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	Improving CdSeTe Devices With a Back Buffer Layer of Cu_xAlO_y. IEEE Journal of Photovoltaics, 2022, 12, 16-21.	1.5	9
2	Intercalation of Ca into a Highly Defective Manganese Oxide at Room Temperature. Chemistry of Materials, 2022, 34, 836-846.	3.2	10
3	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
4	Investigation of Ca Insertion into Î±-MoO₃ Nanoparticles for High Capacity Ca-Ion Cathodes. Nano Letters, 2022, 22, 2228-2235.	4.5	16
5	Ingrained: An Automated Framework for Fusing Atomicâ€Scale Image Simulations into Experiments. Small, 2022, 18, e2102960.	5.2	12
6	Isotope-Resolved Electron Energy Loss Spectroscopy in a Monochromated Scanning Transmission Electron Microscope. Microscopy Today, 2021, 29, 36-41.	0.2	5
7	Control of crystal size tailors the electrochemical performance of Î±-V₂O₅ as a Mg²⁺ intercalation host. Nanoscale, 2021, 13, 10081-10091.	2.8	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.	6.6	156
9	Automated plasmon peak fitting derived temperature mapping in a scanning transmission electron microscope. AIP Advances, 2021, 11, 035330.	0.6	2
10	Atomic-scale Insights of Cation Diffusion into Multivalent Battery Cathodes. Microscopy and Microanalysis, 2021, 27, 1498-1501.	0.2	0
11	Plasmon electron energy-loss spectroscopy and in-situ cooling experiments of graphene liquid cells. Microscopy and Microanalysis, 2021, 27, 2212-2214.	0.2	0
12	Hydroxyapatite as a scavenger of reactive radiolysis species in graphene liquid cells for in situ electron microscopy. Nanotechnology, 2021, 32, 485707.	1.3	7
13	Computational design of passivants for CdTe grain boundaries. Solar Energy Materials and Solar Cells, 2021, 232, 111279.	3.0	2
14	Surface morphology and mechanical properties changes induced in Ti3InC2 (M3AX2) thin nanocrystalline films by irradiation of 100ÂkeV Ne+ ions. Surface and Coatings Technology, 2021, 426, 127775.	2.2	5
15	Synthesis and Characterization of Core-Shell Nanocrystals of Co-Rich Cathodes. Journal of the Electrochemical Society, 2020, 167, 050501.	1.3	1
16	Probing Electrochemical Mg-Ion Activity in MgCr_{2â€“x}V_xO₄ Spinel Oxides. Chemistry of Materials, 2020, 32, 1162-1171.	3.2	31
17	Controlling Nanoscale Thermal Expansion of Monolayer Transition Metal Dichalcogenides by Alloy Engineering. Small, 2020, 16, 1905892.	5.2	9
18	High Voltage Mg-Ion Battery Cathode via a Solid Solution Crâ€“Mn Spinel Oxide. Chemistry of Materials, 2020, 32, 6577-6587.	3.2	48

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19	Probing Mg Intercalation in the Tetragonal Tungsten Bronze Framework V₄Nb₁₈O₅₅. Inorganic Chemistry, 2020, 59, 9783-9797.	1.9	7
20	Direct Observation of Electron Beam-Induced Phase Transition in MgCrMnO₄. Chemistry of Materials, 2020, 32, 10456-10462.	3.2	18
21	High Capacity for Mg²⁺ Deintercalation in Spinel Vanadium Oxide Nanocrystals. ACS Energy Letters, 2020, 5, 2721-2727.	8.8	48
22	Highly Conductive Collagen by Low-Temperature Atomic Layer Deposition of Platinum. ACS Applied Materials & Interfaces, 2020, 12, 44371-44380.	4.0	6
23	Phaseâ€Dependent Band Gap Engineering in Alloys of Metalâ€Semiconductor Transition Metal Dichalcogenides. Advanced Functional Materials, 2020, 30, 2004912.	7.8	13
24	High-Voltage Phosphate Cathodes for Rechargeable Ca-Ion Batteries. ACS Energy Letters, 2020, 5, 3203-3211.	8.8	65
25	Chemical and bonding analysis of liquids using liquid cell electron microscopy. MRS Bulletin, 2020, 45, 761-768.	1.7	5
26	Low-loss Electron Energy-loss Spectroscopy in 2-D Materials and Liquids. Microscopy and Microanalysis, 2020, 26, 472-473.	0.2	0
27	Enhanced charge storage of nanometric Î¶-V₂O₅ in Mg electrolytes. Nanoscale, 2020, 12, 22150-22160.	2.8	15
28	Machine-learned impurity level prediction for semiconductors: the example of Cd-based chalcogenides. Npj Computational Materials, 2020, 6, .	3.5	32
29	Intercalation of Mg into a Few-Layer Phyllomanganate in Nonaqueous Electrolytes at Room Temperature. Chemistry of Materials, 2020, 32, 6014-6025.	3.2	3
30	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
31	Covalent surface modifications and superconductivity of two-dimensional metal carbide MXenes. Science, 2020, 369, 979-983.	6.0	870
32	Alloy Engineering: Controlling Nanoscale Thermal Expansion of Monolayer Transition Metal Dichalcogenides by Alloy Engineering (Small 3/2020). Small, 2020, 16, 2070018.	5.2	2
33	Hydrolyzed Ce(IV) salts limit sucrose-dependent biofilm formation by Streptococcus mutans. Journal of Inorganic Biochemistry, 2020, 206, 110997.	1.5	7
34	Fundamental Insights from a Singleâ€Crystal Sodium Iridate Battery. Advanced Energy Materials, 2020, 10, 1903128.	10.2	9
35	Quasiâ€Binary Transition Metal Dichalcogenide Alloys: Thermodynamic Stability Prediction, Scalable Synthesis, and Application. Advanced Materials, 2020, 32, e1907041.	11.1	46
36	Applications of Graphene Liquid Cell. Microscopy and Microanalysis, 2020, 26, 1452-1453.	0.2	1

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37	Identical Location STEM analysis on La_{1â^'x}Sr_xCoO₃ Oxygen-Evolution Catalysts. Microscopy and Microanalysis, 2019, 25, 2052-2053.	0.2	1
38	Colloidal Atomic Layer Deposition with Stationary Reactant Phases Enables Precise Synthesis of â€œDigitalâ€•Ilâ€“VI Nano-heterostructures with Exquisite Control of Confinement and Strain. Journal of the American Chemical Society, 2019, 141, 13487-13496.	6.6	58
39	A Longâ€Cycleâ€Life Lithiumâ€“CO₂ Battery with Carbon Neutrality. Advanced Materials, 2019, 31, e1902518.	11.1	138
40	Stabilization of a monolayer tellurene phase at CdTe interfaces. Nanoscale, 2019, 11, 14698-14706.	2.8	10
41	Effect of selenium and chlorine co-passivation in polycrystalline CdSeTe devices. Applied Physics Letters, 2019, 115, .	1.5	33
42	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
43	Ion Beam Sputtering for Controlled Synthesis of Thin MAX (MXene) Phases. Microscopy and Microanalysis, 2019, 25, 1626-1627.	0.2	6
44	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
45	In situ Materials Characterization of 2-Dim Materials at High Energy and Spatial Resolution. Microscopy and Microanalysis, 2019, 25, 936-937.	0.2	0
46	Radiation Resistant Layered Ti3AlC2 Ceramics Prepared by LEIF. Microscopy and Microanalysis, 2019, 25, 1632-1633.	0.2	0
47	Understanding the Ordering of Charged Nanoparticles in Water. Microscopy and Microanalysis, 2019, 25, 2096-2097.	0.2	1
48	Meso to Atomic Scale Microstructural Changes During Ageing of NCM Li-ion Battery Materials. Microscopy and Microanalysis, 2019, 25, 764-765.	0.2	0
49	Surface Species in Graphene Liquid Cells for Transmission Electron Microscopy. Microscopy and Microanalysis, 2019, 25, 2144-2145.	0.2	1
50	TEM Analysis of Model Li-Ion Battery Cathodes Grown by Molecular Beam Epitaxy. Microscopy and Microanalysis, 2019, 25, 2086-2087.	0.2	2
51	Ti-based MXenes: Preparation by Ion Beam Sputtering and Microstructural Evolution by Ion Irradiation. Microscopy and Microanalysis, 2019, 25, 1628-1629.	0.2	1
52	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
53	Intercalation of Magnesium into a Layered Vanadium Oxide with High Capacity. ACS Energy Letters, 2019, 4, 1528-1534.	8.8	75
54	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

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55	Electronic Structure of LiCoO₂ Surfaces and Effect of Al Substitution. Journal of Physical Chemistry C, 2019, 123, 8851-8858.	1.5	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.	6.6	25
57	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
58	Tuning Thermal Transport Through Atomically Thin Ti₃C₂T_z MXene by Current Annealing in Vacuum. Advanced Functional Materials, 2019, 29, 1805693.	7.8	25
59	In-Situ Characterization of 2-Dim Materials at High Energy and Spatial Resolution. Microscopy and Microanalysis, 2019, 25, 17-18.	0.2	0
60	Strain-Energy Release in Bent Semiconductor Nanowires Occurring by Polygonization or Nanocrack Formation. ACS Nano, 2019, 13, 3730-3738.	7.3	7
61	Particle-Attachment-Mediated and Matrix/Lattice-Guided Enamel Apatite Crystal Growth. ACS Nano, 2019, 13, 3151-3161.	7.3	21
62	Machine learning defect properties in Cd-based chalcogenides. , 2019, , .		0
63	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
64	Decay of high-energy electron bound states in crystals. Ultramicroscopy, 2019, 196, 99-110.	0.8	2
65	New Class of Electrocatalysts Based on 2D Transition Metal Dichalcogenides in Ionic Liquid. Advanced Materials, 2019, 31, e1804453.	11.1	43
66	Multivalent Electrochemistry of Spinel Mg_xMn_{3â€“x}O₄ Nanocrystals. Chemistry of Materials, 2018, 30, 1496-1504.	3.2	23
67	Reversible Mg-Ion Insertion in a Metastable One-Dimensional Polymorph of V2O5. CheM, 2018, 4, 564-585.	5.8	126
68	Mapping Thermal Expansion Coefficients in Freestanding 2D Materials at the Nanometer Scale. Physical Review Letters, 2018, 120, 055902.	2.9	72
69	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
70	A lithiumâ€“oxygen battery with a long cycle life in an air-like atmosphere. Nature, 2018, 555, 502-506.	13.7	433
71	Nanocrystal heterostructures of LiCoO₂ with conformal passivating shells. Nanoscale, 2018, 10, 6954-6961.	2.8	8
72	TiSn and Ti2SnC Nanolaminates Prepared by Ion Beam Sputtering of Individual Phase Elements: Materials for Future Nuclear Application. Microscopy and Microanalysis, 2018, 24, 1618-1619.	0.2	1

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73	Novel EELS Experiments in the Newly Opened Monochromated Regime. Microscopy and Microanalysis, 2018, 24, 418-419.	0.2	0
74	In Situ Materials Characterization of 2-Dim Materials at High Energy and Spatial Resolution. Microscopy and Microanalysis, 2018, 24, 428-429.	0.2	1
75	Efficient CdTe photovoltaics by co-passivating grain boundaries. , 2018, , .		2
76	Structural and Magnetic Properties of Nanosized LiCoO2 Surfaces. Microscopy and Microanalysis, 2018, 24, 164-165.	0.2	0
77	Developing Model Cathodes to Study Interfacial Ion Diffusion. Microscopy and Microanalysis, 2018, 24, 1538-1539.	0.2	0
78	An Autonomous Microscopy Workflow for Structure Determination from Atomic-Resolution Images. Microscopy and Microanalysis, 2018, 24, 510-511.	0.2	3
79	Microstructure Study of Carbon Nanocages Consisting of Graphene Oxide Grafted with Single Gold Nanoparticles by Application of HAADF Contrast Imaging. Microscopy and Microanalysis, 2018, 24, 148-149.	0.2	0
80	The Morphology of TiiAlC (M2AX) and TiiC (MXene) Sheets Revealed by HAADF STEM Analysis. Microscopy and Microanalysis, 2018, 24, 156-157.	0.2	3
81	Vibrational Spectroscopy of Liquid Water by Monochromated Aloof EELS. Microscopy and Microanalysis, 2018, 24, 422-423.	0.2	1
82	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
83	Enhanced Thermal Boundary Conductance in Fewâ€Layer Ti₃C₂ MXene with Encapsulation. Advanced Materials, 2018, 30, e1801629.	11.1	51
84	Atomic-Resolution Study of Grain Boundaries in CdTe Using Scanning Transmission Electron Microscopy. Microscopy and Microanalysis, 2018, 24, 102-103.	0.2	2
85	Enhanced Bioactivity of Collagen Fiber Functionalized with Room Temperature Atomic Layer Deposited Titania. ACS Applied Materials & Interfaces, 2018, 10, 34443-34454.	4.0	13
86	Synthesis and Characterization of MgCr₂S₄ Thiospinel as a Potential Magnesium Cathode. Inorganic Chemistry, 2018, 57, 8634-8638.	1.9	50
87	Vibrational Spectroscopy of Water with High Spatial Resolution. Advanced Materials, 2018, 30, e1802702.	11.1	45
88	Tailoring Thermal Expansion Coefficient of Transition Metal Dichalcogenides via Alloy Engineering. Microscopy and Microanalysis, 2018, 24, 1560-1561.	0.2	1
89	Gallstone-Formation-Inspired Bimetallic Supra-nanostructures for Computed-Tomography-Image-Guided Radiation Therapy. ACS Applied Nano Materials, 2018, 1, 4602-4611.	2.4	10
90	Sintering and Nanoindentation of Ti2SnC (M2AX) Ceramics â€“ Attractive Materials in the Topic of Nuclear Engineering. Microscopy and Microanalysis, 2018, 24, 2282-2283.	0.2	0

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91	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
92	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
93	Facet-Dependent Thermal Instability in LiCoO₂. Nano Letters, 2017, 17, 2165-2171.	4.5	99
94	Cd doping at PVD-CdS/CuInGaSe2 heterojunctions. Solar Energy Materials and Solar Cells, 2017, 164, 128-134.	3.0	16
95	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
96	Mechanism of Zn Insertion into Nanostructured Î´-MnO₂: A Nonaqueous Rechargeable Zn Metal Battery. Chemistry of Materials, 2017, 29, 4874-4884.	3.2	225
97	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
98	Bio-camouflage of anatase nanoparticles explored by in situ high-resolution electron microscopy. Nanoscale, 2017, 9, 10684-10693.	2.8	18
99	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
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.	4.0	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.	7.3	17
102	Nanoscale Thermometry for 2D Materials. Microscopy and Microanalysis, 2017, 23, 1724-1725.	0.2	0
103	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
104	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><mr interfaces: A combined STEM-EELS and first-principles study. Physical Review B, 2017, 96, .	1.1	4
105	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
106	Driving Liquid Chemistry with in situ STEM in Monolayer Window Encapsulated Liquid Cells. Microscopy and Microanalysis, 2017, 23, 878-879.	0.2	6
107	Studying the effects of interfacial coupling in La0.5Sr0.5CoO3-Î´ thin films on SrTiO3 using in-situ cooling experiments. Microscopy and Microanalysis, 2017, 23, 850-851.	0.2	0
108	In-situ STEM-EELS observation of ferroelectric switching of BaTiO₃ film on GaAs. Microscopy and Microanalysis, 2017, 23, 1628-1629.	0.2	1

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109	Leveraging First Principles Modeling and Machine Learning for Microscopy Data Inversion. Microscopy and Microanalysis, 2017, 23, 178-179.	0.2	1
110	Atomic â€" scale study of model CdTe grain boundaries. , 2017, , .		0
111	In situ cooling and heating study of VO 2 phase transition. Microscopy and Microanalysis, 2016, 22, 816-817.	0.2	0
112	Atomic Resolution Studies of W Dopants Effect on the Phase Transformation of VO2. Microscopy and Microanalysis, 2016, 22, 884-885.	0.2	1
113	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
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. Microscopy and Microanalysis, 2016, 22, 1626-1627.	0.2	1
115	Atomic â€" 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 LiCoO2. Microscopy and Microanalysis, 2016, 22, 844-845.	0.2	0
118	Atomic and electronic structure of Ti substitution in Ca3Co4O9. Journal of Applied Physics, 2016, 120, 205105.	1.1	2
119	Atomic and electronic structure of Lomer dislocations at CdTe bicrystal interface. Scientific Reports, 2016, 6, 27009.	1.6	35
120	Atomistic Study of Model CdTe Grain Boundaries. Microscopy and Microanalysis, 2016, 22, 1398-1399.	0.2	0
121	Dynamic Study of Liquid Drop Impact on Supercooled Cerium Dioxide: Anti-Icing Behavior. Langmuir, 2016, 32, 6148-6162.	1.6	38
122	Nanostructured transition metal dichalcogenide electrocatalysts for CO ₂ reduction in ionic liquid. Science, 2016, 353, 467-470.	6.0	778
123	First-principles study of size- and edge-dependent properties of MXene nanoribbons. Physical Review B, 2016, 93, .	1.1	72
124	Artificial Dense Granules: A Procoagulant Liposomal Formulation Modeled after Platelet Polyphosphate Storage Pools. Biomacromolecules, 2016, 17, 2572-2581.	2.6	25
125	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
126	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

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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.	0.2	0
128	Ultrafast and Highly Reversible Sodium Storage in Zincâ€Antimony Intermetallic Nanomaterials. Advanced Functional Materials, 2016, 26, 543-552.	7.8	81
129	Cathode Based on Molybdenum Disulfide Nanoflakes for Lithiumâ€“Oxygen Batteries. ACS Nano, 2016, 10, 2167-2175.	7.3	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_{3â^'Î´} via Analytical Transmission Electron Microscopy. ACS Nano, 2016, 10, 938-947.	7.3	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.	3.2	98
132	In situ TEM Observation of Lithiation and Sodiation Process of ZnO Nanowire. Microscopy and Microanalysis, 2015, 21, 1371-1372.	0.2	2
133	Position-sensitive change in the transition metal L-edge fine structures. Applied Physics Letters, 2015, 107, .	1.5	6
134	Direct observation of oxygen-vacancy-enhanced polarization in a SrTiO3-buffered ferroelectric BaTiO3 film on GaAs. Applied Physics Letters, 2015, 107, .	1.5	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.	0.2	0
137	On the Localized Nature of the Structural Transformations of Li₂MnO₃ Following Electrochemical Cycling. Advanced Energy Materials, 2015, 5, 1501252.	10.2	63
138	Can Na+ Transport Faster Than Li+ inside Zn-Sb Intermetallic Nanomaterials?. Microscopy and Microanalysis, 2015, 21, 1195-1196.	0.2	2
139	Atomic Scale Study of Lomer-Cottrell and Hirth Lock Dislocations in CdTe. Microscopy and Microanalysis, 2015, 21, 2087-2088.	0.2	2
140	Transmission Electron Microscopic and First-principles Study of SrTiO3/GaAs Hetero-interfaces. Microscopy and Microanalysis, 2015, 21, 1647-1648.	0.2	2
141	Atomic-Resolution EELS Study of Titanium Dopant Effects of Ca3Co4O9 Thin Film. Microscopy and Microanalysis, 2015, 21, 2069-2070.	0.2	0
142	Dynamic Observation of Tunnel-driven Lithiation Process in Single Crystalline a-MnCh Nanowires. Microscopy and Microanalysis, 2015, 21, 329-330.	0.2	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.	0.2	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.	13.7	95
147	Stabilization of Battery Electrode/Electrolyte Interfaces Employing Nanocrystals with Passivating Epitaxial Shells. Chemistry of Materials, 2015, 27, 394-399.	3.2	17
148	Highâ€Quality Black Phosphorus Atomic Layers by Liquidâ€Phase Exfoliation. Advanced Materials, 2015, 27, 1887-1892.	11.1	728
149	Direct Observation of Reversible Magnesium Ion Intercalation into a Spinel Oxide Host. Advanced Materials, 2015, 27, 3377-3384.	11.1	178
150	Asynchronous Crystal Cell Expansion during Lithiation of K⁺-Stabilized Î±-MnO₂. Nano Letters, 2015, 15, 2998-3007.	4.5	161
151	Atomic Origins of Monoclinic-Tetragonal (Rutile) Phase Transition in Doped VO₂ Nanowires. Nano Letters, 2015, 15, 7179-7188.	4.5	52
152	Twin Boundary-Assisted Lithium Ion Transport. Nano Letters, 2015, 15, 610-615.	4.5	80
153	Heterogeneous nucleation and shape transformation of multicomponent metallicÂnanostructures. Nature Materials, 2015, 14, 215-223.	13.3	187
154	Direct observation of the structural and electronic changes of Li2MnO3 during electron irradiation. Applied Physics Letters, 2014, 105, .	1.5	24
155	Phonon and thermal transport properties of the misfit-layered oxide thermoelectric Ca3Co4O9 from first principles. Applied Physics Letters, 2014, 104, 251910.	1.5	17
156	Deep ultraviolet emitting polarization induced nanowire light emitting diodes with Al_xGa_{1â^'x}N active regions. Nanotechnology, 2014, 25, 455201.	1.3	53
157	The new JEOL JEMâ€ARM200CF at the University of Illinois at Chicago. Crystal Research and Technology, 2014, 49, 653-662.	0.6	10
158	Highly lattice-mismatched semiconductorâ€“metal hybrid nanostructures: gold nanoparticle encapsulated luminescent silicon quantum dots. Nanoscale, 2014, 6, 2201.	2.8	34
159	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
160	Reversible Modulation of Orbital Occupations via an Interface-Induced Polar State in Metallic Manganites. Nano Letters, 2014, 14, 4965-4970.	4.5	61
161	Robust carbon dioxide reduction on molybdenum disulphide edges. Nature Communications, 2014, 5, 4470.	5.8	644
162	Chemical sensing with switchable transport channels in graphene grain boundaries. Nature Communications, 2014, 5, 4911.	5.8	105

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163	Lithiation-Induced Shuffling of Atomic Stacks. Nano Letters, 2014, 14, 5301-5307.	4.5	18
164	Correlating the degree of metalâ€“promoter interaction to ethanol selectivity over MnRh/CNTs CO hydrogenation catalysts. Journal of Catalysis, 2014, 313, 149-158.	3.1	39
165	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
166	A New Silicon Drift Detector for High Spatial Resolution STEM-XEDS: Performance and Applications. Microscopy and Microanalysis, 2014, 20, 1046-1052.	0.2	18
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