text{O}_3(0001)$. Surface Science, 2005, 586, 38-44.	1.9	7
143	Atomic Resolution Transmission Electron Microscopy of Surfaces. Journal of Materials Research, 2005, 20, 1619-1627.	2.6	12
144	Electron precession: A guide for implementation. Review of Scientific Instruments, 2005, 76, 033703.	1.3	26

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145	Surface crystallography via electron microscopy. <i>Ultramicroscopy</i> , 2004, 98, 151-157.	1.9	17
146	TiO ₂ -rich reconstructions of SrTiO ₃ (001): a theoretical study of structural patterns. <i>Surface Science</i> , 2004, 573, 446-456.	1.9	56
147	Optical Floating Zone Growth of Single Crystal $\hat{\Gamma}$ -Fe ₂ O ₃ from a CaFe ₄ O ₇ -Based Solvent. <i>Crystal Growth and Design</i> , 2004, 4, 749-753.	3.0	6
148	Prospects for Aberration Corrected Nanocrystallography. <i>Microscopy and Microanalysis</i> , 2004, 10, 30-30.	0.4	0
149	Surface Structures of SrTiO ₃ (001): A TiO ₂ -rich Reconstruction with a $c(4\sqrt{2})$ Unit Cell. <i>Journal of the American Chemical Society</i> , 2003, 125, 10050-10056.	13.7	134
150	Epitaxial decagonal thin films on crystalline substrates. <i>Philosophical Magazine Letters</i> , 2003, 83, 47-55.	1.2	11
151	Sufficient Conditions for Direct Methods with Swift Electrons. <i>Microscopy and Microanalysis</i> , 2003, 9, 399-410.	0.4	11
152	The Nature of Precession Electron Diffraction Data. <i>Microscopy and Microanalysis</i> , 2003, 9, 858-859.	0.4	0
153	The structure and chemistry of the TiO ₂ -rich surface of SrTiO ₃ (001). <i>Nature</i> , 2002, 419, 55-58.	27.8	342
154	Statistical dynamical direct methods. II. The three-phase structure invariant. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2001, 57, 231-239.	0.3	10
155	Crystallographic direct methods for surfaces. <i>Journal of Physics Condensed Matter</i> , 2001, 13, 10677-10687.	1.8	25
156	Critical thickness for transformation of epitaxially stabilized cubic AlN in superlattices. <i>Applied Physics Letters</i> , 2001, 78, 892-894.	3.3	93
157	Statistical dynamical direct methods. I. The effective kinematical approximation. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2000, 56, 458-469.	0.3	14
158	Low-temperature magnetron sputter-deposition, hardness, and electrical resistivity of amorphous and crystalline alumina thin films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2000, 18, 2333.	2.1	81
159	Spatial variation of the current in grain boundary Josephson junctions. <i>Journal of Applied Physics</i> , 2000, 87, 2454-2459.	2.5	9
160	STRUCTURE DETERMINATION OF THE Ge(111)-(3 $\sqrt{3}$ ×1)Ag SURFACE RECONSTRUCTION. <i>Surface Review and Letters</i> , 1999, 06, 1061-1065.	1.1	8
161	A feasible set approach to the crystallographic phase problem. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 1999, 55, 601-612.	0.3	49
162	Cyclic Ozone Identified in Magnesium Oxide (111) Surface Reconstructions. <i>Physical Review Letters</i> , 1998, 81, 4891-4894.	7.8	102

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163	Formation of BN nanoarches: Possibly the key to cubic boron nitride film growth. Applied Physics Letters, 1998, 72, 314-316.	3.3	29
164	Direct Methods for Surfaces. Surface Review and Letters, 1998, 05, 1087-1106.	1.1	43
165	Au 6 Å— 6 on Si(111): Evidence for a 2D Pseudoglass. Surface Review and Letters, 1998, 05, 459-464.	1.1	23
166	Determination and Refinement of the Ag/Si(111) (3 Å—1) Surface Structure. Physical Review Letters, 1998, 80, 1678-1681.	7.8	117
167	The mechanism of sputter-induced epitaxy modification in YBCO (001) films grown on MgO (001) substrates. Journal of Materials Research, 1998, 13, 3378-3388.	2.6	0
168	Microstructure of cosputter-deposited metal- and oxide-MoS ₂ solid lubricant thin films. Journal of Materials Research, 1998, 13, 1022-1032.	2.6	71
169	Oxide Structures: By Hook Or by Crook. Microscopy and Microanalysis, 1998, 4, 678-679.	0.4	0
170	IMAGING SURFACE STRUCTURES BY DIRECT PHASING. Surface Review and Letters, 1997, 04, 1-8.	1.1	26
171	Surface roughening by electron beam heating. Applied Physics Letters, 1997, 71, 2301-2303.	3.3	7
172	Computer simulations of interactions between ultrafine alumina particles produced by an arc discharge. Journal of Materials Research, 1997, 12, 235-243.	2.6	8
173	Structure of the TiO ₂ (100)-1X3 Surface Determined by Direct Methods. Microscopy and Microanalysis, 1997, 3, 1045-1046.	0.4	0
174	A Direct Phasing Electron Image of Oxygen Atoms in a Ga-In-Sn-O Ceramic. Microscopy and Microanalysis, 1997, 3, 1057-1058.	0.4	0
175	Is it Really that Easy to Solve Surface Structures Using Direct Methods?. Microscopy and Microanalysis, 1997, 3, 1023-1024.	0.4	0
176	Surface Structures from Direct Methods Using a Genetic Algorithm. Microscopy and Microanalysis, 1997, 3, 1047-1048.	0.4	0
177	Direct Phasing Determination of Si(111)-(3X1)-Ag Surface Reconstruction. Microscopy and Microanalysis, 1997, 3, 1043-1044.	0.4	0
178	Structure of the in on Si(111)4X1 Surface Determined by Applying Direct Phasing Methods to Transmission Electron Diffraction Data. Microscopy and Microanalysis, 1997, 3, 1041-1042.	0.4	0
179	Layered Cuprates. Materials Research Society Symposia Proceedings, 1996, 453, 311.	0.1	1
180	Imaging the Dimers in Si (111) 7 Å—7. Materials Research Society Symposia Proceedings, 1996, 466, 259.	0.1	0

#	ARTICLE	IF	CITATIONS
181	Wiener-filter enhancement of noisy HREM images. Ultramicroscopy, 1996, 62, 43-52.	1.9	80
182	Bi-epitaxial grain boundaries in $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ thin films prepared by pulsed laser deposition and pulsed organometallic beam epitaxy: Direct comparison of transport properties and grain boundary structure. Journal of Materials Research, 1996, 11, 2429-2439.	2.6	9
183	Imaging the Dimers in $\text{Si}(111)-(7\times 7)$. Physical Review Letters, 1996, 77, 4226-4228.	7.8	40
184	Structural features of defect cascades in $\text{YBa}_2\text{Cu}_3\text{O}_x$ as a function of oxygen stoichiometry. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1996, 74, 617-628.	0.6	2
185	Sputter-induced grain boundary junctions in $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ thin films on MgO. Journal of Applied Physics, 1995, 77, 2591-2594.	2.5	16
186	Atomic Structure of $\text{Si}(111)-(5\times 2)\text{-Au}$ from High Resolution Electron Microscopy and Heavy-Atom Holography. Physical Review Letters, 1995, 75, 2172-2175.	7.8	88
187	$\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ on MgO films grown by pulsed organometallic beam epitaxy and a grain boundary junction application. Journal of Materials Research, 1995, 10, 2700-2707.	2.6	9
188	Preferred structures in small particles. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1995, 71, 291-310.	0.6	34
189	UHV transmission electron microscopy structure determination of the $\text{Si}(111)-(3\times 3)\text{-R}30^\circ\text{Au}$ surface. Surface Science, 1995, 342, 233-249.	1.9	25
190	Integrated multilayer sputter-induced 45° $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ grain boundary junctions. Applied Physics Letters, 1995, 67, 1013-1015.	3.3	4
191	Morphology Maps of Small Particles. Materials Research Society Symposia Proceedings, 1994, 355, 135.	0.1	1
192	Experimental studies of small particle structures. Reports on Progress in Physics, 1994, 57, 603-649.	20.1	838
193	Atomic Imaging of Metal-Semiconductor Surfaces Using UHV-Hrem and Diffraction. Materials Research Society Symposia Proceedings, 1994, 355, 181.	0.1	0
194	Structure of The Annealed $\text{Au-Si}(100)$ System: A UHV-Hrem Study. Materials Research Society Symposia Proceedings, 1994, 355, 275.	0.1	0
195	Direct Correlation of Transport Properties and Microstructure In $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ Thin Film Grain Boundaries. Materials Research Society Symposia Proceedings, 1994, 357, 419.	0.1	1
196	Transformations in quasimelting. Zeitschrift für Physik D-Atoms Molecules and Clusters, 1993, 26, 70-72.	1.0	9
197	Thermal shock cleavage of silicon (111) thin crystals. Journal of Applied Physics, 1993, 73, 1039-1042.	2.5	1
198	Microstructure and properties of Cu-rich 123: Part II. Homogeneous copper and high magnetic Jc. Journal of Materials Research, 1993, 8, 1232-1239.	2.6	1

#	ARTICLE	IF	CITATIONS
199	Ultrahigh vacuum microscopy of the Si(111) boron β - $3R30^\circ$ surface. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1993, 11, 469-473.	2.1	2
200	Microstructure and properties of Cu-rich 123. Part I: Copper at the grain boundaries. Journal of Materials Research, 1992, 7, 572-579.	2.6	2
201	The sintering behavior of ultrafine alumina particles. Journal of Materials Research, 1992, 7, 1489-1500.	2.6	65
202	Sintering Behavior of Ultrafine Ceramic Particles. Materials Research Society Symposia Proceedings, 1992, 286, 3.	0.1	5
203	Ultrahigh vacuum furnace for sintering studies of ultrafine ceramic particles. Review of Scientific Instruments, 1991, 62, 3061-3067.	1.3	3
204	In-Situ Tem Observations of Electron Beam-Stimulated Reactions in NiO Under Oxidizing and Reducing Atmospheres. Materials Research Society Symposia Proceedings, 1991, 235, 339.	0.1	0
205	The Role of Ballistic, Electronic, and Thermal Processes in Electron Irradiation Damage of Maximum Valence Transition Metal Oxide Surfaces. Materials Research Society Symposia Proceedings, 1991, 235, 401.	0.1	0
206	Microstructures of Si(111) on Ion Sputtering and Electron Annealing. Materials Research Society Symposia Proceedings, 1991, 236, 259.	0.1	0
207	UHV-Tem Studies of Laser-Induced Damage in Silicon. Materials Research Society Symposia Proceedings, 1991, 236, 495.	0.1	0
208	Growth of Au on A Ge (111) Surface. Materials Research Society Symposia Proceedings, 1991, 237, 441.	0.1	0
209	The Interaction of Bulk Defects with Surface Reconstructions. Materials Research Society Symposia Proceedings, 1991, 238, 241.	0.1	0
210	Ion Beam Damage of Clean Gold Surfaces. Materials Research Society Symposia Proceedings, 1990, 202, 433.	0.1	0
211	UHV Microscopy of the Reconstructed Au (001) Surface. Materials Research Society Symposia Proceedings, 1990, 208, 41.	0.1	0
212	Equilibrium shape of a buoyant particle. Journal of Materials Research, 1990, 5, 1496-1501.	2.6	9
213	Phase instabilities in small particles. Phase Transitions, 1990, 24-26, 229-258.	1.3	43
214	Diffusion during electron-beam-induced reduction of tungsten trioxide. Philosophical Magazine Letters, 1989, 60, 31-36.	1.2	19
215	Evidence for sinking of small particles into substrates and implications for heterogeneous catalysis. Nature, 1989, 338, 139-141.	27.8	57
216	HREM of Gold Clusters on MgO Smoke Particles. Materials Research Society Symposia Proceedings, 1989, 139, 333.	0.1	1

#	ARTICLE	IF	CITATIONS
217	Surface Reaction in NiO CoO MnO and FeO in the Electron Microscope. Materials Research Society Symposia Proceedings, 1989, 157, 575.	0.1	0
218	In-Situ Study of Radiation Damage in V2os Induced by Low Energy Electrons. Materials Research Society Symposia Proceedings, 1989, 157, 599.	0.1	3
219	Structural fluctuations in small particles. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1988, 57, 605-620.	0.6	58
220	HREM In-Situ Studies of Electron Irradiation Effects in Oxides. Materials Research Society Symposia Proceedings, 1988, 100, 635.	0.1	3
221	Formation of a Ni ₃ O ₄ Spinel Phase on the Surface of NiO During Electron Irradiation. Materials Research Society Symposia Proceedings, 1988, 129, 521.	0.1	3
222	Entropy and Melting in Small Particles. Materials Research Society Symposia Proceedings, 1987, 111, 53.	0.1	0
223	Structure and Epitaxy of Silver/Gold Microclusters on MgO. Materials Research Society Symposia Proceedings, 1987, 111, 213.	0.1	5
224	Atomic Imaging of Particle Surfaces. ACS Symposium Series, 1985, , 341-350.	0.5	0
225	Elastic strains and the energy balance for multiply twinned particles. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1984, 49, 95-109.	0.6	249
226	Direct Observation of Elastic and Plastic Deformations at Au(111) Surfaces. Physical Review Letters, 1984, 52, 656-658.	7.8	66
227	Surface structure and energetics of multiply twinned particles. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1984, 49, 81-93.	0.6	354
228	Direct Imaging of Atomic Rearrangements on Extended Gold Surfaces. Materials Research Society Symposia Proceedings, 1984, 41, 129.	0.1	11
229	Direct surface imaging in small metal particles. Nature, 1983, 303, 316-317.	27.8	250
230	Direct Imaging of Carbon-Covered and Clean Gold (110) Surfaces. Physical Review Letters, 1983, 51, 1000-1002.	7.8	194
231	Direct lattice imaging of small metal particles. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1981, 44, 735-740.	0.6	39
232	Multiply-twinned particles in silver catalysts. Nature, 1979, 282, 196-198.	27.8	90
233	Single nanoparticle plasmonics. , 0, .		1