Robert F Klie

List of Publications by Year
in descending order

210 papers	9,319 citations	53660 45 h-index	40881 93 g-index
216 all docs	216 docs citations	216 times ranked	14608 citing authors

#	Article	IF	Citations
1	Covalent surface modifications and superconductivity of two-dimensional metal carbide MXenes. Science, 2020, 369, 979-983.	6.0	870
2	Nanostructured transition metal dichalcogenide electrocatalysts for CO ₂ reduction in ionic liquid. Science, 2016, 353, 467-470.	6.0	778
3	Highâ€Quality Black Phosphorus Atomic Layers by Liquidâ€Phase Exfoliation. Advanced Materials, 2015, 27, 1887-1892.	11.1	728
4	Robust carbon dioxide reduction on molybdenum disulphide edges. Nature Communications, 2014, 5, 4470.	5.8	644
5	A lithiumâ€“oxygen battery with a long cycle life in an air-like atmosphere. Nature, 2018, 555, 502-506.	13.7	433
6	Synthesis of Pure Boron Single-Wall Nanotubes. Journal of Physical Chemistry B, 2004, 108, 3967-3969.	1.2	305
7	Mechanism of Zn Insertion into Nanostructured Î´-MnO₂: A Nonaqueous Rechargeable Zn Metal Battery. Chemistry of Materials, 2017, 29, 4874-4884.	3.2	225
8	Heterogeneous nucleation and shape transformation of multicomponent metallicÂnanostructures. Nature Materials, 2015, 14, 215-223.	13.3	187
9	Cathode Based on Molybdenum Disulfide Nanoflakes for Lithiumâ€“Oxygen Batteries. ACS Nano, 2016, 10, 2167-2175.	7.3	184
10	Direct Observation of Reversible Magnesium Ion Intercalation into a Spinel Oxide Host. Advanced Materials, 2015, 27, 3377-3384.	11.1	178
11	Asynchronous Crystal Cell Expansion during Lithiation of K⁺-Stabilized Î±-MnO₂. Nano Letters, 2015, 15, 2998-3007.	4.5	161
12	Dynamically Stable Active Sites from Surface Evolution of Perovskite Materials during the Oxygen Evolution Reaction. Journal of the American Chemical Society, 2021, 143, 2741-2750.	6.6	156
13	Highâ€Resolution Electron Microscopy and Spectroscopy of Ferritin in Biocompatible Graphene Liquid Cells and Graphene Sandwiches. Advanced Materials, 2014, 26, 3410-3414.	11.1	148
14	A Longâ€Cycleâ€Life Lithiumâ€“CO₂ Battery with Carbon Neutrality. Advanced Materials, 2019, 31, e1902518.	11.1	138
15	Atomic-Scale Observation of Lithiation Reaction Front in Nanoscale SnO₂ Materials. ACS Nano, 2013, 7, 6203-6211.	7.3	134
16	Chemical Weathering of Layered Ni-Rich Oxide Electrode Materials: Evidence for Cation Exchange. Journal of the Electrochemical Society, 2017, 164, A1489-A1498.	1.3	133
17	Understanding the Role of Temperature and Cathode Composition on Interface and Bulk: Optimizing Aluminum Oxide Coatings for Li-Ion Cathodes. ACS Applied Materials & Interfaces, 2017, 9, 14769-14778.	4.0	129
18	Reversible Mg-Ion Insertion in a Metastable One-Dimensional Polymorph of V2O5. CheM, 2018, 4, 564-585.	5.8	126

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19	Growth and characterization of Î²-Ga2O3 thin films by molecular beam epitaxy for deep-UV photodetectors. Journal of Applied Physics, 2017, 122, .	1.1	124
20	Chemical sensing with switchable transport channels in graphene grain boundaries. Nature Communications, 2014, 5, 4911.	5.8	105
21	Facet-Dependent Thermal Instability in LiCoO₂. Nano Letters, 2017, 17, 2165-2171.	4.5	99
22	Highly Efficient Hydrogen Evolution Reaction Using Crystalline Layered Three-Dimensional Molybdenum Disulfides Grown on Graphene Film. Chemistry of Materials, 2016, 28, 549-555.	3.2	98
23	The observation of square ice in graphene questioned. Nature, 2015, 528, E1-E2.	13.7	95
24	In situ electron energy loss spectroscopy study of metallic Co and Co oxides. Journal of Applied Physics, 2010, 108, .	1.1	84
25	Ultrafast and Highly Reversible Sodium Storage in Zincâ€Antimony Intermetallic Nanomaterials. Advanced Functional Materials, 2016, 26, 543-552.	7.8	81
26	Twin Boundary-Assisted Lithium Ion Transport. Nano Letters, 2015, 15, 610-615.	4.5	80
27	Mixed Polarity in Polarization-Induced pâ€“n Junction Nanowire Light-Emitting Diodes. Nano Letters, 2013, 13, 3029-3035.	4.5	77
28	Intercalation of Magnesium into a Layered Vanadium Oxide with High Capacity. ACS Energy Letters, 2019, 4, 1528-1534.	8.8	75
29	First-principles study of size- and edge-dependent properties of MXene nanoribbons. Physical Review B, 2016, 93, .	1.1	72
30	Mapping Thermal Expansion Coefficients in Freestanding 2D Materials at the Nanometer Scale. Physical Review Letters, 2018, 120, 055902.	2.9	72
31	High-Voltage Phosphate Cathodes for Rechargeable Ca-Ion Batteries. ACS Energy Letters, 2020, 5, 3203-3211.	8.8	65
32	Atomic Resolution Analysis of the Defect Chemistry and Microdomain Structure of Brownmilleriteâ€Type Strontium Cobaltite. Journal of the American Ceramic Society, 2002, 85, 969-976.	1.9	63
33	On the Localized Nature of the Structural Transformations of Li₂MnO₃ Following Electrochemical Cycling. Advanced Energy Materials, 2015, 5, 1501252.	10.2	63
34	Direct Investigation of Mg Intercalation into the Orthorhombic V₂O₅ Cathode Using Atomic-Resolution Transmission Electron Microscopy. Chemistry of Materials, 2017, 29, 2218-2226.	3.2	62
35	Reversible Modulation of Orbital Occupations via an Interface-Induced Polar State in Metallic Manganites. Nano Letters, 2014, 14, 4965-4970.	4.5	61
36	Colloidal Chemistry in Molten Salts: Synthesis of Luminescent In_{1â€“x}Ga_xP and In_{1â€“x}Ga_xAs Quantum Dots. Journal of the American Chemical Society, 2018, 140, 12144-12151.	6.6	60

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37	Colloidal Atomic Layer Deposition with Stationary Reactant Phases Enables Precise Synthesis of â€œDigitalâ€•IIâ€“VI Nano-heterostructures with Exquisite Control of Confinement and Strain. Journal of the American Chemical Society, 2019, 141, 13487-13496.	6.6	58
38	Deep ultraviolet emitting polarization induced nanowire light emitting diodes with Al_xGa_{1â^'x}N active regions. Nanotechnology, 2014, 25, 455201.	1.3	53
39	Atomic Origins of Monoclinic-Tetragonal (Rutile) Phase Transition in Doped VO₂ Nanowires. Nano Letters, 2015, 15, 7179-7188.	4.5	52
40	Direct Atomic-Scale Imaging of Hydrogen and Oxygen Interstitials in Pure Niobium Using Atom-Probe Tomography and Aberration-Corrected Scanning Transmission Electron Microscopy. ACS Nano, 2013, 7, 732-739.	7.3	51
41	Enhanced Thermal Boundary Conductance in Fewâ€Layer Ti₃C₂ MXene with Encapsulation. Advanced Materials, 2018, 30, e1801629.	11.1	51
42	Synthesis and Characterization of MgCr₂S₄ Thiospinel as a Potential Magnesium Cathode. Inorganic Chemistry, 2018, 57, 8634-8638.	1.9	50
43	High Voltage Mg-Ion Battery Cathode via a Solid Solution Crâ€“Mn Spinel Oxide. Chemistry of Materials, 2020, 32, 6577-6587.	3.2	48
44	High Capacity for Mg²⁺ Deintercalation in Spinel Vanadium Oxide Nanocrystals. ACS Energy Letters, 2020, 5, 2721-2727.	8.8	48
45	Quasiâ€Binary Transition Metal Dichalcogenide Alloys: Thermodynamic Stability Prediction, Scalable Synthesis, and Application. Advanced Materials, 2020, 32, e1907041.	11.1	46
46	Vibrational Spectroscopy of Water with High Spatial Resolution. Advanced Materials, 2018, 30, e1802702.	11.1	45
47	Free standing luminescent silicon quantum dots: evidence of quantum confinement and defect related transitions. Nanotechnology, 2010, 21, 505602.	1.3	44
48	Precise In Situ Modulation of Local Liquid Chemistry via Electron Irradiation in Nanoreactors Based on Graphene Liquid Cells. Advanced Materials, 2016, 28, 7716-7722.	11.1	44
49	New Class of Electrocatalysts Based on 2D Transition Metal Dichalcogenides in Ionic Liquid. Advanced Materials, 2019, 31, e1804453.	11.1	43
50	Selective Adsorption of Manganese onto Rhodium for Optimized Mn/Rh/SiO₂ Alcohol Synthesis Catalysts. ChemCatChem, 2013, 5, 3665-3672.	1.8	42
51	Luminescent core-shell nanostructures of silicon and silicon oxide: Nanodots and nanorods. Journal of Applied Physics, 2010, 107, .	1.1	40
52	Elastic modulus of single-crystal GaN nanowires. Journal of Materials Research, 2006, 21, 2882-2887.	1.2	39
53	First-principles study of the atomic and electronic structures of misfit-layered calcium cobaltite		

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55	Dynamic Study of Liquid Drop Impact on Supercooled Cerium Dioxide: Anti-Icing Behavior. Langmuir, 2016, 32, 6148-6162.	1.6	38
56	Atomic and electronic structure of Lomer dislocations at CdTe bicrystal interface. Scientific Reports, 2016, 6, 27009.	1.6	35
57	Highly lattice-mismatched semiconductorâ€“metal hybrid nanostructures: gold nanoparticle encapsulated luminescent silicon quantum dots. Nanoscale, 2014, 6, 2201.	2.8	34
58	Electrochemical Reduction of a Spinel-Type Manganese Oxide Cathode in Aqueous Electrolytes with Ca²⁺ or Zn²⁺. Journal of Physical Chemistry C, 2018, 122, 4182-4188.	1.5	33
59	Effect of selenium and chlorine co-passivation in polycrystalline CdSeTe devices. Applied Physics Letters, 2019, 115, .	1.5	33
60	Electron energy-loss spectroscopy study of metallic Nb and Nb oxides. Journal of Applied Physics, 2011, 110, .	1.1	32
61	Machine-learned impurity level prediction for semiconductors: the example of Cd-based chalcogenides. Npj Computational Materials, 2020, 6, .	3.5	32
62	Atomic scale study of polar Lomerâ€“Cottrell and Hirth lock dislocation cores in CdTe. Acta Crystallographica Section A: Foundations and Advances, 2014, 70, 524-531.	0.0	31
63	Liquid Ammonia Chemical Lithiation: An Approach for High-Energy and High-Voltage Siâ€“Graphite | Li_{1+x}Ni_{0.5}Mn_{1.5}O₄ Li-Ion Batteries. ACS Applied Energy Materials, 2019, 2, 5019-5028.	2.5	31
64	Probing Electrochemical Mg-Ion Activity in MgCr_{2â€“x}V_xO₄ Spinel Oxides. Chemistry of Materials, 2020, 32, 1162-1171.	3.2	31
65	Synthesis and Characterization of Semiconductor Tantalum Nitride Nanoparticles. Journal of Physical Chemistry C, 2011, 115, 647-652.	1.5	30
66	Temperature dependent photoluminescence from porous silicon nanostructures: Quantum confinement and oxide related transitions. Journal of Applied Physics, 2011, 110, 094309.	1.1	28
67	Artificial Dense Granules: A Procoagulant Liposomal Formulation Modeled after Platelet Polyphosphate Storage Pools. Biomacromolecules, 2016, 17, 2572-2581.	2.6	25
68	Synthesis of Type I PbSe/CdSe Dot-on-Plate Heterostructures with Near-Infrared Emission. Journal of the American Chemical Society, 2019, 141, 5092-5096.	6.6	25
69	Tuning Thermal Transport Through Atomically Thin Ti₃C₂T_z MXene by Current Annealing in Vacuum. Advanced Functional Materials, 2019, 29, 1805693.	7.8	25
70	Direct observation of the structural and electronic changes of Li2MnO3 during electron irradiation. Applied Physics Letters, 2014, 105, .	1.5	24
71	Electronic Structure of LiCoO₂ Surfaces and Effect of Al Substitution. Journal of Physical Chemistry C, 2019, 123, 8851-8858.	1.5	24
72	Direct observation of oxygen-vacancy-enhanced polarization in a SrTiO3-buffered ferroelectric BaTiO3 film on GaAs. Applied Physics Letters, 2015, 107, .	1.5	23

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73	Multivalent Electrochemistry of Spinel Mg_xMn_{3â€“x}O₄ Nanocrystals. Chemistry of Materials, 2018, 30, 1496-1504.	3.2	23
74	Highly Active Rhenium-, Ruthenium-, and Iridium-Based Dichalcogenide Electrocatalysts for Oxygen Reduction and Oxygen Evolution Reactions in Aprotic Media. Chemistry of Materials, 2020, 32, 2764-2773.	3.2	23
75	Measuring the hole-state anisotropy inMgB2by electron energy-loss spectroscopy. Physical Review B, 2003, 67, .	1.1	22
76	Creating a single twin boundary between two CdTe (111) wafers with controlled rotation angle by wafer bonding. Applied Physics Letters, 2013, 103, .	1.5	21
77	Particle-Attachment-Mediated and Matrix/Lattice-Guided Enamel Apatite Crystal Growth. ACS Nano, 2019, 13, 3151-3161.	7.3	21
78	Microstructure and possible strain relaxation mechanisms of La2CuO4+Î´ thin films grown on LaSrAlO4 and SrTiO3 substrates. Journal of Applied Physics, 2007, 101, 073906.	1.1	18
79	Lithiation-Induced Shuffling of Atomic Stacks. Nano Letters, 2014, 14, 5301-5307.	4.5	18
80	A New Silicon Drift Detector for High Spatial Resolution STEM-XEDS: Performance and Applications. Microscopy and Microanalysis, 2014, 20, 1046-1052.	0.2	18
81	Integration of BiFeO₃/La_{0.7}Sr_{0.3}MnO₃ heterostructures with IIIâ€“V semiconductors for low-power non-volatile memory and multiferroic field effect transistors. Journal of Materials Chemistry C, 2016, 4, 10386-10394.	2.7	18
82	Bio-camouflage of anatase nanoparticles explored by in situ high-resolution electron microscopy. Nanoscale, 2017, 9, 10684-10693.	2.8	18
83	Direct Observation of Electron Beam-Induced Phase Transition in MgCrMnO₄. Chemistry of Materials, 2020, 32, 10456-10462.	3.2	18
84	Direct measurement of Co-ion spin state transitions in Ca3Co4O9 using variable-temperature electron energy-loss spectroscopy. Applied Physics Letters, 2009, 94, 093112.	1.5	17
85	Phonon and thermal transport properties of the misfit-layered oxide thermoelectric Ca3Co4O9 from first principles. Applied Physics Letters, 2014, 104, 251910.	1.5	17
86	Stabilization of Battery Electrode/Electrolyte Interfaces Employing Nanocrystals with Passivating Epitaxial Shells. Chemistry of Materials, 2015, 27, 394-399.	3.2	17
87	Simultaneous First-Order Valence and Oxygen Vacancy Order/Disorder Transitions in (Pr_{0.85}Y_{0.15})_{0.7}Ca_{0.3}CoO_{3â^'Î´} via Analytical Transmission Electron Microscopy. ACS Nano, 2016, 10, 938-947.	7.3	17
88	Charge Carriers Modulate the Bonding of Semiconductor Nanoparticle Dopants As Revealed by Time-Resolved X-ray Spectroscopy. ACS Nano, 2017, 11, 10070-10076.	7.3	17
89	Effect of Passivating Shells on the Chemistry and Electrode Properties of LiMn₂O₄ Nanocrystal Heterostructures. ACS Applied Materials & Interfaces, 2019, 11, 3823-3833.	4.0	17
90	The Influence of Preparation Method on Mnâ€“Co Interactions in Mn/Co/TiO₂ Fischerâ€“Tropsch Catalysts. ChemCatChem, 2010, 2, 1065-1068.	1.8	16

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91	A study of the effect of iron island morphology and interface oxidation on the magnetic hysteresis of Fe-MgO (001) thin film composites. Journal of Applied Physics, 2012, 112, .	1.1	16
92	Cd doping at PVD-CdS/CuInGaSe2 heterojunctions. Solar Energy Materials and Solar Cells, 2017, 164, 128-134.	3.0	16
93	Atomic-resolution in-situ cooling study of oxygen vacancy ordering in La0.5Sr0.5CoO3â˜Î´ thin films. Applied Physics Letters, 2019, 114, .	1.5	16
94	Characterization of oxygen ordering in (La, Sr)FeO3 â€“ Îˊby atomic resolution Zâ€contrast imaging and electron energyâ€loss spectroscopy. Journal of Electron Microscopy, 2002, 51, S59-S66.	0.9	16
95	Investigation of Ca Insertion into Î±-MoO₃ Nanoparticles for High Capacity Ca-Ion Cathodes. Nano Letters, 2022, 22, 2228-2235.	4.5	16
96	Atomicâ€Scale Structural and Chemical Study of Columnar and Multilayer Reâ€“Ni Electrodeposited Thermal Barrier Coating. Advanced Engineering Materials, 2016, 18, 1133-1144.	1.6	15
97	Enhanced charge storage of nanometric Î¶-V₂O₅ in Mg electrolytes. Nanoscale, 2020, 12, 22150-22160.	2.8	15
98	Compositionâ€“Structureâ€“Dielectric Property of Yttrium-Doped Hafnium Oxide Films Deposited by Atomic Layer Deposition. Electrochemical and Solid-State Letters, 2009, 12, G50.	2.2	13
99	Enhanced Bioactivity of Collagen Fiber Functionalized with Room Temperature Atomic Layer Deposited Titania. ACS Applied Materials & Interfaces, 2018, 10, 34443-34454.	4.0	13
100	Phaseâ€Dependent Band Gap Engineering in Alloys of Metalâ€Semiconductor Transition Metal Dichalcogenides. Advanced Functional Materials, 2020, 30, 2004912.	7.8	13
101	Reconstructions and nonstoichiometry of oxygenatedÎ²-Si3N4(101Â¯0)surfaces. Physical Review B, 2008, 78, .	1.1	12
102	Atomic-Resolution STEM in the Aberration-Corrected JEOL JEM2200FS. Microscopy and Microanalysis, 2008, 14, 104-112.	0.2	12
103	Experimental verification of orbital engineering at the atomic scale: Charge transfer and symmetry breaking in nickelate heterostructures. Physical Review B, 2017, 95, .	1.1	12
104	Direct observation of MgO formation at cathode electrolyte interface of a spinel MgCo2O4 cathode upon electrochemical Mg removal and insertion. Journal of Power Sources, 2019, 424, 68-75.	4.0	12
105	Ingrained: An Automated Framework for Fusing Atomicâ€Scale Image Simulations into Experiments. Small, 2022, 18, e2102960.	5.2	12
106	Crystal-induced effects at crystal/amorphous interfaces: The case of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Si</mml:mtext></mml:mrow><mml:mn>3</mml:mn></mml:msub> Physical Review B, 2010, 82, .	1.1	11
107	Direct characterization of the Li intercalation mechanism into Î±-V2O5 nanowires using in-situ transmission electron microscopy. Applied Physics Letters, 2017, 110, .	1.5	11
108	Direct evidence of M2 phase during the monoclinic-tetragonal (rutile) phase transition of W-doped VO2 nanowires. Applied Physics Letters, 2017, 110, .	1.5	11

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109	Full-Scale Characterization of UVLED Al_xGa_{1â€“x}N Nanowires via Advanced Electron Microscopy. ACS Nano, 2013, 7, 5045-5051.	7.3	10
110	The new JEOL JEMâ€ARM200CF at the University of Illinois at Chicago. Crystal Research and Technology, 2014, 49, 653-662.	0.6	10
111	Gallstone-Formation-Inspired Bimetallic Supra-nanostructures for Computed-Tomography-Image-Guided Radiation Therapy. ACS Applied Nano Materials, 2018, 1, 4602-4611.	2.4	10
112	Stabilization of a monolayer tellurene phase at CdTe interfaces. Nanoscale, 2019, 11, 14698-14706.	2.8	10
113	Intercalation of Ca into a Highly Defective Manganese Oxide at Room Temperature. Chemistry of Materials, 2022, 34, 836-846.	3.2	10
114	Controlling Nanoscale Thermal Expansion of Monolayer Transition Metal Dichalcogenides by Alloy Engineering. Small, 2020, 16, 1905892.	5.2	9
115	Fundamental Insights from a Singleâ€Crystal Sodium Iridate Battery. Advanced Energy Materials, 2020, 10, 1903128.	10.2	9
116	Improving CdSeTe Devices With a Back Buffer Layer of Cu_xAlO_y. IEEE Journal of Photovoltaics, 2022, 12, 16-21.	1.5	9
117	Nanocrystal heterostructures of LiCoO₂ with conformal passivating shells. Nanoscale, 2018, 10, 6954-6961.	2.8	8
118	High-resolution Z-contrast imaging and EELS study of functional oxide materials. Micron, 2008, 39, 723-733.	1.1	7
119	Synthesis of Uniform Diameter Boron-Based Nanostructures Using a Mesoporous Mgâ€Al₂O₃ Template and Tests for Superconductivity. Journal of Physical Chemistry C, 2009, 113, 17661-17668.	1.5	7
120	An analytical scanning transmission electron microscopy study of the support effects on Mn-promoted Co Fischerâ€“Tropsch catalysts. Catalysis Science and Technology, 2011, 1, 1483.	2.1	7
121	In-Situ Electron Energy Loss Spectroscopy Study of Mn-Promoted Co/TiO2 Fischerâ€“Tropsch Catalysts. Catalysis Letters, 2011, 141, 641-648.	1.4	7
122	Strain-Energy Release in Bent Semiconductor Nanowires Occurring by Polygonization or Nanocrack Formation. ACS Nano, 2019, 13, 3730-3738.	7.3	7
123	Probing Mg Intercalation in the Tetragonal Tungsten Bronze Framework V₄Nb₁₈O₅₅. Inorganic Chemistry, 2020, 59, 9783-9797.	1.9	7
124	Hydrolyzed Ce(IV) salts limit sucrose-dependent biofilm formation by Streptococcus mutans. Journal of Inorganic Biochemistry, 2020, 206, 110997.	1.5	7
125	Control of crystal size tailors the electrochemical performance of Î±-V₂O₅ as a Mg²⁺ intercalation host. Nanoscale, 2021, 13, 10081-10091.	2.8	7
126	Hydroxyapatite as a scavenger of reactive radiolysis species in graphene liquid cells for in situ electron microscopy. Nanotechnology, 2021, 32, 485707.	1.3	7

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127	Atomic Scale Characterization of Vacancy Ordering in Oxygen Conducting Membranes. Microscopy and Microanalysis, 2002, 8, 475-486.	0.2	6
128	Electronic and superconducting properties of oxygen-orderedMgB2compounds of the formMg2B3Ox. Physical Review B, 2004, 70, .	1.1	6
129	Position-sensitive change in the transition metal <i>L</i>-edge fine structures. Applied Physics Letters, 2015, 107, .	1.5	6
130	Driving Liquid Chemistry with in situ STEM in Monolayer Window Encapsulated Liquid Cells. Microscopy and Microanalysis, 2017, 23, 878-879.	0.2	6
131	Ion Beam Sputtering for Controlled Synthesis of Thin MAX (MXene) Phases. Microscopy and Microanalysis, 2019, 25, 1626-1627.	0.2	6
132	Highly Conductive Collagen by Low-Temperature Atomic Layer Deposition of Platinum. ACS Applied Materials & Interfaces, 2020, 12, 44371-44380.	4.0	6
133	Chemical and bonding analysis of liquids using liquid cell electron microscopy. MRS Bulletin, 2020, 45, 761-768.	1.7	5
134	Isotope-Resolved Electron Energy Loss Spectroscopy in a Monochromated Scanning Transmission Electron Microscope. Microscopy Today, 2021, 29, 36-41.	0.2	5
135	Surface morphology and mechanical properties changes induced in Ti3InC2 (M3AX2) thin nanocrystalline films by irradiation of 100Â keV Ne+ ions. Surface and Coatings Technology, 2021, 426, 127775.	2.2	5
136	Identification of light elements in silicon nitride by aberration-corrected scanning transmission electron microscopy. Ultramicroscopy, 2012, 123, 74-79.	0.8	4
137	Atomic-scale structural and electronic properties of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>SrTiO</mml:mi><mml:mn>3</mml:mn></mml:msub>< interfaces: A combined STEM-EELS and first-principles study. Physical Review B, 2017, 96, .	1.1	4
138	Graded nanowire ultraviolet LEDs by polarization engineering. , 2012, , .		3
139	Atomistic simulations of grain boundaries in CdTe. , 2015, , .		3
140	An Autonomous Microscopy Workflow for Structure Determination from Atomic-Resolution Images. Microscopy and Microanalysis, 2018, 24, 510-511.	0.2	3
141	The Morphology of TiiAlC (M2AX) and TiiC (MXene) Sheets Revealed by HAADF STEM Analysis. Microscopy and Microanalysis, 2018, 24, 156-157.	0.2	3
142	Ti₂SnC and Ti₂InC Nanolaminates by Low Energy Ion Facility (LEIF) and Their Resistance Towards Ar⁺ Ion Bombardment. Microscopy and Microanalysis, 2019, 25, 1630-1631.	0.2	3
143	Intercalation of Mg into a Few-Layer Phyllomanganate in Nonaqueous Electrolytes at Room Temperature. Chemistry of Materials, 2020, 32, 6014-6025.	3.2	3
144	The Key Role of Tin (Sn) in Microstructure and Mechanical Properties of Ti2SnC (M2AX) Thin Nanocrystalline Films and Powdered Polycrystalline Samples. Nanomaterials, 2022, 12, 307.	1.9	3

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145	Variable Temperature Electron Energy-Loss Spectroscopy. , 2011, , 689-723.		2
146	In situ TEM Observation of Lithiation and Sodiation Process of ZnO Nanowire. Microscopy and Microanalysis, 2015, 21, 1371-1372.	0.2	2
147	Can Na+ Transport Faster Than Li+ inside Zn-Sb Intermetallic Nanomaterials?. Microscopy and Microanalysis, 2015, 21, 1195-1196.	0.2	2
148	Atomic Scale Study of Lomer-Cottrell and Hirth Lock Dislocations in CdTe. Microscopy and Microanalysis, 2015, 21, 2087-2088.	0.2	2
149	Transmission Electron Microscopic and First-principles Study of SrTiO3/GaAs Hetero-interfaces. Microscopy and Microanalysis, 2015, 21, 1647-1648.	0.2	2
150	Creation and analysis of atomic structures for CdTe bi-crystal interfaces by the grain boundary genie. , 2015, , .		2
151	Atomic and electronic structure of Ti substitution in Ca3Co4O9. Journal of Applied Physics, 2016, 120, 205105.	1.1	2
152	Efficient CdTe photovoltaics by co-passivating grain boundaries. , 2018, , .		2
153	Atomic-resolution study of oxygen vacancy ordering in Lao.5Sro.5CoO3-s thin films on SrTiO3 during in situ cooling experiments.. Microscopy and Microanalysis, 2018, 24, 84-85.	0.2	2
154	Atomic-Resolution Study of Grain Boundaries in CdTe Using Scanning Transmission Electron Microscopy. Microscopy and Microanalysis, 2018, 24, 102-103.	0.2	2
155	Radiation Stability of Ti₂InC (M₂AX) Nanolaminates Under He Ions Irradiation â€“ Evaluation Through STEM microscopy. Microscopy and Microanalysis, 2019, 25, 1624-1625.	0.2	2
156	TEM Analysis of Model Li-Ion Battery Cathodes Grown by Molecular Beam Epitaxy. Microscopy and Microanalysis, 2019, 25, 2086-2087.	0.2	2
157	Decay of high-energy electron bound states in crystals. Ultramicroscopy, 2019, 196, 99-110.	0.8	2
158	Alloy Engineering: Controlling Nanoscale Thermal Expansion of Monolayer Transition Metal Dichalcogenides by Alloy Engineering (Small 3/2020). Small, 2020, 16, 2070018.	5.2	2
159	Automated plasmon peak fitting derived temperature mapping in a scanning transmission electron microscope. AIP Advances, 2021, 11, 035330.	0.6	2
160	Computational design of passivants for CdTe grain boundaries. Solar Energy Materials and Solar Cells, 2021, 232, 111279.	3.0	2
161	Angular-Resolved Electron Energy-Loss Spectroscopy of MgB2-related Compounds. Microscopy and Microanalysis, 2004, 10, 838-839.	0.2	1
162	Chemical Analysis with Single Atom Sensitivity Using Aberration-Corrected STEM. Microscopy and Microanalysis, 2014, 20, 56-57.	0.2	1

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163	Creating Single Boundary between Two CdTe (111) Wafers with Controlled Orientation by Wafer Bonding. Microscopy and Microanalysis, 2014, 20, 516-517.	0.2	1
164	Investigation of Li ion and Multivalent Battery Systems Using In situ TEM and High Resolution EELS. Microscopy and Microanalysis, 2015, 21, 1819-1820.	0.2	1
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