

Robert F Klie

List of Publications by Year in descending order

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210
papers

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citations

53794

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216
all docs

216
docs citations

216
times ranked

14608
citing authors

#	ARTICLE	IF	CITATIONS
1	Improving CdSeTe Devices With a Back Buffer Layer of Cu_xAlO_y . IEEE Journal of Photovoltaics, 2022, 12, 16-21.	2.5	9
2	Intercalation of Ca into a Highly Defective Manganese Oxide at Room Temperature. Chemistry of Materials, 2022, 34, 836-846.	6.7	10
3	The Key Role of Tin (Sn) in Microstructure and Mechanical Properties of Ti_2SnC (M2AX) Thin Nanocrystalline Films and Powdered Polycrystalline Samples. Nanomaterials, 2022, 12, 307.	4.1	3
4	Investigation of Ca Insertion into MoO_3 Nanoparticles for High Capacity Ca-Ion Cathodes. Nano Letters, 2022, 22, 2228-2235.	9.1	16
5	Ingrained: An Automated Framework for Fusing Atomic-Scale Image Simulations into Experiments. Small, 2022, 18, e2102960.	10.0	12
6	Isotope-Resolved Electron Energy Loss Spectroscopy in a Monochromated Scanning Transmission Electron Microscope. Microscopy Today, 2021, 29, 36-41.	0.3	5
7	Control of crystal size tailors the electrochemical performance of V_2O_5 as a Mg^{2+} intercalation host. Nanoscale, 2021, 13, 10081-10091.	5.6	7
8	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.	13.7	156
9	Automated plasmon peak fitting derived temperature mapping in a scanning transmission electron microscope. AIP Advances, 2021, 11, 035330.	1.3	2
10	Atomic-scale Insights of Cation Diffusion into Multivalent Battery Cathodes. Microscopy and Microanalysis, 2021, 27, 1498-1501.	0.4	0
11	Plasmon electron energy-loss spectroscopy and in-situ cooling experiments of graphene liquid cells. Microscopy and Microanalysis, 2021, 27, 2212-2214.	0.4	0
12	Hydroxyapatite as a scavenger of reactive radiolysis species in graphene liquid cells for in situ electron microscopy. Nanotechnology, 2021, 32, 485707.	2.6	7
13	Computational design of passivants for CdTe grain boundaries. Solar Energy Materials and Solar Cells, 2021, 232, 111279.	6.2	2
14	Surface morphology and mechanical properties changes induced in Ti_3InC_2 (M3AX2) thin nanocrystalline films by irradiation of 100 keV Ne^+ ions. Surface and Coatings Technology, 2021, 426, 127775.	4.8	5
15	Synthesis and Characterization of Core-Shell Nanocrystals of Co-Rich Cathodes. Journal of the Electrochemical Society, 2020, 167, 050501.	2.9	1
16	Probing Electrochemical Mg-Ion Activity in $\text{MgCr}_2\text{V}_4\text{O}_{14}$ Spinel Oxides. Chemistry of Materials, 2020, 32, 1162-1171.	6.7	31
17	Controlling Nanoscale Thermal Expansion of Monolayer Transition Metal Dichalcogenides by Alloy Engineering. Small, 2020, 16, 1905892.	10.0	9
18	High Voltage Mg-Ion Battery Cathode via a Solid Solution CrMn Spinel Oxide. Chemistry of Materials, 2020, 32, 6577-6587.	6.7	48

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19	Probing Mg Intercalation in the Tetragonal Tungsten Bronze Framework $V_4Nb_{18}O_{55}$. <i>Inorganic Chemistry</i> , 2020, 59, 9783-9797.	4.0	7
20	Direct Observation of Electron Beam-Induced Phase Transition in $MgCrMnO_4$. <i>Chemistry of Materials</i> , 2020, 32, 10456-10462.	6.7	18
21	High Capacity for Mg^{2+} Deintercalation in Spinel Vanadium Oxide Nanocrystals. <i>ACS Energy Letters</i> , 2020, 5, 2721-2727.	17.4	48
22	Highly Conductive Collagen by Low-Temperature Atomic Layer Deposition of Platinum. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 44371-44380.	8.0	6
23	Phase-Dependent Band Gap Engineering in Alloys of Metal-Semiconductor Transition Metal Dichalcogenides. <i>Advanced Functional Materials</i> , 2020, 30, 2004912.	14.9	13
24	High-Voltage Phosphate Cathodes for Rechargeable Ca-Ion Batteries. <i>ACS Energy Letters</i> , 2020, 5, 3203-3211.	17.4	65
25	Chemical and bonding analysis of liquids using liquid cell electron microscopy. <i>MRS Bulletin</i> , 2020, 45, 761-768.	3.5	5
26	Low-loss Electron Energy-loss Spectroscopy in 2-D Materials and Liquids. <i>Microscopy and Microanalysis</i> , 2020, 26, 472-473.	0.4	0
27	Enhanced charge storage of nanometric V_2O_5 in Mg electrolytes. <i>Nanoscale</i> , 2020, 12, 22150-22160.	5.6	15
28	Machine-learned impurity level prediction for semiconductors: the example of Cd-based chalcogenides. <i>Npj Computational Materials</i> , 2020, 6, .	8.7	32
29	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
30	Highly Active Rhenium-, Ruthenium-, and Iridium-Based Dichalcogenide Electrocatalysts for Oxygen Reduction and Oxygen Evolution Reactions in Aprotic Media. <i>Chemistry of Materials</i> , 2020, 32, 2764-2773.	6.7	23
31	Covalent surface modifications and superconductivity of two-dimensional metal carbide MXenes. <i>Science</i> , 2020, 369, 979-983.	12.6	870
32	Alloy Engineering: Controlling Nanoscale Thermal Expansion of Monolayer Transition Metal Dichalcogenides by Alloy Engineering (<i>Small</i> 3/2020). <i>Small</i> , 2020, 16, 2070018.	10.0	2
33	Hydrolyzed Ce(IV) salts limit sucrose-dependent biofilm formation by <i>Streptococcus mutans</i> . <i>Journal of Inorganic Biochemistry</i> , 2020, 206, 110997.	3.5	7
34	Fundamental Insights from a Single-Crystal Sodium Iridate Battery. <i>Advanced Energy Materials</i> , 2020, 10, 1903128.	19.5	9
35	Quasi-Binary Transition Metal Dichalcogenide Alloys: Thermodynamic Stability Prediction, Scalable Synthesis, and Application. <i>Advanced Materials</i> , 2020, 32, e1907041.	21.0	46
36	Applications of Graphene Liquid Cell. <i>Microscopy and Microanalysis</i> , 2020, 26, 1452-1453.	0.4	1

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37	Identical Location STEM analysis on La _{1-x} Sr _x CoO ₃ Oxygen-Evolution Catalysts. <i>Microscopy and Microanalysis</i> , 2019, 25, 2052-2053.	0.4	1
38	Colloidal Atomic Layer Deposition with Stationary Reactant Phases Enables Precise Synthesis of 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
39	A Long-Cycle Life Lithium CO ₂ Battery with Carbon Neutrality. <i>Advanced Materials</i> , 2019, 31, e1902518.	21.0	138
40	Stabilization of a monolayer tellurene phase at CdTe interfaces. <i>Nanoscale</i> , 2019, 11, 14698-14706.	5.6	10
41	Effect of selenium and chlorine co-passivation in polycrystalline CdSeTe devices. <i>Applied Physics Letters</i> , 2019, 115, .	3.3	33
42	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
43	Ion Beam Sputtering for Controlled Synthesis of Thin MAX (MXene) Phases. <i>Microscopy and Microanalysis</i> , 2019, 25, 1626-1627.	0.4	6
44	Radiation Stability of Ti ₂ InC (M ₂ AX) Nanolaminates Under He Ions Irradiation Evaluation Through STEM microscopy. <i>Microscopy and Microanalysis</i> , 2019, 25, 1624-1625.	0.4	2
45	In situ Materials Characterization of 2-Dim Materials at High Energy and Spatial Resolution. <i>Microscopy and Microanalysis</i> , 2019, 25, 936-937.	0.4	0
46	Radiation Resistant Layered Ti ₃ AlC ₂ Ceramics Prepared by LEIF. <i>Microscopy and Microanalysis</i> , 2019, 25, 1632-1633.	0.4	0
47	Understanding the Ordering of Charged Nanoparticles in Water. <i>Microscopy and Microanalysis</i> , 2019, 25, 2096-2097.	0.4	1
48	Meso to Atomic Scale Microstructural Changes During Ageing of NCM Li-ion Battery Materials. <i>Microscopy and Microanalysis</i> , 2019, 25, 764-765.	0.4	0
49	Surface Species in Graphene Liquid Cells for Transmission Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2019, 25, 2144-2145.	0.4	1
50	TEM Analysis of Model Li-Ion Battery Cathodes Grown by Molecular Beam Epitaxy. <i>Microscopy and Microanalysis</i> , 2019, 25, 2086-2087.	0.4	2
51	Ti-based MXenes: Preparation by Ion Beam Sputtering and Microstructural Evolution by Ion Irradiation. <i>Microscopy and Microanalysis</i> , 2019, 25, 1628-1629.	0.4	1
52	Liquid Ammonia Chemical Lithiation: An Approach for High-Energy and High-Voltage Si Graphite Li _{1+x} Ni _{0.5} Mn _{1.5} O ₄ Li-Ion Batteries. <i>ACS Applied Energy Materials</i> , 2019, 2, 5019-5028.	5.1	31
53	Intercalation of Magnesium into a Layered Vanadium Oxide with High Capacity. <i>ACS Energy Letters</i> , 2019, 4, 1528-1534.	17.4	75
54	Atomic-resolution in-situ 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

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55	Electronic Structure of LiCoO_2 Surfaces and Effect of Al Substitution. Journal of Physical Chemistry C, 2019, 123, 8851-8858.	3.1	24
56	Synthesis of Type I PbSe/CdSe Dot-on-Plate Heterostructures with Near-Infrared Emission. Journal of the American Chemical Society, 2019, 141, 5092-5096.	13.7	25
57	Direct observation of MgO formation at cathode electrolyte interface of a spinel MgCo_2O_4 cathode upon electrochemical Mg removal and insertion. Journal of Power Sources, 2019, 424, 68-75.	7.8	12
58	Tuning Thermal Transport Through Atomically Thin $\text{Ti}_3\text{C}_2\text{T}_z$ MXene by Current Annealing in Vacuum. Advanced Functional Materials, 2019, 29, 1805693.	14.9	25
59	In-Situ Characterization of 2-Dim Materials at High Energy and Spatial Resolution. Microscopy and Microanalysis, 2019, 25, 17-18.	0.4	0
60	Strain-Energy Release in Bent Semiconductor Nanowires Occurring by Polygonization or Nanocrack Formation. ACS Nano, 2019, 13, 3730-3738.	14.6	7
61	Particle-Attachment-Mediated and Matrix/Lattice-Guided Enamel Apatite Crystal Growth. ACS Nano, 2019, 13, 3151-3161.	14.6	21
62	Machine learning defect properties in Cd-based chalcogenides. , 2019, , .		0
63	Effect of Passivating Shells on the Chemistry and Electrode Properties of LiMn_2O_4 Nanocrystal Heterostructures. ACS Applied Materials & Interfaces, 2019, 11, 3823-3833.	8.0	17
64	Decay of high-energy electron bound states in crystals. Ultramicroscopy, 2019, 196, 99-110.	1.9	2
65	New Class of Electrocatalysts Based on 2D Transition Metal Dichalcogenides in Ionic Liquid. Advanced Materials, 2019, 31, e1804453.	21.0	43
66	Multivalent Electrochemistry of Spinel $\text{Mg}_x\text{Mn}_3\text{O}_4$ Nanocrystals. Chemistry of Materials, 2018, 30, 1496-1504.	6.7	23
67	Reversible Mg-Ion Insertion in a Metastable One-Dimensional Polymorph of V_2O_5 . Chem, 2018, 4, 564-585.	11.7	126
68	Mapping Thermal Expansion Coefficients in Freestanding 2D Materials at the Nanometer Scale. Physical Review Letters, 2018, 120, 055902.	7.8	72
69	Electrochemical Reduction of a Spinel-Type Manganese Oxide Cathode in Aqueous Electrolytes with Ca^{2+} or Zn^{2+} . Journal of Physical Chemistry C, 2018, 122, 4182-4188.	3.1	33
70	A lithium-oxygen battery with a long cycle life in an air-like atmosphere. Nature, 2018, 555, 502-506.	27.8	433
71	Nanocrystal heterostructures of LiCoO_2 with conformal passivating shells. Nanoscale, 2018, 10, 6954-6961.	5.6	8
72	TiSn and Ti_2SnC Nanolaminates Prepared by Ion Beam Sputtering of Individual Phase Elements: Materials for Future Nuclear Application. Microscopy and Microanalysis, 2018, 24, 1618-1619.	0.4	1

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73	Novel EELS Experiments in the Newly Opened Monochromated Regime. <i>Microscopy and Microanalysis</i> , 2018, 24, 418-419.	0.4	0
74	In Situ Materials Characterization of 2-Dim Materials at High Energy and Spatial Resolution. <i>Microscopy and Microanalysis</i> , 2018, 24, 428-429.	0.4	1
75	Efficient CdTe photovoltaics by co-passivating grain boundaries. , 2018, , .		2
76	Structural and Magnetic Properties of Nanosized LiCoO ₂ Surfaces. <i>Microscopy and Microanalysis</i> , 2018, 24, 164-165.	0.4	0
77	Developing Model Cathodes to Study Interfacial Ion Diffusion. <i>Microscopy and Microanalysis</i> , 2018, 24, 1538-1539.	0.4	0
78	An Autonomous Microscopy Workflow for Structure Determination from Atomic-Resolution Images. <i>Microscopy and Microanalysis</i> , 2018, 24, 510-511.	0.4	3
79	Microstructure Study of Carbon Nanocages Consisting of Graphene Oxide Grafted with Single Gold Nanoparticles by Application of HAADF Contrast Imaging. <i>Microscopy and Microanalysis</i> , 2018, 24, 148-149.	0.4	0
80	The Morphology of Ti ₃ AlC ₂ (M ₂ AX) and Ti ₃ C ₂ (MXene) Sheets Revealed by HAADF STEM Analysis. <i>Microscopy and Microanalysis</i> , 2018, 24, 156-157.	0.4	3
81	Vibrational Spectroscopy of Liquid Water by Monochromated Atoof EELS. <i>Microscopy and Microanalysis</i> , 2018, 24, 422-423.	0.4	1
82	Atomic-resolution study of oxygen vacancy ordering in La _{0.5} Sr _{0.5} CoO _{3-s} thin films on SrTiO ₃ during in situ cooling experiments.. <i>Microscopy and Microanalysis</i> , 2018, 24, 84-85.	0.4	2
83	Enhanced Thermal Boundary Conductance in Few-Layer Ti ₃ C ₂ MXene with Encapsulation. <i>Advanced Materials</i> , 2018, 30, e1801629.	21.0	51
84	Atomic-Resolution Study of Grain Boundaries in CdTe Using Scanning Transmission Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2018, 24, 102-103.	0.4	2
85	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
86	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
87	Vibrational Spectroscopy of Water with High Spatial Resolution. <i>Advanced Materials</i> , 2018, 30, e1802702.	21.0	45
88	Tailoring Thermal Expansion Coefficient of Transition Metal Dichalcogenides via Alloy Engineering. <i>Microscopy and Microanalysis</i> , 2018, 24, 1560-1561.	0.4	1
89	Gallstone-Formation-Inspired Bimetallic Supra-nanostructures for Computed-Tomography-Image-Guided Radiation Therapy. <i>ACS Applied Nano Materials</i> , 2018, 1, 4602-4611.	5.0	10
90	Sintering and Nanoindentation of Ti ₂ SnC (M ₂ AX) Ceramics – Attractive Materials in the Topic of Nuclear Engineering. <i>Microscopy and Microanalysis</i> , 2018, 24, 2282-2283.	0.4	0

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91	Colloidal Chemistry in Molten Salts: Synthesis of Luminescent In _x Ga _{1-x} P and In _x Ga _{1-x} As Quantum Dots. Journal of the American Chemical Society, 2018, 140, 12144-12151.	13.7	60
92	Direct Investigation of Mg Intercalation into the Orthorhombic V ₂ O ₅ Cathode Using Atomic-Resolution Transmission Electron Microscopy. Chemistry of Materials, 2017, 29, 2218-2226.	6.7	62
93	Facet-Dependent Thermal Instability in LiCoO ₂ . Nano Letters, 2017, 17, 2165-2171.	9.1	99
94	Cd doping at PVD-CdS/CuInGaSe ₂ heterojunctions. Solar Energy Materials and Solar Cells, 2017, 164, 128-134.	6.2	16
95	Chemical Weathering of Layered Ni-Rich Oxide Electrode Materials: Evidence for Cation Exchange. Journal of the Electrochemical Society, 2017, 164, A1489-A1498.	2.9	133
96	Mechanism of Zn Insertion into Nanostructured $\hat{\Gamma}$ -MnO ₂ : A Nonaqueous Rechargeable Zn Metal Battery. Chemistry of Materials, 2017, 29, 4874-4884.	6.7	225
97	Direct characterization of the Li intercalation mechanism into $\hat{\Gamma}$ -V ₂ O ₅ nanowires using <i>in-situ</i> transmission electron microscopy. Applied Physics Letters, 2017, 110, .	3.3	11
98	Bio-camouflage of anatase nanoparticles explored by in situ high-resolution electron microscopy. Nanoscale, 2017, 9, 10684-10693.	5.6	18
99	Direct evidence of M2 phase during the monoclinic-tetragonal (rutile) phase transition of W-doped VO ₂ nanowires. Applied Physics Letters, 2017, 110, .	3.3	11
100	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.	8.0	129
101	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
102	Nanoscale Thermometry for 2D Materials. Microscopy and Microanalysis, 2017, 23, 1724-1725.	0.4	0
103	Growth and characterization of $\hat{\Gamma}$ -Ga ₂ O ₃ thin films by molecular beam epitaxy for deep-UV photodetectors. Journal of Applied Physics, 2017, 122, .	2.5	124
104	Atomic-scale structural and electronic properties of SrTiO ₃ /SrTiO ₃ interfaces: A combined STEM-EELS and first-principles study. Physical Review B, 2017, 96, .	1.2	4
105	Experimental verification of orbital engineering at the atomic scale: Charge transfer and symmetry breaking in nickelate heterostructures. Physical Review B, 2017, 95, .	3.2	12
106	Driving Liquid Chemistry with in situ STEM in Monolayer Window Encapsulated Liquid Cells. Microscopy and Microanalysis, 2017, 23, 878-879.	0.4	6
107	Studying the effects of interfacial coupling in La _{0.5} Sr _{0.5} CoO ₃ - $\hat{\Gamma}$ thin films on SrTiO ₃ using in-situ cooling experiments. Microscopy and Microanalysis, 2017, 23, 850-851.	0.4	0
108	<i>in-situ</i> STEM-EELS observation of ferroelectric switching of BaTiO ₃ film on GaAs. Microscopy and Microanalysis, 2017, 23, 1628-1629.	0.4	1

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109	Leveraging First Principles Modeling and Machine Learning for Microscopy Data Inversion. <i>Microscopy and Microanalysis</i> , 2017, 23, 178-179.	0.4	1
110	Atomic scale study of model CdTe grain boundaries. , 2017, , .		0
111	In situ cooling and heating study of VO ₂ phase transition. <i>Microscopy and Microanalysis</i> , 2016, 22, 816-817.	0.4	0
112	Atomic Resolution Studies of W Dopants Effect on the Phase Transformation of VO ₂ . <i>Microscopy and Microanalysis</i> , 2016, 22, 884-885.	0.4	1
113	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
114	Atomic-scale characterization of the oxygen vacancy ordering in La _{0.5} Sr _{0.5} CoO ₃ thin film grown on SrTiO ₃ using in-situ cooling experiments. <i>Microscopy and Microanalysis</i> , 2016, 22, 1626-1627.	0.4	1
115	Atomic scale study of model CdTe grain boundaries. , 2016, , .		0
116	First principles modeling of grain boundaries in CdTe. , 2016, , .		0
117	In-situ TEM Investigation on Thermal Stability and Oxygen Release Behavior of Charged and Discharged LiCoO ₂ . <i>Microscopy and Microanalysis</i> , 2016, 22, 844-845.	0.4	0
118	Atomic and electronic structure of Ti substitution in Ca ₃ Co ₄ O ₉ . <i>Journal of Applied Physics</i> , 2016, 120, 205105.	2.5	2
119	Atomic and electronic structure of Lomer dislocations at CdTe bicrystal interface. <i>Scientific Reports</i> , 2016, 6, 27009.	3.3	35
120	Atomistic Study of Model CdTe Grain Boundaries. <i>Microscopy and Microanalysis</i> , 2016, 22, 1398-1399.	0.4	0
121	Dynamic Study of Liquid Drop Impact on Supercooled Cerium Dioxide: Anti-Icing Behavior. <i>Langmuir</i> , 2016, 32, 6148-6162.	3.5	38
122	Nanostructured transition metal dichalcogenide electrocatalysts for CO ₂ reduction in ionic liquid. <i>Science</i> , 2016, 353, 467-470.	12.6	778
123	First-principles study of size- and edge-dependent properties of MXene nanoribbons. <i>Physical Review B</i> , 2016, 93, .	3.2	72
124	Artificial Dense Granules: A Procoagulant Liposomal Formulation Modeled after Platelet Polyphosphate Storage Pools. <i>Biomacromolecules</i> , 2016, 17, 2572-2581.	5.4	25
125	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
126	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. <i>Journal of Materials Chemistry C</i> , 2016, 4, 10386-10394.	5.5	18

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127	Atomic-resolution EELS Study of Polarization of BaTiO ₃ in the Interface With Metallic Manganite. Microscopy and Microanalysis, 2016, 22, 314-315.	0.4	0
128	Ultrafast and Highly Reversible Sodium Storage in Zinc-Antimony Intermetallic Nanomaterials. Advanced Functional Materials, 2016, 26, 543-552.	14.9	81
129	Cathode Based on Molybdenum Disulfide Nanoflakes for Lithium-Oxygen Batteries. ACS Nano, 2016, 10, 2167-2175.	14.6	184
130	Simultaneous First-Order Valence and Oxygen Vacancy Order/Disorder Transitions in (Pr _{0.85} Y _{0.15}) _{0.7} Ca _{0.3} CoO ₃ via Analytical Transmission Electron Microscopy. ACS Nano, 2016, 10, 938-947.	14.6	17
131	Highly Efficient Hydrogen Evolution Reaction Using Crystalline Layered Three-Dimensional Molybdenum Disulfides Grown on Graphene Film. Chemistry of Materials, 2016, 28, 549-555.	6.7	98
132	In situ TEM Observation of Lithiation and Sodiation Process of ZnO Nanowire. Microscopy and Microanalysis, 2015, 21, 1371-1372.	0.4	2
133	Position-sensitive change in the transition metal <i>L</i> -edge fine structures. Applied Physics Letters, 2015, 107, .	3.3	6
134	Direct observation of oxygen-vacancy-enhanced polarization in a SrTiO ₃ -buffered ferroelectric BaTiO ₃ film on GaAs. Applied Physics Letters, 2015, 107, .	3.3	23
135	A fundamental study of the effects of grain boundaries on performance of poly-crystalline thin film CdTe solar cells. , 2015, , .		0
136	Using Graphene Liquid Cells for High-resolution Chemical Analysis of Nano-particle Reactions. Microscopy and Microanalysis, 2015, 21, 1289-1290.	0.4	0
137	On the Localized Nature of the Structural Transformations of Li ₂ MnO ₃ Following Electrochemical Cycling. Advanced Energy Materials, 2015, 5, 1501252.	19.5	63
138	Can Na ⁺ Transport Faster Than Li ⁺ inside Zn-Sb Intermetallic Nanomaterials?. Microscopy and Microanalysis, 2015, 21, 1195-1196.	0.4	2
139	Atomic Scale Study of Lomer-Cottrell and Hirth Lock Dislocations in CdTe. Microscopy and Microanalysis, 2015, 21, 2087-2088.	0.4	2
140	Transmission Electron Microscopic and First-principles Study of SrTiO ₃ /GaAs Hetero-interfaces. Microscopy and Microanalysis, 2015, 21, 1647-1648.	0.4	2
141	Atomic-Resolution EELS Study of Titanium Dopant Effects of Ca ₃ Co ₄ O ₉ Thin Film. Microscopy and Microanalysis, 2015, 21, 2069-2070.	0.4	0
142	Dynamic Observation of Tunnel-driven Lithiation Process in Single Crystalline α -MnCh Nanowires. Microscopy and Microanalysis, 2015, 21, 329-330.	0.4	0
143	Investigation of Li ion and Multivalent Battery Systems Using In situ TEM and High Resolution EELS. Microscopy and Microanalysis, 2015, 21, 1819-1820.	0.4	1
144	Atomistic simulations of grain boundaries in CdTe. , 2015, , .		3

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145	Creation and analysis of atomic structures for CdTe bi-crystal interfaces by the grain boundary genie. , 2015, , .		2
146	The observation of square ice in graphene questioned. Nature, 2015, 528, E1-E2.	27.8	95
147	Stabilization of Battery Electrode/Electrolyte Interfaces Employing Nanocrystals with Passivating Epitaxial Shells. Chemistry of Materials, 2015, 27, 394-399.	6.7	17
148	High-Quality Black Phosphorus Atomic Layers by Liquid-Phase Exfoliation. Advanced Materials, 2015, 27, 1887-1892.	21.0	728
149	Direct Observation of Reversible Magnesium Ion Intercalation into a Spinel Oxide Host. Advanced Materials, 2015, 27, 3377-3384.	21.0	178
150	Asynchronous Crystal Cell Expansion during Lithiation of K^{+} -Stabilized Li_xMnO_2 . Nano Letters, 2015, 15, 2998-3007.	9.1	161
151	Atomic Origins of Monoclinic-Tetragonal (Rutile) Phase Transition in Doped VO_2 Nanowires. Nano Letters, 2015, 15, 7179-7188.	9.1	52
152	Twin Boundary-Assisted Lithium Ion Transport. Nano Letters, 2015, 15, 610-615.	9.1	80
153	Heterogeneous nucleation and shape transformation of multicomponent metallic nanostructures. Nature Materials, 2015, 14, 215-223.	27.5	187
154	Direct observation of the structural and electronic changes of Li_2MnO_3 during electron irradiation. Applied Physics Letters, 2014, 105, .	3.3	24
155	Phonon and thermal transport properties of the misfit-layered oxide thermoelectric $\text{Ca}_3\text{Co}_4\text{O}_9$ from first principles. Applied Physics Letters, 2014, 104, 251910.	3.3	17
156	Deep ultraviolet emitting polarization induced nanowire light emitting diodes with $\text{Al}_x\text{Ga}_{1-x}\text{N}$ active regions. Nanotechnology, 2014, 25, 455201.	2.6	53
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