Lothar Houben

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

171 6,779 41 77 g-index

177 7,702 8.6 5.87 ext. papers ext. citations avg, IF L-index

#	Paper	IF	Citations
171	Nanotubes from the Misfit Layered Compound (SmS)TaS: Atomic Structure, Charge Transfer, and Electrical Properties <i>Chemistry of Materials</i> , 2022 , 34, 1838-1853	9.6	2
170	Halide perovskite dynamics at work: Large cations at 2D-on-3D interfaces are mobile <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022 , 119, e2114740119	11.5	1
169	Complex morphologies of biogenic crystals emerge from anisotropic growth of symmetry-related facets <i>Science</i> , 2022 , 376, 312-316	33.3	6
168	Cation-Ligand Complexation Mediates the Temporal Evolution of Colloidal Fluoride Nanocrystals through Transient Aggregation. <i>Nano Letters</i> , 2021 , 21, 9916-9921	11.5	0
167	Pathway-Dependent Coordination Networks: Crystals versus Films. <i>Journal of the American Chemical Society</i> , 2021 , 143, 16913-16918	16.4	
166	Flexible STEM with Simultaneous Phase and Depth Contrast. <i>Microscopy and Microanalysis</i> , 2021 , 1-12	0.5	1
165	Growth-Etch Metal-Organic Chemical Vapor Deposition Approach of WS Atomic Layers. <i>ACS Nano</i> , 2021 , 15, 526-538	16.7	20
164	Oxygen Vacancy Distribution in Yttrium-Doped Ceria from Y-Y Correlations via Dynamic Nuclear Polarization Solid-State NMR. <i>Journal of Physical Chemistry Letters</i> , 2021 , 12, 2964-2969	6.4	9
163	Continuum Crystallization Model Derived from Pharmaceutical Crystallization Mechanisms. <i>ACS Central Science</i> , 2021 , 7, 900-908	16.8	5
162	Glyconanofluorides as Immunotracers with a Tunable Core Composition for Sensitive Hotspot Magnetic Resonance Imaging of Inflammatory Activity. <i>ACS Nano</i> , 2021 , 15, 7563-7574	16.7	8
161	Unusual Surface Texture, Dimensions and Morphology Variations of Chiral and Single Crystals**. <i>Angewandte Chemie</i> , 2021 , 133, 18404-18412	3.6	O
160	All-Solid-State Electro-Chemo-Mechanical Actuator Operating at Room Temperature. <i>Advanced Functional Materials</i> , 2021 , 31, 2006712	15.6	4
159	Improving the quality factors of plasmonic silver cavities for strong coupling with quantum emitters. <i>Journal of Chemical Physics</i> , 2021 , 154, 014703	3.9	O
158	In situ NMR reveals real-time nanocrystal growth evolution via monomer-attachment or particle-coalescence. <i>Nature Communications</i> , 2021 , 12, 229	17.4	8
157	Molecular cannibalism: Sacrificial materials as precursors for hollow and multidomain single crystals. <i>Nature Communications</i> , 2021 , 12, 957	17.4	5
156	Unusual Surface Texture, Dimensions and Morphology Variations of Chiral and Single Crystals*. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 18256-18264	16.4	2
155	Asymmetric misfit nanotubes: Chemical affinity outwits the entropy at high-temperature solid-state reactions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> 2021 118	11.5	4

154	Toward Compositional Contrast by Cryo-STEM. Accounts of Chemical Research, 2021, 54, 3621-3631	24.3	5
153	Oriented Attachment of 2D Nanosheets: The Case of Few-Layer Bi2Se3. <i>Chemistry of Materials</i> , 2021 , 33, 7558-7565	9.6	3
152	Noncovalent Bonding Caught in Action: From Amorphous to Cocrystalline Molecular Thin Films. <i>ACS Nano</i> , 2021 , 15, 14643-14652	16.7	
151	Electrostatic co-assembly of nanoparticles with oppositely charged small molecules into static and dynamic superstructures. <i>Nature Chemistry</i> , 2021 , 13, 940-949	17.6	21
150	Nickel phosphide catalysts for hydrogen generation through water reduction, ammonia-borane and borohydride hydrolysis. <i>Applied Materials Today</i> , 2020 , 20, 100693	6.6	4
149	A mechanism of ferritin crystallization revealed by cryo-STEM tomography. <i>Nature</i> , 2020 , 579, 540-543	50.4	27
148	Chiral and SHG-Active Metal-Organic Frameworks Formed in Solution and on Surfaces: Uniformity, Morphology Control, Oriented Growth, and Postassembly Functionalization. <i>Journal of the American Chemical Society</i> , 2020 , 142, 14210-14221	16.4	11
147	Epitaxial growth of In2Se3 on monolayer transition metal dichalcogenide single crystals for high performance photodetectors. <i>Applied Materials Today</i> , 2020 , 20, 100734	6.6	9
146	Large lattice distortions and size-dependent bandgap modulation in epitaxial halide perovskite nanowires. <i>Nature Communications</i> , 2020 , 11, 489	17.4	43
145	Emergence of chirality and structural complexity in single crystals at the molecular and morphological levels. <i>Nature Communications</i> , 2020 , 11, 380	17.4	23
144	Applications of Momentum-resolved Scanning Transmission Electron Microscopy for Cryo-preserved Radiation Sensitive Materials. <i>Microscopy and Microanalysis</i> , 2020 , 26, 1492-1492	0.5	
143	Vacuum Rabi splitting of a dark plasmonic cavity mode revealed by fast electrons. <i>Nature Communications</i> , 2020 , 11, 487	17.4	24
142	NiWSe2 nanostructures as efficient catalysts for electrochemical hydrogen evolution reaction (HER) in acidic and alkaline media. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 1403-1416	13	43
141	Guest Transition Metals in Host Inorganic Nanocapsules: Single Sites, Discrete Electron Transfer, and Atomic Scale Structure. <i>Journal of the American Chemical Society</i> , 2020 , 142, 14504-14512	16.4	6
140	Inducing Defects in F-Nanocrystals Provides Paramagnetic-free Relaxation Enhancement for Improved Hotspot MRI. <i>Nano Letters</i> , 2020 , 20, 7207-7212	11.5	11
139	The effects of sample conductivity on the efficacy of dynamic nuclear polarization for sensitivity enhancement in solid state NMR spectroscopy. <i>Solid State Nuclear Magnetic Resonance</i> , 2019 , 99, 7-14	3.1	5
138	Seeded Rods with Ag and Pd Bimetallic Tips Spontaneous Rearrangements of the Nanoalloys on the Atomic Scale. <i>Chemistry of Materials</i> , 2019 , 31, 7231-7237	9.6	6
137	Atomic surface reduction of interfaces utilizing vapor phase approach: High energy LiNixMnyCoz oxide as a test case. <i>Energy Storage Materials</i> , 2019 , 19, 261-269	19.4	17

136	Resolution and aberration correction in liquid cell transmission electron microscopy. <i>Nature Reviews Materials</i> , 2019 , 4, 61-78	73.3	83
135	3D mapping of native extracellular matrix reveals cellular responses to the microenvironment. <i>Journal of Structural Biology: X</i> , 2019 , 1, 100002	2.9	8
134	STEM Tomography in Biology 2018 , 33-60		3
133	Large-Velocity Saturation in Thin-Film Black Phosphorus Transistors. ACS Nano, 2018, 12, 5003-5010	16.7	32
132	Synthesis and Characterization of Nanotubes from Misfit (LnS) TaS (Ln=Pr, Sm, Gd, Yb) Compounds. <i>Chemistry - A European Journal</i> , 2018 , 24, 11354-11363	4.8	9
131	A Mechanistic Study of Phase Transformation in Perovskite Nanocrystals Driven by Ligand Passivation. <i>Chemistry of Materials</i> , 2018 , 30, 84-93	9.6	107
130	Surface-Guided CsPbBr Perovskite Nanowires on Flat and Faceted Sapphire with Size-Dependent Photoluminescence and Fast Photoconductive Response. <i>Nano Letters</i> , 2018 , 18, 424-433	11.5	76
129	Nanotubes from the Misfit Compound Alloy LaS-NbxTa(1日)S2. <i>Chemistry of Materials</i> , 2018 , 30, 8829-88	43 6	11
128	Growth Mechanisms and Electronic Properties of Vertically Aligned MoS. Scientific Reports, 2018, 8, 164	1 80 9	20
127	Cu2NSMoS2 Nano-Octahedra at the Atomic Scale: Using a Template To Activate the Basal Plane of MoS2 for Hydrogen Production. <i>Chemistry of Materials</i> , 2018 , 30, 4489-4492	9.6	34
126	Paramagnetic Metal-Ion Dopants as Polarization Agents for Dynamic Nuclear Polarization NMR Spectroscopy in Inorganic Solids. <i>ChemPhysChem</i> , 2018 , 19, 2139-2142	3.2	26
125	Guided Growth of Horizontal ZnS Nanowires on Flat and Faceted Sapphire Surfaces. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 12413-12420	3.8	13
124	Metal-Coordination-Induced Fusion Creates Hollow Crystalline Molecular Superstructures. <i>Journal of the American Chemical Society</i> , 2018 , 140, 9132-9139	16.4	12
123	Metallic Nanocrystal Ripening on Inorganic Surfaces. ACS Omega, 2018, 3, 6533-6539	3.9	1
122	Nucleation, Growth, and Structural Transformations of Perovskite Nanocrystals. <i>Chemistry of Materials</i> , 2017 , 29, 1302-1308	9.6	146
121	Synthesis and Characterization of Pb@GaS CoreBhell Fullerene-Like Nanoparticles and Nanotubes. <i>Nano</i> , 2017 , 12, 1750030	1.1	4
120	Inside-Out: The Role of Buried Interfaces in Hybrid Cu2ZnSnS4Noble Metal Photocatalysts. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 7062-7068	3.8	16
119	Probing the local nature of excitons and plasmons in few-layer MoS2. <i>Npj 2D Materials and Applications</i> , 2017 , 1,	8.8	41

(2015-2017)

118	Synthesis of core-shell single-layer MoS sheathing gold nanoparticles, AuNP@1L-MoS. <i>Nanotechnology</i> , 2017 , 28, 24LT03	3.4	19	
117	Tunable porous nanoallotropes prepared by post-assembly etching of binary nanoparticle superlattices. <i>Science</i> , 2017 , 358, 514-518	33.3	92	
116	Detection of isolated protein-bound metal ions by single-particle cryo-STEM. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, 11139-11144	11.5	19	
115	Nanoscale x-ray investigation of magnetic metallofullerene peapods. <i>Nanotechnology</i> , 2017 , 28, 435703	3.4	3	
114	Real-time molecular scale observation of crystal formation. <i>Nature Chemistry</i> , 2017 , 9, 369-373	17.6	54	
113	The effect of atomic disorder at the core-shell interface on stacking fault formation in hybrid nanoparticles. <i>Nanoscale</i> , 2016 , 8, 17568-17572	7.7	3	
112	Advanced tomography techniques for inorganic, organic, and biological materials. <i>MRS Bulletin</i> , 2016 , 41, 516-521	3.2	11	
111	Stability of Seeded Rod Photocatalysts: Atomic Scale View. <i>Chemistry of Materials</i> , 2016 , 28, 1546-1552	9.6	18	
110	Tubular structures from the LnSIIaS2 (Ln = La, Ce, Nd, Ho, Er) and LaSeIIaSe2 misfit layered compounds. <i>Journal of Materials Chemistry C</i> , 2016 , 4, 89-98	7.1	19	
109	Cryo-scanning transmission electron tomography of biological cells. MRS Bulletin, 2016, 41, 542-548	3.2	14	
108	From dilute isovalent substitution to alloying in CdSeTe nanoplatelets. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 15295-303	3.6	28	
107	Revealing Growth Schemes of Nanoparticles in Atomic Resolution: Mapping Stacking Fault Formation and Distribution. <i>Crystal Growth and Design</i> , 2015 , 15, 3114-3118	3.5	5	
106	Atomic structure and chemistry of dislocation cores at low-angle tilt grain boundary in SrTiO3 bicrystals. <i>Acta Materialia</i> , 2015 , 89, 344-351	8.4	49	
105	Growth Schemes of Tunable Ultrathin CdSxSe1 Alloyed Nanostructures at Low Temperatures. Journal of Physical Chemistry C, 2015, 119, 10734-10739	3.8	13	
104	Understanding the formation mechanism and the 3D structure of Mo(SxSe1☑)2 nanoflowers. <i>RSC Advances</i> , 2015 , 5, 88108-88114	3.7	22	
103	The golden gate to photocatalytic hydrogen production. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 1967	9 <u>1</u> 3968	3 2 ₃₇	
102	Designing Bimetallic Co-Catalysts: A Party of Two. Journal of Physical Chemistry Letters, 2015, 6, 3760-4	6.4	40	
101	Study Using Low-loss EELS to Compare Properties of TMDs Produced by Mechanical and Liquid Phase Exfoliation. <i>Microscopy and Microanalysis</i> , 2015 , 21, 1475-1476	0.5	2	

100	Rapid low dose electron tomography using a direct electron detection camera. <i>Scientific Reports</i> , 2015 , 5, 14516	4.9	61
99	Controlled covalent binding of antiferromagnetic tetramanganese complexes to carbon nanotubes. <i>RSC Advances</i> , 2015 , 5, 84119-84124	3.7	2
98	Polarity-driven polytypic branching in cu-based quaternary chalcogenide nanostructures. <i>ACS Nano</i> , 2014 , 8, 2290-301	16.7	41
97	Analysis of dopant atom distribution and quantification of oxygen vacancies on individual Gd-doped CeO2 nanocrystals. <i>Chemistry - A European Journal</i> , 2014 , 20, 6288-93	4.8	14
96	Nanotubes from Misfit Layered Compounds: A New Family of Materials with Low Dimensionality. Journal of Physical Chemistry Letters, 2014 , 5, 3724-36	6.4	44
95	Elemental mapping in achromatic atomic-resolution energy-filtered transmission electron microscopy. <i>Ultramicroscopy</i> , 2014 , 147, 98-105	3.1	21
94	Atomic-scale evolution of a growing core-shell nanoparticle. <i>Journal of the American Chemical Society</i> , 2014 , 136, 12564-7	16.4	14
93	Edge and confinement effects allow in situ measurement of size and thickness of liquid-exfoliated nanosheets. <i>Nature Communications</i> , 2014 , 5, 4576	17.4	350
92	Solution phase synthesis of homogeneously alloyed ultrathin CdSxSe1⊠ nanosheets. <i>RSC Advances</i> , 2014 , 4, 49842-49845	3.7	9
91	Orienting MoS2 flakes into ordered films. <i>Journal of Materials Science</i> , 2014 , 49, 7353-7359	4.3	2
90	Enantioselective control of lattice and shape chirality in inorganic nanostructures using chiral biomolecules. <i>Nature Communications</i> , 2014 , 5, 4302	17.4	138
89	High spatially resolved cation concentration profile at the grain boundaries of Sc-doped BaZrO3. <i>Solid State Ionics</i> , 2014 , 262, 860-864	3.3	15
88	Cryo-scanning transmission electron tomography of vitrified cells. <i>Nature Methods</i> , 2014 , 11, 423-8	21.6	82
87	Studies of local structural distortions in strained ultrathin BaTiO3 films using scanning transmission electron microscopy. <i>Microscopy and Microanalysis</i> , 2014 , 20, 740-7	0.5	8
86	Analyses of Interfaces in Wafer-Bonded Tandem Solar Cells by Aberration-Corrected STEM and EELS. <i>Microscopy and Microanalysis</i> , 2014 , 20, 456-457	0.5	1
85	Lanthanide-Based Functional Misfit-Layered Nanotubes. <i>Angewandte Chemie</i> , 2014 , 126, 7040-7044	3.6	7
84	Lanthanide-based functional misfit-layered nanotubes. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 6920-4	16.4	20
83	Nanotubes from chalcogenide misfit compounds: Sn-S and Nb-Pb-S. <i>Accounts of Chemical Research</i> , 2014 , 47, 406-16	24.3	36

(2012-2013)

82	Aberration-corrected transmission electron microscopy analyses of GaAs/Si interfaces in wafer-bonded multi-junction solar cells. <i>Ultramicroscopy</i> , 2013 , 134, 55-61	3.1	16
81	Atomic-scale measurement of structure and chemistry of a single-unit-cell layer of LaAlO3 embedded in SrTiO3. <i>Microscopy and Microanalysis</i> , 2013 , 19, 310-8	0.5	19
8o	Controllable atomic scale patterning of freestanding monolayer graphene at elevated temperature. <i>ACS Nano</i> , 2013 , 7, 1566-72	16.7	90
79	Geometric reconstruction methods for electron tomography. <i>Ultramicroscopy</i> , 2013 , 128, 42-54	3.1	24
78	Line Defects in Molybdenum Disulfide Layers. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 10842-10848	3.8	105
77	Controlling the orientation, edge geometry, and thickness of chemical vapor deposition graphene. <i>ACS Nano</i> , 2013 , 7, 1351-9	16.7	159
76	Assessment of a nanocrystal 3-D morphology by the analysis of single HAADF-HRSTEM images. <i>Nanoscale Research Letters</i> , 2013 , 8, 475	5	5
75	Spatial resolution and radiation damage in quantitative high-resolution STEM-EEL spectroscopy in oxides. <i>Micron</i> , 2012 , 43, 532-537	2.3	8
74	Microcrystalline silicon carbide window layers in thin film silicon solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2012 , 98, 370-378	6.4	29
73	Atomic-Scale Imaging and Quantification of Electrical Polarisation in Incommensurate Antiferroelectric Lanthanum-Doped Lead Zirconate Titanate. <i>Advanced Functional Materials</i> , 2012 , 22, 261-266	15.6	33
72	Correlating electron tomography and plasmon spectroscopy of single noble metal core-shell nanoparticles. <i>Nano Letters</i> , 2012 , 12, 145-50	11.5	44
71	Covalent functionalization of carbon nanotubes with tetramanganese complexes. <i>Physica Status Solidi (B): Basic Research</i> , 2012 , 249, 2412-2415	1.3	5
70	Investigation of Rhenium-Doped MoS2 Nanoparticles with Fullerene-Like Structure. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2012 , 638, 2610-2616	1.3	19
69	Diffraction from Disordered Stacking Sequences in MoS2and WS2Fullerenes and Nanotubes. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 24350-24357	3.8	40
68	New high-temperature Pb-catalyzed synthesis of inorganic nanotubes. <i>Journal of the American Chemical Society</i> , 2012 , 134, 16379-86	16.4	30
67	Formation and Analysis of CoreBhell Fine Structures in Pt Bimetallic Nanoparticle Fuel Cell Electrocatalysts. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 19073-19083	3.8	97
66	Direct imaging of single Au atoms within GaAs nanowires. <i>Nano Letters</i> , 2012 , 12, 2352-6	11.5	129
65	Opportunities for Chromatic Aberration Corrected High-Resolution Transmission Electron Microscopy, Lorentz Microscopy and Electron Holography of Magnetic Minerals. <i>Microscopy and Microanalysis</i> , 2012 , 18, 1708-1709	0.5	6

New Route for Stabilization of 1T-WS2 and MoS2 Phases. *Journal of Physical Chemistry C*, **2011**, 115, 245\$62

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63	Refinement procedure for the image alignment in high-resolution electron tomography. <i>Ultramicroscopy</i> , 2011 , 111, 1512-20	3.1	38
62	Metadislocations in the complex metallic alloys TAIMn[[Pd, Fe]. Acta Materialia, 2011, 59, 4458-4466	8.4	9
61	Comprehensive characterization of an individual carbon nanotube transport device. <i>Physica Status Solidi (B): Basic Research</i> , 2011 , 248, 2660-2663	1.3	4
60	MoS2 Hybrid Nanostructures: From Octahedral to Quasi-Spherical Shells within Individual Nanoparticles. <i>Angewandte Chemie</i> , 2011 , 123, 1850-1854	3.6	8
59	MoS2 hybrid nanostructures: from octahedral to quasi-spherical shells within individual nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 1810-4	16.4	56
58	Nanocomposite thin films for miniaturized multi-layer ceramic capacitors prepared from barium titanate nanoparticle based hybrid solutions. <i>Journal of Materials Chemistry</i> , 2011 , 21, 7953		17
57	Strain-induce shift of the crystal-field splitting of SrTiOlembedded in scandate multilayers. <i>ACS Applied Materials & Discours (Materials & Discours)</i> 1, 3, 1545-51	9.5	1
56	Plastic-deformation mechanism in complex solids. <i>Nature Materials</i> , 2010 , 9, 332-6	27	55
55	Hybrid nanoscale inorganic cages. <i>Nature Materials</i> , 2010 , 9, 810-5	27	119
54	Stability Criteria of Fullerene-like Nanoparticles: Comparing VD to Layered Metal Dichalcogenides and Dihalides. <i>Materials</i> , 2010 , 3, 4428-4445	3.5	9
53	Observation of breathing-like modes in an individual multiwalled carbon nanotube. <i>Nano Letters</i> , 2010 , 10, 4470-4	11.5	18
52	Hollow V(2)O(5) nanoparticles (fullerene-like analogues) prepared by laser ablation. <i>Journal of the American Chemical Society</i> , 2010 , 132, 11214-22	16.4	43
51	Bright-field electron tomography of individual inorganic fullerene-like structures. <i>Nanoscale</i> , 2010 , 2, 423-8	7.7	7
50	Catalyst Composition, Morphology and Reaction Pathway in the Growth of Buper-LonglCarbon Nanotubes. <i>ChemCatChem</i> , 2010 , 2, 1069-1073	5.2	32
49	On the benefit of the negative-spherical-aberration imaging technique for quantitative HRTEM. <i>Ultramicroscopy</i> , 2010 , 110, 500-505	3.1	85
48	Defects induced on chemical vapour deposition carbon nanotubes during peapod synthesis on substrates. <i>Nanotechnology</i> , 2009 , 20, 065603	3.4	8
47	Inorganic WS2 nanotubes revealed atom by atom using ultra-high-resolution transmission electron microscopy. <i>Applied Physics A: Materials Science and Processing</i> , 2009 , 96, 343-348	2.6	12

(2007-2009)

46	Microcrystalline silicon carbide alloys prepared with HWCVD as highly transparent and conductive window layers for thin film solar cells. <i>Thin Solid Films</i> , 2009 , 517, 3507-3512	2.2	47
45	StripeSTEM, a technique for the isochronous acquisition of high angle annular dark-field images and monolayer resolved electron energy loss spectra. <i>Ultramicroscopy</i> , 2009 , 109, 1447-52	3.1	28
44	Intermixing and charge neutrality at DyScO3/SrTiO3 interfaces. <i>Acta Materialia</i> , 2009 , 57, 3192-3198	8.4	20
43	Nanoseashells and Nanooctahedra of MoS2: Routes to Inorganic Fullerenes. <i>Chemistry of Materials</i> , 2009 , 21, 5627-5636	9.6	25
42	Method for suppression of stacking faults in Wurtzite III-V nanowires. <i>Nano Letters</i> , 2009 , 9, 1506-10	11.5	148
41	Negative spherical aberration ultrahigh-resolution imaging in corrected transmission electron microscopy. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2009 , 367, 3735-53	3	76
40	Atomic Scale Compositions Across DyScO3/SrTiO3 Interfaces. <i>Microscopy and Microanalysis</i> , 2009 , 15, 1012-1013	0.5	
39	Atomic-Resolution Aberration-Corrected Transmission Electron Microscopy. <i>Advances in Imaging and Electron Physics</i> , 2008 , 153, 439-480	0.2	2
38	Atomic structure of the interface between SrTiO3 thin films and Si(001) substrates. <i>Applied Physics Letters</i> , 2008 , 93, 101913	3.4	43
37	Atom by atom: HRTEM insights into inorganic nanotubes and fullerene-like structures. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 15643-8	11.5	66
36	Toward atomic-scale bright-field electron tomography for the study of fullerene-like nanostructures. <i>Nano Letters</i> , 2008 , 8, 891-6	11.5	60
35	Metadislocations in the structurally complex orthorhombic alloy Al13Co4. <i>Philosophical Magazine</i> , 2008 , 88, 2333-2338	1.6	20
34	Microstructure of highly crystalline silicon carbide thin films grown by HWCVD technique. <i>Thin Solid Films</i> , 2008 , 516, 618-621	2.2	31
33	Effect of filament and substrate temperatures on the structural and electrical properties of SiC thin films grown by the HWCVD technique. <i>Thin Solid Films</i> , 2008 , 516, 622-625	2.2	34
32	Microcrystalline silicon deposition: Process stability and process control. <i>Thin Solid Films</i> , 2007 , 515, 74	5 5- 745	930
31	Deposition of highly efficient microcrystalline silicon solar cells under conditions of low H2 dilution: the role of the transient depletion induced incubation layer. <i>Progress in Photovoltaics: Research and Applications</i> , 2007 , 15, 291-301	6.8	26
30	Unit-cell scale mapping of ferroelectricity and tetragonality in epitaxial ultrathin ferroelectric films. <i>Nature Materials</i> , 2007 , 6, 64-9	27	322
29	Hidden parameters in the plasma deposition of microcrystalline silicon solar cells. <i>Journal of Materials Research</i> , 2007 , 22, 1767-1774	2.5	10

28	Low substrate temperature deposition of crystalline SiC using HWCVD. Thin Solid Films, 2006, 501, 169-	1 <u>7.2</u>	46
27	Meandering of the grain boundary and d-wave effects in high-Tcbicrystal Josephson junctions. Superconductor Science and Technology, 2006 , 19, S195-S199	3.1	19
26	Atomic-resolution imaging of lattice imperfections in semiconductors by combined aberration-corrected HRTEM and exit-plane wavefunction retrieval. <i>Philosophical Magazine</i> , 2006 , 86, 4589-4606	1.6	9
25	Atom vacancies at a screw dislocation core in SrTiO3. <i>Philosophical Magazine Letters</i> , 2006 , 86, 683-690	1	23
24	Improvement of open circuit voltage in microcrystalline silicon solar cells using hot wire buffer layers. <i>Journal of Non-Crystalline Solids</i> , 2006 , 352, 1859-1862	3.9	30
23	Structural properties of microcrystalline SiC deposited at low substrate temperatures by HWCVD. Journal of Non-Crystalline Solids, 2006 , 352, 1376-1379	3.9	22
22	Aberration-Corrected HRTEM of Defects in Strained Lanthanum Cuprate Thin Films Grown on Strontium Titanate. <i>Microscopy and Microanalysis</i> , 2006 , 12, 1474-1475	0.5	
21	Characterization of laser-fired contacts in PERC solar cells: SIMS and TEM analysis applying advanced preparation techniques. <i>Applied Surface Science</i> , 2006 , 252, 7082-7085	6.7	15
20	Microstructure of thick chromium litride coating synthesized using plasma assisted MOCVD technique. <i>Surface and Coatings Technology</i> , 2006 , 201, 1401-1408	4.4	8
19	Atomic-precision determination of the reconstruction of a 90 degree tilt boundary in YBa2Cu3O7-delta by aberration corrected HRTEM. <i>Ultramicroscopy</i> , 2006 , 106, 200-14	3.1	82
18	Aberration-corrected HRTEM of defects in strained La2CuO4 thin films grown on SrTiO3. <i>Journal of Materials Science</i> , 2006 , 41, 4413-4419	4.3	7
17	Spherical-aberration correction in tandem with the restoration of the exit-plane wavefunction: synergetic tools for the imaging of lattice imperfections in crystalline solids at atomic resolution. <i>Journal of Materials Science</i> , 2006 , 41, 4420-4433	4.3	19
16	Strategies for Aberration Control in Sub-Angstrom HRTEM. Microscopy and Microanalysis, 2005, 11,	0.5	1
15	Illumination effects in holographic imaging of the electrostatic potential of defects and pn junctions in transmission electron microscopy. <i>Physical Review B</i> , 2004 , 70,	3.3	32
14	Magnetic and structural properties of GaN thin layers implanted with Mn, Cr, or V ions. <i>Journal of Applied Physics</i> , 2004 , 96, 5663-5667	2.5	18
13	Light-induced modification of a-SiOx II: Laser crystallization. <i>Journal of Applied Physics</i> , 2004 , 95, 4060-4	068	28
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11	Microtwinning in microcrystalline silicon and its effect on grain-size measurements. <i>Physical Review B</i> , 2003 , 67,	3.3	19

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10	Growth of microcrystalline nip Si solar cells: role of local epitaxy. <i>Journal of Non-Crystalline Solids</i> , 2002 , 299-302, 1189-1193	3.9	16
9	Intrinsic microcrystalline silicon: A new material for photovoltaics. <i>Solar Energy Materials and Solar Cells</i> , 2000 , 62, 97-108	6.4	507
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