David A Muller

List of Publications by Citations

482 papers	42,058 citations	97 h-index	198 g-index
515 ext. papers	47,766 ext. citations	9.8 avg, IF	7.37 L-index

#	Paper	IF	Citations
482	Superconducting interfaces between insulating oxides. *Science*, **2007**, 317, 1196-9	33.3	2013
481	One-dimensional electrical contact to a two-dimensional material. *Science*, **2013**, 342, 614-7	33.3	1676
480	Grains and grain boundaries in highly crystalline monolayer molybdenum disulphide. *Nature Materials*, **2013**, 12, 554-61	27	1590
479	Grains and grain boundaries in single-layer graphene atomic patchwork quilts. *Nature*, **2011**, 469, 389-92	50.4	1573
478	Structurally ordered intermetallic platinum-cobalt core-shell nanoparticles with enhanced activity and stability as oxygen reduction electrocatalysts. *Nature Materials*, **2013**, 12, 81-7	27	1467
477	High-mobility three-atom-thick semiconducting films with wafer-scale homogeneity. *Nature*, **2015**, 520, 656-60	50.4	1224
476	Why some interfaces cannot be sharp. *Nature Materials*, **2006**, 5, 204-209	27	1219
475	Multi-terminal transport measurements of MoS2 using a van der Waals heterostructure device platform. *Nature Nanotechnology*, **2015**, 10, 534-40	28.7	868
474	Artificial charge-modulationin atomic-scale perovskite titanate superlattices. *Nature*, **2002**, 419, 378-80	50.4	851
473	Compressive-stress-induced formation of thin-film tetrahedral amorphous carbon. *Physical Review Letters*, **1991**, 67, 773-776	7.4	845
472	Janus monolayers of transition metal dichalcogenides. *Nature Nanotechnology*, **2017**, 12, 744-749	28.7	828
471	The electronic structure at the atomic scale of ultrathin gate oxides. *Nature*, **1999**, 399, 758-761	50.4	815
470	Graphene and boron nitride lateral heterostructures for atomically thin circuitry. *Nature*, **2012**, 488, 627-32	50.4	650
469	A strong ferroelectric ferromagnet created by means of spin-lattice coupling. *Nature*, **2010**, 466, 954-8	50.4	586
468	Graphene kirigami. *Nature*, **2015**, 524, 204-7	50.4	551
467	Atomic-scale imaging of nanoengineered oxygen vacancy profiles in SrTiO3. *Nature*, **2004**, 430, 657-61	50.4	520
466	Atomic-scale chemical imaging of composition and bonding by aberration-corrected microscopy. *Science*, **2008**, 319, 1073-6	33.3	513

465	Direct fabrication of large micropatterned single crystals. *Science*, **2003**, 299, 1205-8	33.3	470
464	Tailoring electrical transport across grain boundaries in polycrystalline graphene. *Science*, **2012**, 336, 1143-6	33.3	469
463	High-temperature interface superconductivity between metallic and insulating copper oxides. *Nature*, **2008**, 455, 782-5	50.4	390
462	Atomic-scale imaging of individual dopant atoms and clusters in highly n-type bulk Si. *Nature*, **2002**, 416, 826-9	50.4	367
461	Free-standing nanoparticle superlattice sheets controlled by DNA. *Nature Materials*, **2009**, 8, 519-25	27	344
460	Crossover from incoherent to coherent phonon scattering in epitaxial oxide superlattices. *Nature Materials*, **2014**, 13, 168-72	27	327
459	Chemical vapor deposition-derived graphene with electrical performance of exfoliated graphene. *Nano Letters*, **2012**, 12, 2751-6	11.5	321
458	A ferroelectric oxide made directly on silicon. *Science*, **2009**, 324, 367-70	33.3	320
457	Structure and bonding at the atomic scale by scanning transmission electron microscopy. *Nature Materials*, **2009**, 8, 263-70	27	316
456	Elastic strain engineering of ferroic oxides. *MRS Bulletin*, **2014**, 39, 118-130	3.2	309
455	Layer-by-layer assembly of two-dimensional materials into wafer-scale heterostructures. *Nature*, **2017**, 550, 229-233	50.4	305
454	Strain solitons and topological defects in bilayer graphene. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 11256-60	11.5	293
453	Pt-decorated PdCo@Pd/C core-shell nanoparticles with enhanced stability and electrocatalytic activity for the oxygen reduction reaction. *Journal of the American Chemical Society*, **2010**, 132, 17664-6	16.4	286
452	HfO2 and Al2O3 gate dielectrics on GaAs grown by atomic layer deposition. *Applied Physics Letters*, **2005**, 86, 152904	3.4	280
451	Softened elastic response and unzipping in chemical vapor deposition graphene membranes. *Nano Letters*, **2011**, 11, 2259-63	11.5	278
450	Electron ptychography of 2D materials to deep sub-□gstr□m resolution. *Nature*, **2018**, 559, 343-349	50.4	269
449	Tuning oxygen reduction reaction activity via controllable dealloying: a model study of ordered Cu3Pt/C intermetallic nanocatalysts. *Nano Letters*, **2012**, 12, 5230-8	11.5	259
448	Nucleation and growth of atomic layer deposited HfO2 gate dielectric layers on chemical oxide (Si□DH) and thermal oxide (SiO2 or Si□DN) underlayers. *Journal of Applied Physics*, **2002**, 92, 7168-7174	2.5	249

447	Esaki Diodes in van der Waals Heterojunctions with Broken-Gap Energy Band Alignment. *Nano Letters*, **2015**, 15, 5791-8	11.5	237
446	Properties of high gate dielectrics Gd2O3 and Y2O3 for Si. *Journal of Applied Physics*, **2001**, 89, 3920-3927	2.5	237
445	Delocalization in inelastic scattering. *Ultramicroscopy*, **1995**, 59, 195-213	3.1	234
444	Visualizing the 3D internal structure of calcite single crystals grown in agarose hydrogels. *Science*, **2009**, 326, 1244-7	33.3	232
443	Properties of tetrahedral amorphous carbon prepared by vacuum arc deposition. *Diamond and Related Materials*, **1991**, 1, 51-59	3.5	228
442	Rapid electron transfer by the carbon matrix in natural pyrogenic carbon. *Nature Communications*, **2017**, 8, 14873	17.4	223
441	Epitaxial integration of the highly spin-polarized ferromagnetic semiconductor EuO with silicon and GaN. *Nature Materials*, **2007**, 6, 882-7	27	222
440	High Dynamic Range Pixel Array Detector for Scanning Transmission Electron Microscopy. *Microscopy and Microanalysis*, **2016**, 22, 237-49	0.5	222
439	Observation of room-temperature polar skyrmions. *Nature*, **2019**, 568, 368-372	50.4	221
438	Atomically engineered ferroic layers yield a room-temperature magnetoelectric multiferroic. *Nature*, **2016**, 537, 523-7	50.4	221
437	Mapping sp2 and sp3 states of carbon at sub-nanometre spatial resolution. *Nature*, **1993**, 366, 725-727	50.4	215
436	Hierarchical porous polymer scaffolds from block copolymers. *Science*, **2013**, 341, 530-4	33.3	214
435	Tailoring the electronic structure in bilayer molybdenum disulfide via interlayer twist. *Nano Letters*, **2014**, 14, 3869-75	11.5	213
434	The structure of the C70 molecule. *Nature*, **1992**, 355, 622-624	50.4	210
433	Direct imaging of a two-dimensional silica glass on graphene. *Nano Letters*, **2012**, 12, 1081-6	11.5	206
432	Nanoscale imaging of lithium ion distribution during in situ operation of battery electrode and electrolyte. *Nano Letters*, **2014**, 14, 1453-9	11.5	204
431	Large-scale chemical assembly of atomically thin transistors and circuits. *Nature Nanotechnology*, **2016**, 11, 954-959	28.7	201
430	Imaging individual atoms inside crystals with ADF-STEM. *Ultramicroscopy*, **2003**, 96, 251-73	3.1	195

429	Twinning and twisting of tri- and bilayer graphene. *Nano Letters*, **2012**, 12, 1609-15	11.5	194
428	Surfactant ligand removal and rational fabrication of inorganically connected quantum dots. *Nano Letters*, **2011**, 11, 5356-61	11.5	187
427	Growth of homoepitaxial SrTiO3 thin films by molecular-beam epitaxy. *Applied Physics Letters*, **2009**, 94, 162905	3.4	179
426	LaAlO3 stoichiometry is key to electron liquid formation at LaAlO3/SrTiO3 interfaces. *Nature Communications*, **2013**, 4, 2351	17.4	177
425	Connections between the electron-energy-loss spectra, the local electronic structure, and the physical properties of a material: A study of nickel aluminum alloys. *Physical Review B*, **1998**, 57, 8181-8202	3.3	176
424	Negatively curved graphitic sheet model of amorphous carbon. *Physical Review Letters*, **1992**, 69, 921-924	7.4	176
423	Interface superconductor with gap behaviour like a high-temperature superconductor. *Nature*, **2013**, 502, 528-31	50.4	174
422	Coherent, atomically thin transition-metal dichalcogenide superlattices with engineered strain. *Science*, **2018**, 359, 1131-1136	33.3	170
421	Exploiting dimensionality and defect mitigation to create tunable microwave dielectrics. *Nature*, **2013**, 502, 532-6	50.4	170
420	Intrinsic Two-Dimensional Ferroelectricity with Dipole Locking. *Physical Review Letters*, **2018**, 120, 227601	7.4	170
419	Effect of biaxial strain on the electrical and magnetic properties of (001) La0.7Sr0.3MnO3 thin films. *Applied Physics Letters*, **2009**, 95, 112504	3.4	164
418	Imaging atomic rearrangements in two-dimensional silica glass: watching silica's dance. *Science*, **2013**, 342, 224-7	33.3	162
417	Predicting LVOT Obstruction in Transcatheter Mitral Valve Implantation: Concept of the Neo-LVOT. *JACC: Cardiovascular Imaging*, **2017**, 10, 482-485	8.4	155
416	Facile Synthesis of Carbon-Supported PdCo Core–Shell Nanoparticles as Oxygen Reduction Electrocatalysts and Their Enhanced Activity and Stability with Monolayer Pt Decoration. *Chemistry of Materials*, **2012**, 24, 2274-2281	9.6	154
415	Atomic-resolution spectroscopic imaging of ensembles of nanocatalyst particles across the life of a fuel cell. *Nano Letters*, **2012**, 12, 490-7	11.5	149
414	Three-dimensional tracking and visualization of hundreds of Pt-Co fuel cell nanocatalysts during electrochemical aging. *Nano Letters*, **2012**, 12, 4417-23	11.5	145
413	Atomically Thin Ohmic Edge Contacts Between Two-Dimensional Materials. *ACS Nano*, **2016**, 10, 6392-9	16.7	144
412	Multifunctional nanoarchitectures from DNA-based ABC monomers. *Nature Nanotechnology*, **2009**, 4, 430-6	28.7	144

411	Spatially resolved steady-state negative capacitance. *Nature*, **2019**, 565, 468-471	50.4	144
410	Morphology and crystallization kinetics in HfO2 thin films grown by atomic layer deposition. *Journal of Applied Physics*, **2003**, 93, 1477-1481	2.5	137
409	Strain distributions and their influence on electronic structures of WSe-MoS laterally strained heterojunctions. *Nature Nanotechnology*, **2018**, 13, 152-158	28.7	135
408	Multicompartment mesoporous silica nanoparticles with branched shapes: an epitaxial growth mechanism. *Science*, **2013**, 340, 337-41	33.3	132
407	Achieving High-Power PEM Fuel Cell Performance with an Ultralow-Pt-Content Core□Shell Catalyst. *ACS Catalysis*, **2016**, 6, 1578-1583	13.1	129
406	Synergistic Mn-Co catalyst outperforms Pt on high-rate oxygen reduction for alkaline polymer electrolyte fuel cells. *Nature Communications*, **2019**, 10, 1506	17.4	128
405	Pt-Rich/Sn-Rich/Pt Nanocubes As Highly Active and Stable Electrocatalysts for the Ethanol Oxidation Reaction. *Journal of the American Chemical Society*, **2018**, 140, 3791-3797	16.4	124
404	Solid-solid phase transformations induced through cation exchange and strain in 2D heterostructured copper sulfide nanocrystals. *Nano Letters*, **2014**, 14, 7090-9	11.5	122
403	Study of strain fields at a-Si/c-Si interface. *Journal of Applied Physics*, **2004**, 95, 3362-3371	2.5	121
402	Microscopic origins for stabilizing room-temperature ferromagnetism in ultrathin manganite layers. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 11682-5	11.5	120
401	Graphene-based bimorphs for micron-sized, autonomous origami machines. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 466-470	11.5	113
400	In situ electron energy-loss spectroscopy in liquids. *Microscopy and Microanalysis*, **2013**, 19, 1027-35	0.5	112
399	Wafer-scale synthesis of monolayer two-dimensional porphyrin polymers for hybrid superlattices. *Science*, **2019**, 366, 1379-1384	33.3	111
398	Morphology and activity tuning of Cu□Pt/C ordered intermetallic nanoparticles by selective electrochemical dealloying. *Nano Letters*, **2015**, 15, 1343-8	11.5	108
397	Fluctuation microscopy in the STEM. *Ultramicroscopy*, **2002**, 93, 147-59	3.1	108
396	Atomic Scale Observations of Metal-Induced Gap States at {222} MgO/Cu Interfaces. *Physical Review Letters*, **1998**, 80, 4741-4744	7.4	108
395	Tuning the Electrocatalytic Oxygen Reduction Reaction Activity and Stability of Shape-Controlled Pt-Ni Nanoparticles by Thermal Annealing - Elucidating the Surface Atomic Structural and Compositional Changes. *Journal of the American Chemical Society*, **2017**, 139, 16536-16547	16.4	107
394	Epitaxial growth and electronic structure of LaTiOx films. *Applied Physics Letters*, **2002**, 80, 3922-3924	3.4	107

393	Initial Feasibility Study of a New Transcatheter Mitral Prosthesis: The First 100 Patients. *Journal of the American College of Cardiology*, **2019**, 73, 1250-1260	15.1	106
392	Stacking order dependent second harmonic generation and topological defects in h-BN bilayers. *Nano Letters*, **2013**, 13, 5660-5	11.5	106
391	Electronic properties of the Si/SiO2 interface from first principles. *Physical Review Letters*, **2000**, 85, 1298-301	7.4	104
390	Simulation of thermal diffuse scattering including a detailed phonon dispersion curve. *Ultramicroscopy*, **2001**, 86, 371-80	3.1	103
389	Characterization of Carbon Corrosion-Induced Structural Damage of PEM Fuel Cell Cathode Electrodes Caused by Local Fuel Starvation. *Journal of the Electrochemical Society*, **2008**, 155, B979	3.9	99
388	Mechanism of Gold-Assisted Exfoliation of Centimeter-Sized Transition-Metal Dichalcogenide Monolayers. *ACS Nano*, **2018**, 12, 10463-10472	16.7	99
387	Correlation of annealing effects on local electronic structure and macroscopic electrical properties for HfO2 deposited by atomic layer deposition. *Applied Physics Letters*, **2003**, 83, 3984-3986	3.4	98
386	Adsorption-controlled growth of La-doped BaSnO3 by molecular-beam epitaxy. *APL Materials*, **2017**, 5, 116107	5.7	98
385	Star-shaped azo-based dipolar chromophores: design, synthesis, matrix compatibility, and electro-optic activity. *Journal of the American Chemical Society*, **2004**, 126, 1741-7	16.4	94
384	Functional electronic inversion layers at ferroelectric domain walls. *Nature Materials*, **2017**, 16, 622-627	27	92
383	Block copolymer self-assembly-directed single-crystal homo- and heteroepitaxial nanostructures. *Science*, **2010**, 330, 214-9	33.3	92
382	Three-dimensional imaging of nonspherical silicon nanoparticles embedded in silicon oxide by plasmon tomography. *Applied Physics Letters*, **2006**, 89, 151920	3.4	91
381	Direct observation of defect-mediated cluster nucleation. *Nature Materials*, **2002**, 1, 102-5	27	91
380	A surfactant-free strategy for synthesizing and processing intermetallic platinum-based nanoparticle catalysts. *Journal of the American Chemical Society*, **2012**, 134, 18453-9	16.4	90
379	Calcite Prisms from Mollusk Shells (Atrina Rigida): Swiss-cheese-like Organic–Inorganic Single-crystal Composites. *Advanced Functional Materials*, **2011**, 21, 2028-2034	15.6	87
378	Data processing for atomic resolution electron energy loss spectroscopy. *Microscopy and Microanalysis*, **2012**, 18, 667-75	0.5	87
377	Atomically precise interfaces from non-stoichiometric deposition. *Nature Communications*, **2014**, 5, 4530	17.4	86
376	Enhancement of the anti-damping spin torque efficacy of platinum by interface modification. *Applied Physics Letters*, **2015**, 106, 222402	3.4	85

375	First principles simulation of a ceramic /Metal interface with misfit. *Physical Review Letters*, **2000**, 84, 3362-5	7.4	84
374	Design Principles for Optimum Performance of Porous Carbons in Lithium–Sulfur Batteries. *Advanced Energy Materials*, **2016**, 6, 1600134	21.8	84
373	GaN/NbN epitaxial semiconductor/superconductor heterostructures. *Nature*, **2018**, 555, 183-189	50.4	83
372	Real-time imaging of activation and degradation of carbon supported octahedral PtNi alloy fuel cell catalysts at the nanoscale using in situ electrochemical liquid cell STEM. *Energy and Environmental Science*, **2019**, 12, 2476-2485	35.4	82
371	Comparison between Dealloyed PtCo3 and PtCu3 Cathode Catalysts for Proton Exchange Membrane Fuel Cells. *Journal of Physical Chemistry C*, **2012**, 116, 19877-19885	3.8	82
370	Defining Crystalline/Amorphous Phases of Nanoparticles through X-ray Absorption Spectroscopy and X-ray Diffraction: The Case of Nickel Phosphide. *Chemistry of Materials*, **2013**, 25, 2394-2403	9.6	81
369	Quantum many-body interactions in digital oxide superlattices. *Nature Materials*, **2012**, 11, 855-9	27	80
368	Electron optical characterization of cubic boron nitride thin films prepared by reactive ion plating. *Journal of Applied Physics*, **1991**, 70, 3007-3012	2.5	79
367	Three-dimensional imaging of nanovoids in copper interconnects using incoherent bright field tomography. *Applied Physics Letters*, **2006**, 88, 243116	3.4	78
366	Nature of the metal insulator transition in ultrathin epitaxial vanadium dioxide. *Nano Letters*, **2013**, 13, 4857-61	11.5	77
365	Electronically integrated, mass-manufactured, microscopic robots. *Nature*, **2020**, 584, 557-561	50.4	77
364	Sub-nanometre channels embedded in two-dimensional materials. *Nature Materials*, **2018**, 17, 129-133	27	75
363	Transport properties of ultra-thin VO2 films on (001) TiO2 grown by reactive molecular-beam epitaxy. *Applied Physics Letters*, **2015**, 107, 163101	3.4	74
362	Magnetic structure and ordering of multiferroic hexagonal LuFeO_{3}. *Physical Review Letters*, **2015** , 114, 217602	7.4	74
361	Lattice-polarization effects on electron-gas charge densities in ionic superlattices. *Physical Review B* , **2006**, 73,	3.3	73
360	Highly conductive and chemically stable alkaline anion exchange membranes via ROMP of -cyclooctene derivatives. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 9729-9734	11.5	71
359	Materials Characterization of Alternative Gate Dielectrics. *MRS Bulletin*, **2002**, 27, 206-211	3.2	68
358	Aberration-corrected ADF-STEM depth sectioning and prospects for reliable 3D imaging in S/TEM. *Journal of Electron Microscopy*, **2009**, 58, 157-65		67

357	Depth-dependent imaging of individual dopant atoms in silicon. *Microscopy and Microanalysis*, **2004**, 10, 291-300	0.5	67
356	DNAsomes: Multifunctional DNA-based nanocarriers. *Small*, **2011**, 7, 74-8	11	66
355	Near atomic scale studies of electronic structure at grain boundaries in Ni3Al. *Physical Review Letters*, **1995**, 75, 4744-4747	7.4	66
354	Visualizing the interfacial evolution from charge compensation to metallic screening across the manganite metal-insulator transition. *Nature Communications*, **2014**, 5, 3464	17.4	65
353	Advances in high □gate dielectrics for Si and III□V semiconductors. *Journal of Crystal Growth*, **2003**, 251, 645-650	1.6	65
352	Revealing the atomic ordering of binary intermetallics using in situ heating techniques at multilength scales. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 1974-1983	11.5	64
351	Atomic scale measurements of the interfacial electronic structure and chemistry of zirconium silicate gate dielectrics. *Applied Physics Letters*, **2001**, 79, 4195-4197	3.4	64
350	Mitigation of PEM Fuel Cell Catalyst Degradation with Porous Carbon Supports. *Journal of the Electrochemical Society*, **2019**, 166, F198-F207	3.9	63
349	Infiltrating sulfur in hierarchical architecture MWCNT@meso C core-shell nanocomposites for lithium-sulfur batteries. *Physical Chemistry Chemical Physics*, **2013**, 15, 9051-7	3.6	63
348	Subtleties in ADF imaging and spatially resolved EELS: A case study of low-angle twist boundaries in SrTiO3. *Ultramicroscopy*, **2006**, 106, 1053-61	3.1	62
347	Synthesis, structure and applications of amorphous diamond. *Thin Solid Films*, **1991**, 206, 198-203	2.2	62
346	Multicomponent Nanomaterials with Complex Networked Architectures from Orthogonal Degradation and Binary Metal Backfilling in ABC Triblock Terpolymers. *Journal of the American Chemical Society*, **2015**, 137, 6026-33	16.4	61
345	Visualizing short-range charge transfer at the interfaces between ferromagnetic and superconducting oxides. *Nature Communications*, **2013**, 4, 2336	17.4	61
344	Structure, chemistry and bonding at grain boundaries in Ni3Al□ The role of boron in ductilizing grain boundaries. *Acta Materialia*, **1996**, 44, 1637-1645	8.4	61
343	Synthetic Lateral Metal-Semiconductor Heterostructures of Transition Metal Disulfides. *Journal of the American Chemical Society*, **2018**, 140, 12354-12358	16.4	60
342	Tuning Electrical Conductance of MoS Monolayers through Substitutional Doping. *Nano Letters*, **2020**, 20, 4095-4101	11.5	59
341	Editors' Choice□Connecting Fuel Cell Catalyst Nanostructure and Accessibility Using Quantitative Cryo-STEM Tomography. *Journal of the Electrochemical Society*, **2018**, 165, F173-F180	3.9	59
340	Effect of oxygen stoichiometry on the electrical properties of zirconia gate dielectrics. *Applied Physics Letters*, **2001**, 79, 3311-3313	3.4	59

339	Spontaneous incorporation of gold in palladium-based ternary nanoparticles makes durable electrocatalysts for oxygen reduction reaction. *Nature Communications*, **2016**, 7, 11941	17.4	58
338	Chemical Vapor Deposition Growth of Large Single-Crystal Mono-, Bi-, Tri-Layer Hexagonal Boron Nitride and Their Interlayer Stacking. *ACS Nano*, **2017**, 11, 12057-12066	16.7	58
337	Coalescence in the Thermal Annealing of Nanoparticles: An in Situ STEM Study of the Growth Mechanisms of Ordered PtFe Nanoparticles in a KCl Matrix. *Chemistry of Materials*, **2013**, 25, 1436-1442	9.6	58
336	A polarization-induced 2D hole gas in undoped gallium nitride quantum wells. *Science*, **2019**, 365, 1454-1457	33.3	57
335	Electrical half-wave rectification at ferroelectric domain walls. *Nature Nanotechnology*, **2018**, 13, 1028-1034	38.7	57
334	Optical band gap and magnetic properties of unstrained EuTiO3 films. *Applied Physics Letters*, **2009**, 94, 212509	3.4	56
333	Room design for high-performance electron microscopy. *Ultramicroscopy*, **2006**, 106, 1033-40	3.1	56
332	Spatially resolved electron energy-loss spectroscopy of electron-beam grown and sputtered CoFeB/MgO/CoFeB magnetic tunnel junctions. *Applied Physics Letters*, **2007**, 91, 062516	3.4	55
331	Dopant mapping for the nanotechnology age. *Nature Materials*, **2003**, 2, 129-31	27	55
330	Adsorption-controlled growth of BiVO4 by molecular-beam epitaxy. *APL Materials*, **2013**, 1, 042112	5.7	54
329	Nanoscale assembly processes revealed in the nacroprismatic transition zone of Pinna nobilis mollusc shells. *Nature Communications*, **2015**, 6, 10097	17.4	54
328	Analytic derivation of optimal imaging conditions for incoherent imaging in aberration-corrected electron microscopes. *Ultramicroscopy*, **2008**, 108, 1454-66	3.1	53
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326	Growth and characterization of ultrathin zirconia dielectrics grown by ultraviolet ozone oxidation. *Applied Physics Letters*, **2001**, 79, 2621-2623	3.4	53
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324	Networked and chiral nanocomposites from ABC triblock terpolymer coassembly with transition metal oxide nanoparticles. *Journal of Materials Chemistry*, **2012**, 22, 1078-1087		52
323	Simultaneous Quantification of Electron Transfer by Carbon Matrices and Functional Groups in Pyrogenic Carbon. *Environmental Science & Technology*, **2018**, 52, 8538-8547	10.3	52
322	Stability of the M2 phase of vanadium dioxide induced by coherent epitaxial strain. *Physical Review B*, **2016**, 94,	3.3	51

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319	Characterization and production metrology of thin transistor gate oxide films. *Materials Science in Semiconductor Processing*, **1999**, 2, 103-147	4.3	51
318	Strain Mapping of Two-Dimensional Heterostructures with Subpicometer Precision. *Nano Letters*, **2018**, 18, 3746-3751	11.5	50
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315	Sulfur encapsulation by MOF-derived CoS2 embedded in carbon hosts for high-performance Li? batteries. *Journal of Materials Chemistry A*, **2019**, 7, 21128-21139	13	48
314	Intrinsic magnetic properties of hexagonal LuFeO3 and the effects of nonstoichiometry. *APL Materials*, **2014**, 2, 012106	5.7	47
313	Depth sectioning of individual dopant atoms with aberration-corrected scanning transmission electron microscopy. *Applied Physics Letters*, **2008**, 92, 013125	3.4	47
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309	Gate-Recessed E-mode p-Channel HFET With High On-Current Based on GaN/AlN 2D Hole Gas. *IEEE Electron Device Letters*, **2018**, 39, 1848-1851	4.4	46
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307	Effect of reduced dimensionality on the optical band gap of SrTiO3. *Applied Physics Letters*, **2013**, 102, 122901	3.4	45
306	Electron Accumulation and Emergent Magnetism in LaMnO_{3}/SrTiO_{3} Heterostructures. *Physical Review Letters*, **2017**, 119, 156801	7.4	44
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