

Robert F Klie

List of Publications by Year in descending order

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210
papers

9,319
citations

53794

45
h-index

40979

93
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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. <i>Science</i> , 2020, 369, 979-983.	12.6	870
2	Nanostructured transition metal dichalcogenide electrocatalysts for CO ₂ reduction in ionic liquid. <i>Science</i> , 2016, 353, 467-470.	12.6	778
3	High-Quality Black Phosphorus Atomic Layers by Liquid-Phase Exfoliation. <i>Advanced Materials</i> , 2015, 27, 1887-1892.	21.0	728
4	Robust carbon dioxide reduction on molybdenum disulphide edges. <i>Nature Communications</i> , 2014, 5, 4470.	12.8	644
5	A lithium-oxygen battery with a long cycle life in an air-like atmosphere. <i>Nature</i> , 2018, 555, 502-506.	27.8	433
6	Synthesis of Pure Boron Single-Wall Nanotubes. <i>Journal of Physical Chemistry B</i> , 2004, 108, 3967-3969.	2.6	305
7	Mechanism of Zn Insertion into Nanostructured δ -MnO ₂ : A Nonaqueous Rechargeable Zn Metal Battery. <i>Chemistry of Materials</i> , 2017, 29, 4874-4884.	6.7	225
8	Heterogeneous nucleation and shape transformation of multicomponent metallic nanostructures. <i>Nature Materials</i> , 2015, 14, 215-223.	27.5	187
9	Cathode Based on Molybdenum Disulfide Nanoflakes for Lithium-Oxygen Batteries. <i>ACS Nano</i> , 2016, 10, 2167-2175.	14.6	184
10	Direct Observation of Reversible Magnesium Ion Intercalation into a Spinel Oxide Host. <i>Advanced Materials</i> , 2015, 27, 3377-3384.	21.0	178
11	Asynchronous Crystal Cell Expansion during Lithiation of K ⁺ -Stabilized δ -MnO ₂ . <i>Nano Letters</i> , 2015, 15, 2998-3007.	9.1	161
12	Dynamically Stable Active Sites from Surface Evolution of Perovskite Materials during the Oxygen Evolution Reaction. <i>Journal of the American Chemical Society</i> , 2021, 143, 2741-2750.	13.7	156
13	High-Resolution Electron Microscopy and Spectroscopy of Ferritin in Biocompatible Graphene Liquid Cells and Graphene Sandwiches. <i>Advanced Materials</i> , 2014, 26, 3410-3414.	21.0	148
14	A Long-Cycle-Life Lithium-CO ₂ Battery with Carbon Neutrality. <i>Advanced Materials</i> , 2019, 31, e1902518.	21.0	138
15	Atomic-Scale Observation of Lithiation Reaction Front in Nanoscale SnO ₂ Materials. <i>ACS Nano</i> , 2013, 7, 6203-6211.	14.6	134
16	Chemical Weathering of Layered Ni-Rich Oxide Electrode Materials: Evidence for Cation Exchange. <i>Journal of the Electrochemical Society</i> , 2017, 164, A1489-A1498.	2.9	133
17	Understanding the Role of Temperature and Cathode Composition on Interface and Bulk: Optimizing Aluminum Oxide Coatings for Li-Ion Cathodes. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 14769-14778.	8.0	129
18	Reversible Mg-Ion Insertion in a Metastable One-Dimensional Polymorph of V ₂ O ₅ . <i>CheM</i> , 2018, 4, 564-585.	11.7	126

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19	Growth and characterization of In^{2+} -Ga ₂ O ₃ thin films by molecular beam epitaxy for deep-UV photodetectors. <i>Journal of Applied Physics</i> , 2017, 122, .	2.5	124
20	Chemical sensing with switchable transport channels in graphene grain boundaries. <i>Nature Communications</i> , 2014, 5, 4911.	12.8	105
21	Facet-Dependent Thermal Instability in LiCoO ₂ . <i>Nano Letters</i> , 2017, 17, 2165-2171.	9.1	99
22	Highly Efficient Hydrogen Evolution Reaction Using Crystalline Layered Three-Dimensional Molybdenum Disulfides Grown on Graphene Film. <i>Chemistry of Materials</i> , 2016, 28, 549-555.	6.7	98
23	The observation of square ice in graphene questioned. <i>Nature</i> , 2015, 528, E1-E2.	27.8	95
24	<i>In situ</i> electron energy loss spectroscopy study of metallic Co and Co oxides. <i>Journal of Applied Physics</i> , 2010, 108, .	2.5	84
25	Ultrafast and Highly Reversible Sodium Storage in Zinc-Antimony Intermetallic Nanomaterials. <i>Advanced Functional Materials</i> , 2016, 26, 543-552.	14.9	81
26	Twin Boundary-Assisted Lithium Ion Transport. <i>Nano Letters</i> , 2015, 15, 610-615.	9.1	80
27	Mixed Polarity in Polarization-Induced p-n Junction Nanowire Light-Emitting Diodes. <i>Nano Letters</i> , 2013, 13, 3029-3035.	9.1	77
28	Intercalation of Magnesium into a Layered Vanadium Oxide with High Capacity. <i>ACS Energy Letters</i> , 2019, 4, 1528-1534.	17.4	75
29	First-principles study of size- and edge-dependent properties of MXene nanoribbons. <i>Physical Review B</i> , 2016, 93, .	3.2	72
30	Mapping Thermal Expansion Coefficients in Freestanding 2D Materials at the Nanometer Scale. <i>Physical Review Letters</i> , 2018, 120, 055902.	7.8	72
31	High-Voltage Phosphate Cathodes for Rechargeable Ca-Ion Batteries. <i>ACS Energy Letters</i> , 2020, 5, 3203-3211.	17.4	65
32	Atomic Resolution Analysis of the Defect Chemistry and Microdomain Structure of Brownmillerite-Type Strontium Cobaltite. <i>Journal of the American Ceramic Society</i> , 2002, 85, 969-976.	3.8	63
33	On the Localized Nature of the Structural Transformations of Li ₂ MnO ₃ Following Electrochemical Cycling. <i>Advanced Energy Materials</i> , 2015, 5, 1501252.	19.5	63
34	Direct Investigation of Mg Intercalation into the Orthorhombic V ₂ O ₅ Cathode Using Atomic-Resolution Transmission Electron Microscopy. <i>Chemistry of Materials</i> , 2017, 29, 2218-2226.	6.7	62
35	Reversible Modulation of Orbital Occupations via an Interface-Induced Polar State in Metallic Manganites. <i>Nano Letters</i> , 2014, 14, 4965-4970.	9.1	61
36	Colloidal Chemistry in Molten Salts: Synthesis of Luminescent In ₂ S ₃ -Ga ₂ P and In ₂ S ₃ -GaAs Quantum Dots. <i>Journal of the American Chemical Society</i> , 2018, 140, 12144-12151.	13.7	60

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37	Colloidal Atomic Layer Deposition with Stationary Reactant Phases Enables Precise Synthesis of α -Digital-VI Nano-heterostructures with Exquisite Control of Confinement and Strain. <i>Journal of the American Chemical Society</i> , 2019, 141, 13487-13496.	13.7	58
38	Deep ultraviolet emitting polarization induced nanowire light emitting diodes with Al _x Ga _{1-x} N active regions. <i>Nanotechnology</i> , 2014, 25, 455201.	2.6	53
39	Atomic Origins of Monoclinic-Tetragonal (Rutile) Phase Transition in Doped VO ₂ Nanowires. <i>Nano Letters</i> , 2015, 15, 7179-7188.	9.1	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. <i>ACS Nano</i> , 2013, 7, 732-739.	14.6	51
41	Enhanced Thermal Boundary Conductance in Few-Layer Ti ₃ C ₂ MXene with Encapsulation. <i>Advanced Materials</i> , 2018, 30, e1801629.	21.0	51
42	Synthesis and Characterization of MgCr ₂ S ₄ Thiospinel as a Potential Magnesium Cathode. <i>Inorganic Chemistry</i> , 2018, 57, 8634-8638.	4.0	50
43	High Voltage Mg-Ion Battery Cathode via a Solid Solution Cr-Mn Spinel Oxide. <i>Chemistry of Materials</i> , 2020, 32, 6577-6587.	6.7	48
44	High Capacity for Mg ²⁺ Deintercalation in Spinel Vanadium Oxide Nanocrystals. <i>ACS Energy Letters</i> , 2020, 5, 2721-2727.	17.4	48
45	Quasi-Binary Transition Metal Dichalcogenide Alloys: Thermodynamic Stability Prediction, Scalable Synthesis, and Application. <i>Advanced Materials</i> , 2020, 32, e1907041.	21.0	46
46	Vibrational Spectroscopy of Water with High Spatial Resolution. <i>Advanced Materials</i> , 2018, 30, e1802702.	21.0	45
47	Free standing luminescent silicon quantum dots: evidence of quantum confinement and defect related transitions. <i>Nanotechnology</i> , 2010, 21, 505602.	2.6	44
48	Precise In Situ Modulation of Local Liquid Chemistry via Electron Irradiation in Nanoreactors Based on Graphene Liquid Cells. <i>Advanced Materials</i> , 2016, 28, 7716-7722.	21.0	44
49	New Class of Electrocatalysts Based on 2D Transition Metal Dichalcogenides in Ionic Liquid. <i>Advanced Materials</i> , 2019, 31, e1804453.	21.0	43
50	Selective Adsorption of Manganese onto Rhodium for Optimized Mn/Rh/SiO ₂ Alcohol Synthesis Catalysts. <i>ChemCatChem</i> , 2013, 5, 3665-3672.	3.7	42
51	Luminescent core-shell nanostructures of silicon and silicon oxide: Nanodots and nanorods. <i>Journal of Applied Physics</i> , 2010, 107, .	2.5	40
52	Elastic modulus of single-crystal GaN nanowires. <i>Journal of Materials Research</i> , 2006, 21, 2882-2887. <i>First-principles study of the atomic and electronic structures of misfit-layered calcium cobaltite</i>	2.6	39
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55	Dynamic Study of Liquid Drop Impact on Supercooled Cerium Dioxide: Anti-Icing Behavior. <i>Langmuir</i> , 2016, 32, 6148-6162.	3.5	38
56	Atomic and electronic structure of Lomer dislocations at CdTe bicrystal interface. <i>Scientific Reports</i> , 2016, 6, 27009.	3.3	35
57	Highly lattice-mismatched semiconductor-metal hybrid nanostructures: gold nanoparticle encapsulated luminescent silicon quantum dots. <i>Nanoscale</i> , 2014, 6, 2201.	5.6	34
58	Electrochemical Reduction of a Spinel-Type Manganese Oxide Cathode in Aqueous Electrolytes with Ca^{2+} or Zn^{2+} . <i>Journal of Physical Chemistry C</i> , 2018, 122, 4182-4188.	3.1	33
59	Effect of selenium and chlorine co-passivation in polycrystalline CdSeTe devices. <i>Applied Physics Letters</i> , 2019, 115, .	3.3	33
60	Electron energy-loss spectroscopy study of metallic Nb and Nb oxides. <i>Journal of Applied Physics</i> , 2011, 110, .	2.5	32
61	Machine-learned impurity level prediction for semiconductors: the example of Cd-based chalcogenides. <i>Npj Computational Materials</i> , 2020, 6, .	8.7	32
62	Atomic scale study of polar Lomer-Cottrell and Hirth lock dislocation cores in CdTe. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2014, 70, 524-531.	0.1	31
63	Liquid Ammonia Chemical Lithiation: An Approach for High-Energy and High-Voltage Si-Graphite $\text{Li}_{1+x}\text{Ni}_{0.5}\text{Mn}_{1.5}\text{O}_4$ Li-Ion Batteries. <i>ACS Applied Energy Materials</i> , 2019, 2, 5019-5028.	5.1	31
64	Probing Electrochemical Mg-Ion Activity in $\text{MgCr}_2\text{V}_x\text{O}_4$ Spinel Oxides. <i>Chemistry of Materials</i> , 2020, 32, 1162-1171.	6.7	31
65	Synthesis and Characterization of Semiconductor Tantalum Nitride Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2011, 115, 647-652.	3.1	30
66	Temperature dependent photoluminescence from porous silicon nanostructures: Quantum confinement and oxide related transitions. <i>Journal of Applied Physics</i> , 2011, 110, 094309.	2.5	28
67	Artificial Dense Granules: A Procoagulant Liposomal Formulation Modeled after Platelet Polyphosphate Storage Pools. <i>Biomacromolecules</i> , 2016, 17, 2572-2581.	5.4	25
68	Synthesis of Type I PbSe/CdSe Dot-on-Plate Heterostructures with Near-Infrared Emission. <i>Journal of the American Chemical Society</i> , 2019, 141, 5092-5096.	13.7	25
69	Tuning Thermal Transport Through Atomically Thin $\text{Ti}_3\text{C}_2\text{T}_z$ MXene by Current Annealing in Vacuum. <i>Advanced Functional Materials</i> , 2019, 29, 1805693.	14.9	25
70	Direct observation of the structural and electronic changes of Li_2MnO_3 during electron irradiation. <i>Applied Physics Letters</i> , 2014, 105, .	3.3	24
71	Electronic Structure of LiCoO_2 Surfaces and Effect of Al Substitution. <i>Journal of Physical Chemistry C</i> , 2019, 123, 8851-8858.	3.1	24
72	Direct observation of oxygen-vacancy-enhanced polarization in a SrTiO_3 -buffered ferroelectric BaTiO_3 film on GaAs. <i>Applied Physics Letters</i> , 2015, 107, .	3.3	23

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73	Multivalent Electrochemistry of Spinel Mg ₂ Mn ₃ O ₄ Nanocrystals. Chemistry of Materials, 2018, 30, 1496-1504.	6.7	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.	6.7	23
75	Measuring the hole-state anisotropy in MgB ₂ by electron energy-loss spectroscopy. Physical Review B, 2003, 67, .	3.2	22
76	Creating a single twin boundary between two CdTe (111) wafers with controlled rotation angle by wafer bonding. Applied Physics Letters, 2013, 103, .	3.3	21
77	Particle-Attachment-Mediated and Matrix/Lattice-Guided Enamel Apatite Crystal Growth. ACS Nano, 2019, 13, 3151-3161.	14.6	21
78	Microstructure and possible strain relaxation mechanisms of La ₂ CuO ₄ + δ thin films grown on LaSrAlO ₄ and SrTiO ₃ substrates. Journal of Applied Physics, 2007, 101, 073906.	2.5	18
79	Lithiation-Induced Shuffling of Atomic Stacks. Nano Letters, 2014, 14, 5301-5307.	9.1	18
80	A New Silicon Drift Detector for High Spatial Resolution STEM-XEDS: Performance and Applications. Microscopy and Microanalysis, 2014, 20, 1046-1052.	0.4	18
81	Integration of BiFeO ₃ /La _{0.7} Sr _{0.3} MnO ₃ heterostructures with III-V semiconductors for low-power non-volatile memory and multiferroic field effect transistors. Journal of Materials Chemistry C, 2016, 4, 10386-10394.	5.5	18
82	Bio-camouflage of anatase nanoparticles explored by in situ high-resolution electron microscopy. Nanoscale, 2017, 9, 10684-10693.	5.6	18
83	Direct Observation of Electron Beam-Induced Phase Transition in MgCrMnO ₄ . Chemistry of Materials, 2020, 32, 10456-10462.	6.7	18
84	Direct measurement of Co-ion spin state transitions in Ca ₃ Co ₄ O ₉ using variable-temperature electron energy-loss spectroscopy. Applied Physics Letters, 2009, 94, 093112.	3.3	17
85	Phonon and thermal transport properties of the misfit-layered oxide thermoelectric Ca ₃ Co ₄ O ₉ from first principles. Applied Physics Letters, 2014, 104, 251910.	3.3	17
86	Stabilization of Battery Electrode/Electrolyte Interfaces Employing Nanocrystals with Passivating Epitaxial Shells. Chemistry of Materials, 2015, 27, 394-399.	6.7	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 ₃ + δ via Analytical Transmission Electron Microscopy. ACS Nano, 2016, 10, 938-947.	14.6	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.	14.6	17
89	Effect of Passivating Shells on the Chemistry and Electrode Properties of LiMn ₂ O ₄ Nanocrystal Heterostructures. ACS Applied Materials & Interfaces, 2019, 11, 3823-3833.	8.0	17
90	The Influence of Preparation Method on Mn-Co Interactions in Mn/Co/TiO ₂ Fischer-Tropsch Catalysts. ChemCatChem, 2010, 2, 1065-1068.	3.7	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. <i>Journal of Applied Physics</i> , 2012, 112, .	2.5	16
92	Cd doping at PVD-CdS/CuInGaSe ₂ heterojunctions. <i>Solar Energy Materials and Solar Cells</i> , 2017, 164, 128-134.	6.2	16
93	Atomic-resolution <i>in-situ</i> cooling study of oxygen vacancy ordering in La _{0.5} Sr _{0.5} CoO ₃ thin films. <i>Applied Physics Letters</i> , 2019, 114, .	3.3	16
94	Characterization of oxygen ordering in (La, Sr)FeO ₃ by atomic resolution Z-contrast imaging and electron energy-loss spectroscopy. <i>Journal of Electron Microscopy</i> , 2002, 51, S59-S66.	0.9	16
95	Investigation of Ca Insertion into \pm -MoO ₃ Nanoparticles for High Capacity Ca-Ion Cathodes. <i>Nano Letters</i> , 2022, 22, 2228-2235.	9.1	16
96	Atomic-Scale Structural and Chemical Study of Columnar and Multilayer Re-Ni Electrodeposited Thermal Barrier Coating. <i>Advanced Engineering Materials</i> , 2016, 18, 1133-1144.	3.5	15
97	Enhanced charge storage of nanometric \pm -V ₂ O ₅ in Mg electrolytes. <i>Nanoscale</i> , 2020, 12, 22150-22160.	5.6	15
98	Composition-Structure-Dielectric Property of Yttrium-Doped Hafnium Oxide Films Deposited by Atomic Layer Deposition. <i>Electrochemical and Solid-State Letters</i> , 2009, 12, G50.	2.2	13
99	Enhanced Bioactivity of Collagen Fiber Functionalized with Room Temperature Atomic Layer Deposited Titania. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 34443-34454.	8.0	13
100	Phase-Dependent Band Gap Engineering in Alloys of Metal-Semiconductor Transition Metal Dichalcogenides. <i>Advanced Functional Materials</i> , 2020, 30, 2004912.	14.9	13
101	Reconstructions and nonstoichiometry of oxygenated \pm -Si ₃ N ₄ (10 $\bar{1}$ 0) surfaces. <i>Physical Review B</i> , 2008, 78, .	3.2	12
102	Atomic-Resolution STEM in the Aberration-Corrected JEOL JEM2200FS. <i>Microscopy and Microanalysis</i> , 2008, 14, 104-112.	0.4	12
103	Experimental verification of orbital engineering at the atomic scale: Charge transfer and symmetry breaking in nickelate heterostructures. <i>Physical Review B</i> , 2017, 95, .	3.2	12
104	Direct observation of MgO formation at cathode electrolyte interface of a spinel MgCo ₂ O ₄ cathode upon electrochemical Mg removal and insertion. <i>Journal of Power Sources</i> , 2019, 424, 68-75.	7.8	12
105	Ingrained: An Automated Framework for Fusing Atomic-Scale Image Simulations into Experiments. <i>Small</i> , 2022, 18, e2102960.	10.0	12
106	Crystal-induced effects at crystal/amorphous interfaces: The case of Si_3N_4 . <i>Physical Review B</i> , 2010, 82, .	3.2	11
107	Direct characterization of the Li intercalation mechanism into \pm -V ₂ O ₅ nanowires using <i>in-situ</i> transmission electron microscopy. <i>Applied Physics Letters</i> , 2017, 110, .	3.3	11
108	Direct evidence of M2 phase during the monoclinic-tetragonal (rutile) phase transition of W-doped VO ₂ nanowires. <i>Applied Physics Letters</i> , 2017, 110, .	3.3	11

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109	Full-Scale Characterization of UVLED Al _x Ga _{1-x} N Nanowires via Advanced Electron Microscopy. ACS Nano, 2013, 7, 5045-5051.	14.6	10
110	The new JEOL JEM-ARM200CF at the University of Illinois at Chicago. Crystal Research and Technology, 2014, 49, 653-662.	1.3	10
111	Gallstone-Formation-Inspired Bimetallic Supra-nanostructures for Computed-Tomography-Image-Guided Radiation Therapy. ACS Applied Nano Materials, 2018, 1, 4602-4611.	5.0	10
112	Stabilization of a monolayer tellurene phase at CdTe interfaces. Nanoscale, 2019, 11, 14698-14706.	5.6	10
113	Intercalation of Ca into a Highly Defective Manganese Oxide at Room Temperature. Chemistry of Materials, 2022, 34, 836-846.	6.7	10
114	Controlling Nanoscale Thermal Expansion of Monolayer Transition Metal Dichalcogenides by Alloy Engineering. Small, 2020, 16, 1905892.	10.0	9
115	Fundamental Insights from a Single-Crystal Sodium Iridate Battery. Advanced Energy Materials, 2020, 10, 1903128.	19.5	9
116	Improving CdSeTe Devices With a Back Buffer Layer of Cu _x AlO _y . IEEE Journal of Photovoltaics, 2022, 12, 16-21.	2.5	9
117	Nanocrystal heterostructures of LiCoO ₂ with conformal passivating shells. Nanoscale, 2018, 10, 6954-6961.	5.6	8
118	High-resolution Z-contrast imaging and EELS study of functional oxide materials. Micron, 2008, 39, 723-733.	2.2	7
119	Synthesis of Uniform Diameter Boron-Based Nanostructures Using a Mesoporous Mg ₂ Al ₃ O ₃ Template and Tests for Superconductivity. Journal of Physical Chemistry C, 2009, 113, 17661-17668.	3.1	7
120	An analytical scanning transmission electron microscopy study of the support effects on Mn-promoted Co Fischer-Tropsch catalysts. Catalysis Science and Technology, 2011, 1, 1483.	4.1	7
121	In-Situ Electron Energy Loss Spectroscopy Study of Mn-Promoted Co/TiO ₂ Fischer-Tropsch Catalysts. Catalysis Letters, 2011, 141, 641-648.	2.6	7
122	Strain-Energy Release in Bent Semiconductor Nanowires Occurring by Polygonization or Nanocrack Formation. ACS Nano, 2019, 13, 3730-3738.	14.6	7
123	Probing Mg Intercalation in the Tetragonal Tungsten Bronze Framework V ₄ Nb ₁₈ O ₅₅ . Inorganic Chemistry, 2020, 59, 9783-9797.	4.0	7
124	Hydrolyzed Ce(IV) salts limit sucrose-dependent biofilm formation by Streptococcus mutans. Journal of Inorganic Biochemistry, 2020, 206, 110997.	3.5	7
125	Control of crystal size tailors the electrochemical performance of V ₂ O ₅ as a Mg ²⁺ intercalation host. Nanoscale, 2021, 13, 10081-10091.	5.6	7
126	Hydroxyapatite as a scavenger of reactive radiolysis species in graphene liquid cells for in situ electron microscopy. Nanotechnology, 2021, 32, 485707.	2.6	7

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127	Atomic Scale Characterization of Vacancy Ordering in Oxygen Conducting Membranes. <i>Microscopy and Microanalysis</i> , 2002, 8, 475-486.	0.4	6
128	Electronic and superconducting properties of oxygen-ordered MgB ₂ compounds of the form Mg ₂ B ₃ O _x . <i>Physical Review B</i> , 2004, 70, .	3.2	6
129	Position-sensitive change in the transition metal <i>L</i> -edge fine structures. <i>Applied Physics Letters</i> , 2015, 107, .	3.3	6
130	Driving Liquid Chemistry with in situ STEM in Monolayer Window Encapsulated Liquid Cells. <i>Microscopy and Microanalysis</i> , 2017, 23, 878-879.	0.4	6
131	Ion Beam Sputtering for Controlled Synthesis of Thin MAX (MXene) Phases. <i>Microscopy and Microanalysis</i> , 2019, 25, 1626-1627.	0.4	6
132	Highly Conductive Collagen by Low-Temperature Atomic Layer Deposition of Platinum. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 44371-44380.	8.0	6
133	Chemical and bonding analysis of liquids using liquid cell electron microscopy. <i>MRS Bulletin</i> , 2020, 45, 761-768.	3.5	5
134	Isotope-Resolved Electron Energy Loss Spectroscopy in a Monochromated Scanning Transmission Electron Microscope. <i>Microscopy Today</i> , 2021, 29, 36-41.	0.3	5
135	Surface morphology and mechanical properties changes induced in Ti ₃ InC ₂ (M ₃ AX ₂) thin nanocrystalline films by irradiation of 100 ÅkeV Ne ⁺ ions. <i>Surface and Coatings Technology</i> , 2021, 426, 127775.	4.8	5
136	Identification of light elements in silicon nitride by aberration-corrected scanning transmission electron microscopy. <i>Ultramicroscopy</i> , 2012, 123, 74-79.	1.9	4
137	Atomic-scale structural and electronic properties of SrTiO ₃ /MgO interfaces: A combined STEM-EELS and first-principles study. <i>Physical Review B</i> , 2017, 96, .		
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. <i>Microscopy and Microanalysis</i> , 2018, 24, 510-511.	0.4	3
141	The Morphology of Ti ₂ AlC (M ₂ AX) and TiC (MXene) Sheets Revealed by HAADF STEM Analysis. <i>Microscopy and Microanalysis</i> , 2018, 24, 156-157.	0.4	3
142	Ti ₂ SnC and Ti ₂ InC Nanolaminates by Low Energy Ion Facility (LEIF) and Their Resistance Towards Ar ⁺ Ion Bombardment. <i>Microscopy and Microanalysis</i> , 2019, 25, 1630-1631.	0.4	3
143	Intercalation of Mg into a Few-Layer Phyllosulfate in Nonaqueous Electrolytes at Room Temperature. <i>Chemistry of Materials</i> , 2020, 32, 6014-6025.	6.7	3
144	The Key Role of Tin (Sn) in Microstructure and Mechanical Properties of Ti ₂ SnC (M ₂ AX) Thin Nanocrystalline Films and Powdered Polycrystalline Samples. <i>Nanomaterials</i> , 2022, 12, 307.	4.1	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.	0.4	2
147	Can Na+ Transport Faster Than Li+ inside Zn-Sb Intermetallic Nanomaterials?. Microscopy and Microanalysis, 2015, 21, 1195-1196.	0.4	2
148	Atomic Scale Study of Lomer-Cottrell and Hirth Lock Dislocations in CdTe. Microscopy and Microanalysis, 2015, 21, 2087-2088.	0.4	2
149	Transmission Electron Microscopic and First-principles Study of SrTiO ₃ /GaAs Hetero-interfaces. Microscopy and Microanalysis, 2015, 21, 1647-1648.	0.4	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 Ca ₃ Co ₄ O ₉ . Journal of Applied Physics, 2016, 120, 205105.	2.5	2
152	Efficient CdTe photovoltaics by co-passivating grain boundaries. , 2018, , .		2
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