Louis F J Piper

List of Publications by Citations

181 papers	6,139 citations	46 h-index	68 g-index
197 ext. papers	7,168 ext. citations	7.8 avg, IF	5.5 L-index

#	Paper	IF	Citations
181	Nature of the band gap of In2O3 revealed by first-principles calculations and x-ray spectroscopy. *Physical Review Letters*, **2008**, 100, 167402	7.4	498
180	Origin of electron accumulation at wurtzite InN surfaces. *Physical Review B*, **2004**, 69,	3.3	189
179	High Reversibility of Lattice Oxygen Redox Quantified by Direct Bulk Probes of Both Anionic and Cationic Redox Reactions. *Joule*, **2019**, 3, 518-541	27.8	156
178	Origin of the n-type conductivity of InN: The role of positively charged dislocations. *Applied Physics Letters*, **2006**, 88, 252109	3.4	134
177	Perovskite Sr-Doped LaCrO3 as a New p-Type Transparent Conducting Oxide. *Advanced Materials*, **2015**, 27, 5191-5	24	125
176	Reaction Heterogeneity in LiNi0.8Co0.15Al0.05O2 Induced by Surface Layer. *Chemistry of Materials*, **2017**, 29, 7345-7352	9.6	108
175	Origin of the Bipolar Doping Behavior of SnO from X-ray Spectroscopy and Density Functional Theory. *Chemistry of Materials*, **2013**, 25, 3114-3123	9.6	107
174	EditorsQChoiceCrowth of Ambient Induced Surface Impurity Species on Layered Positive Electrode Materials and Impact on Electrochemical Performance. *Journal of the Electrochemical Society*, **2017**, 164, A3727-A3741	3.9	104
173	Determination of the branch-point energy of InN: Chemical trends in common-cation and common-anion semiconductors. *Physical Review B*, **2008**, 77,	3.3	96
172	Electronic Structure of C60/Phthalocyanine/ITO Interfaces Studied using Soft X-ray Spectroscopies. *Journal of Physical Chemistry C*, **2010**, 114, 1928-1933	3.8	91
171	Quantized electron accumulation states in indium nitride studied by angle-resolved photoemission spectroscopy. *Physical Review Letters*, **2006**, 97, 237601	7.4	91
170	High-efficiency in situ resonant inelastic x-ray scattering (iRIXS) endstation at the Advanced Light Source. *Review of Scientific Instruments*, **2017**, 88, 033106	1.7	86
169	Electronic and transport properties of Li-doped NiO epitaxial thin films. *Journal of Materials Chemistry C*, **2018**, 6, 2275-2282	7.1	85
168	Mapping polaronic states and lithiation gradients in individual V2O5 nanowires. *Nature Communications*, **2016**, 7, 12022	17.4	85
167	Direct Observation of Electrostatically Driven Band Gap Renormalization in a Degenerate Perovskite Transparent Conducting Oxide. *Physical Review Letters*, **2016**, 116, 027602	7.4	83
166	X-ray spectroscopic study of the electronic structure of CuCrO2. *Physical Review B*, **2009**, 79,	3.3	82
165	The nature of electron lone pairs in BiVO4. *Applied Physics Letters*, **2011**, 98, 212110	3.4	81

164	Nature of the metal insulator transition in ultrathin epitaxial vanadium dioxide. *Nano Letters*, **2013**, 13, 4857-61	11.5	77
163	Transition from electron accumulation to depletion at InGaN surfaces. *Applied Physics Letters*, **2006**, 89, 202110	3.4	76
162	Band Gap Dependence on Cation Disorder in ZnSnN2 Solar Absorber. *Advanced Energy Materials*, **2015**, 5, 1501462	21.8	75
161	La-doped BaSnO3□Degenerate perovskite transparent conducting oxide: Evidence from synchrotron x-ray spectroscopy. *Applied Physics Letters*, **2013**, 103, 042105	3.4	74
160	Observation of quantized subband states and evidence for surface electron accumulation in CdO from angle-resolved photoemission spectroscopy. *Physical Review B*, **2008**, 78,	3.3	70
159	Quantifying the Capacity Contributions during Activation of Li2MnO3. *ACS Energy Letters*, **2020**, 5, 634-641	20.1	68
158	Band structure of ZnO from resonant x-ray emission spectroscopy. *Physical Review B*, **2008**, 78,	3.3	67
157	In adlayers on c-plane InN surfaces: A polarity-dependent study by x-ray photoemission spectroscopy. *Physical Review B*, **2007**, 76,	3.3	64
156	Visible Light-Driven H2 Production over Highly Dispersed Ruthenia on Rutile TiO2 Nanorods. *ACS Catalysis*, **2016**, 6, 407-417	13.1	63
155	Origin of deep subgap states in amorphous indium gallium zinc oxide: Chemically disordered coordination of oxygen. *Applied Physics Letters*, **2014**, 104, 232108	3.4	61
154	Elucidating the Nature of Pseudo Jahn□Teller Distortions in LixMnPO4: Combining Density Functional Theory with Soft and Hard X-ray Spectroscopy. *Journal of Physical Chemistry C*, **2013**, 117, 10383-10396	3.8	61
153	Evolution of the Electrode□Electrolyte Interface of LiNi0.8Co0.15Al0.05O2 Electrodes Due to Electrochemical and Thermal Stress. *Chemistry of Materials*, **2018**, 30, 958-969	9.6	60
152	Hole-induced insulator-to-metal transition in La1□xSrxCrO3 epitaxial films. *Physical Review B*, **2015**, 91,	3.3	60
151	Understanding the defect chemistry of tin monoxide. *Journal of Materials Chemistry C*, **2013**, 1, 8194	7.1	59
150	Electron depletion at InAs free surfaces: Doping-induced acceptorlike gap states. *Physical Review B*, **2006**, 73,	3.3	59
149	Electrolyte-Induced Surface Transformation and Transition-Metal Dissolution of Fully Delithiated LiNiCoAlO. *Langmuir*, **2017**, 33, 9333-9353	4	57
148	Thermodynamics, Kinetics and Structural Evolution of □LiVOPO4 over Multiple Lithium Intercalation. *Chemistry of Materials*, **2016**, 28, 1794-1805	9.6	56
147	Dissociate lattice oxygen redox reactions from capacity and voltage drops of battery electrodes. *Science Advances*, **2020**, 6, eaaw3871	14.3	55

146	Valence-band structure of InN from x-ray photoemission spectroscopy. *Physical Review B*, **2005**, 72,	3.3	55
145	Surface degradation of Li1−xNi0.80Co0.15Al0.05O2 cathodes: Correlating charge transfer impedance with surface phase transformations. *Applied Physics Letters*, **2016**, 108, 263902	3.4	55
144	Automated generation and ensemble-learned matching of X-ray absorption spectra. *Npj Computational Materials*, **2018**, 4,	10.9	54
143	Adsorption-controlled growth of BiVO4 by molecular-beam epitaxy. *APL Materials*, **2013**, 1, 042112	5.7	54
142	An improved laboratory-based x-ray absorption fine structure and x-ray emission spectrometer for analytical applications in materials chemistry research. *Review of Scientific Instruments*, **2019**, 90, 024106	1.7	51
141	Stability of the M2 phase of vanadium dioxide induced by coherent epitaxial strain. *Physical Review B*, **2016**, 94,	3.3	51
140	Room Temperature Metallic Conductivity in a Metal-Organic Framework Induced by Oxidation. *Journal of the American Chemical Society*, **2019**, 141, 16323-16330	16.4	49
139	Band anticrossing in GaNxSb1−x. *Applied Physics Letters*, **2006**, 89, 111921	3.4	49
138	Photoluminescence spectroscopy of bandgap reduction in dilute InNAs alloys. *Applied Physics Letters*, **2005**, 87, 182114	3.4	47
137	Clean wurtzite InN surfaces prepared with atomic hydrogen. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2005**, 23, 617-620	2.9	47
136	Structural water and disordered structure promote aqueous sodium-ion energy storage in sodium-birnessite. *Nature Communications*, **2019**, 10, 4975	17.4	46
135	Direct evidence of metallicity at ZnO (0001)-(1×1) surfaces from angle-resolved photoemission spectroscopy. *Physical Review B*, **2010**, 81,	3.3	45
134	Band gap reduction in GaNSb alloys due to the anion mismatch. *Applied Physics Letters*, **2005**, 87, 132101	3.4	44
133	Vapor phase polymerization of poly (3,4-ethylenedioxythiophene) on flexible substrates for enhanced transparent electrodes. *Synthetic Metals*, **2011**, 161, 1159-1165	3.6	43
132	Revisiting the charge compensation mechanisms in LiNi0.8Co0.2−yAlyO2 systems. *Materials Horizons*, **2019**, 6, 2112-2123	14.4	41
131	Hierarchical Heterogeneity at the CeOx−TiO2 Interface: Electronic and Geometric Structural Influence on the Photocatalytic Activity of Oxide on Oxide Nanostructures. *Journal of Physical Chemistry C*, **2015**, 150127101000001	3.8	40
130	Three-dimensional ruthenium-doped TiO2 sea urchins for enhanced visible-light-responsive H2 production. *Physical Chemistry Chemical Physics*, **2016**, 18, 15972-9	3.6	40
129	Bi-induced band gap reduction in epitaxial InSbBi alloys. *Applied Physics Letters*, **2014**, 105, 212101	3.4	38

128	Electronic structure of In2O3 from resonant x-ray emission spectroscopy. *Applied Physics Letters*, **2009**, 94, 022105	3.4	38
127	Temperature invariance of InN electron accumulation. *Physical Review B*, **2004**, 70,	3.3	38
126	Transition from electron accumulation to depletion at β-Ga2O3 surfaces: The role of hydrogen and the charge neutrality level. *APL Materials*, **2019**, 7, 022528	5.7	38
125	Role of lone pair electrons in determining the optoelectronic properties of BiCuOSe. *Physical Review B*, **2012**, 85,	3.3	37
124	Indium nitride: Evidence of electron accumulation. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **2004**, 22, 2175		37
123	Enabling multi-electron reaction of ε-VOPO to reach theoretical capacity for lithium-ion batteries. *Chemical Communications*, **2018**, 54, 7802-7805	5.8	36
122	Ultrafast ion transport at a cathode–electrolyte interface and its strong dependence on salt solvation. *Nature Energy*, **2020**, 5, 578-586	62.3	35
121	What is the Role of Nb in Nickel-Rich Layered Oxide Cathodes for Lithium-Ion Batteries?. *ACS Energy Letters*,1377-1382	20.1	34
120	Interfacial Effects in εLixVOPO4 and Evolution of the Electronic Structure. *Chemistry of Materials*, **2015**, 27, 8211-8219	9.6	33
119	Soft X-ray Spectroscopy of C60/Copper Phthalocyanine/MoO3 Interfaces: Role of Reduced MoO3 on Energetic Band Alignment and Improved Performance. *Journal of Physical Chemistry C*, **2010**, 114, 18252-18257	3.8	33
118	Comparative study of bandwidths in copper delafossites from x-ray emission spectroscopy. *Physical Review B*, **2009**, 80,	3.3	33
117	Inversion and accumulation layers at InN surfaces. *Journal of Crystal Growth*, **2006**, 288, 268-272	1.6	33
116	Surface Structural and Chemical Evolution of Layered LiNi0.8Co0.15Al0.05O2 (NCA) under High Voltage and Elevated Temperature Conditions. *Chemistry of Materials*, **2018**, 30, 8431-8445	9.6	32
115	Molybdenum Substituted Vanadyl Phosphate εVOPO4 with Enhanced Two-Electron Transfer Reversibility and Kinetics for Lithium-Ion Batteries. *Chemistry of Materials*, **2016**, 28, 3159-3170	9.6	31
114	Electronic structure of single-crystal rocksalt CdO studied by soft x-ray spectroscopies and ab initio calculations. *Physical Review B*, **2008**, 77,	3.3	30
113	Resonant doping for high mobility transparent conductors: the case of Mo-doped In2O3. *Materials Horizons*, **2020**, 7, 236-243	14.4	30
112	Photoemission evidence for crossover from Peierls-like to Mott-like transition in highly strained VO2. *Physical Review B*, **2012**, 86,	3.3	29
111	Distinction between Intrinsic and X-ray-Induced Oxidized Oxygen States in Li-Rich 3d Layered Oxides and LiAlO2. *Journal of Physical Chemistry C*, **2019**, 123, 13201-13207	3.8	28

110	KVOPO4: A New High Capacity Multielectron Na-Ion Battery Cathode. *Advanced Energy Materials*, **2018**, 8, 1800221	21.8	28
109	Core-level photoemission spectroscopy of nitrogen bonding in GaNxAs1□ alloys. *Applied Physics Letters*, **2004**, 85, 1550-1552	3.4	27
108	Lone-Pair Stabilization in Transparent Amorphous Tin Oxides: A Potential Route to p-Type Conduction Pathways. *Chemistry of Materials*, **2016**, 28, 4706-4713	9.6	26
107	How Bulk Sensitive is Hard X-ray Photoelectron Spectroscopy: Accounting for the Cathode-Electrolyte Interface when Addressing Oxygen Redox. *Journal of Physical Chemistry Letters*, **2020**, 11, 2106-2112	6.4	25
106	Electronic band structure of graphene from resonant soft x-ray spectroscopy: The role of core-hole effects. *Physical Review B*, **2012**, 86,	3.3	25
105	Soft x-ray spectroscopy study of the element and orbital contributions to the electronic structure of copper hexadecafluoro-phthalocyanine. *Physical Review B*, **2010**, 81,	3.3	25
104	Elucidating the factors that determine the open circuit voltage in discrete heterojunction organic photovoltaic cells. *Journal of Materials Chemistry*, **2010**, 20, 1173-1178		25
103	Tuning a strain-induced orbital selective Mott transition in epitaxial VO2. *Physical Review B*, **2016**, 93,	3.3	24
102	Strain dependence of bonding and hybridization across the metal-insulator transition of VO2. *Physical Review B*, **2012**, 85,	3.3	24
101	Elucidating the Mechanistic Origins of Photocatalytic Hydrogen Evolution Mediated by MoS/CdS Quantum-Dot Heterostructures. *ACS Applied Materials & Interfaces*, **2020**, 12, 43728-43740	9.5	24
100	The Anode Challenge for Lithium-Ion Batteries: A Mechanochemically Synthesized Sn-Fe-C Composite Anode Surpasses Graphitic Carbon. *Advanced Science*, **2016**, 3, 1500229	13.6	23
99	Soft x-ray spectroscopic study of the ferromagnetic insulator V0.82Cr0.18O2. *Physical Review B*, **2010**, 82,	3.3	23
98	Electronic structure of the organic semiconductor Alq3 (aluminum tris-8-hydroxyquinoline) from soft x-ray spectroscopies and density functional theory calculations. *Journal of Chemical Physics*, **2008**, 129, 224705	3.9	23
97	Correlated Polyhedral Rotations in the Absence of Polarons during Electrochemical Insertion of Lithium in ReO3. *ACS Energy Letters*, **2018**, 3, 2513-2519	20.1	23
96	Electrochemical Performance of Nanosized Disordered LiVOPO. *ACS Omega*, **2018**, 3, 7310-7323	3.9	22
95	Deep subgap feature in amorphous indium gallium zinc oxide: Evidence against reduced indium. *Physica Status Solidi (A) Applications and Materials Science*, **2015**, 212, 1471-1475	1.6	22
94	Ab-Initio Studies of Electronic and Spectroscopic Properties of MgO, ZnO and CdO. *Journal of the Korean Physical Society*, **2008**, 53, 2811-2815	0.6	22
93	Designing catalysts for water splitting based on electronic structure considerations. *Electronic Structure*, **2020**, 2, 023001	2.6	21

92	Soft X-Ray Spectroscopic Study of Dense Strontium-Doped Lanthanum Manganite Cathodes for Solid Oxide Fuel Cell Applications. *Journal of the Electrochemical Society*, **2011**, 158, B99	3.9	21
91	Influence of Polymorphism on the Electronic Structure of Ga2O3. *Chemistry of Materials*, **2020**, 32, 8460-8470	9.6	21
90	Hole Extraction by Design in Photocatalytic Architectures Interfacing CdSe Quantum Dots with Topochemically Stabilized Tin Vanadium Oxide. *Journal of the American Chemical Society*, **2018**, 140, 17163-17174	16.4	21
89	Structure Evolution and Thermal Stability of High-Energy- Density Li-Ion Battery Cathode Li2VO2F. *Journal of the Electrochemical Society*, **2017**, 164, A1552-A1558	3.9	20
88	Reducing orbital occupancy in VO2 suppresses Mott physics while Peierls distortions persist. *Physical Review B*, **2017**, 96,	3.3	20
87	Soft X-ray spectroscopy study of electronic structure in the organic semiconductor titanyl phthalocyanine (TiO-Pc). *Journal of Materials Chemistry*, **2008**, 18, 1792		20
86	The Middle Road Less Taken: Electronic-Structure-Inspired Design of Hybrid Photocatalytic Platforms for Solar Fuel Generation. *Accounts of Chemical Research*, **2019**, 52, 645-655	24.3	20
85	Understanding the stability of MnPO4. *Journal of Materials Chemistry A*, **2014**, 2, 12827	13	19
84	X-Ray Spectroscopy of Ultra-Thin Oxide/Oxide Heteroepitaxial Films: A Case Study of Single-Nanometer VO2/TiO2. *Materials*, **2015**, 8, 5452-5466	3.5	19
83	Correlating Lithium Hydroxyl Accumulation with Capacity Retention in V2O5 Aerogel Cathodes. *ACS Applied Materials & Interfaces*, **2016**, 8, 11532-8	9.5	19
82	Simultaneous Structural and Electronic Transitions in Epitaxial VO_{2}/TiO_{2}(001). *Physical Review Letters*, **2020**, 124, 196402	7.4	18
81	Mitigating Cation Diffusion Limitations and Intercalation-Induced Framework Transitions in a 1D Tunnel-Structured Polymorph of V2O5. *Chemistry of Materials*, **2017**, 29, 10386-10397	9.6	18
80	Electronic band structure information of GdN extracted from x-ray absorption and emission spectroscopy. *Applied Physics Letters*, **2010**, 96, 032101	3.4	18
79	Electronic structure of the organic semiconductor copper tetraphenylporphyrin (CuTPP). *Applied Surface Science*, **2009**, 256, 720-725	6.7	18
78	Electron accumulation at InN/AlN and InN/GaN interfaces. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2005**, 2, 2246-2249		18
77	Integrating Pb0.33V2O5 Nanowires with CdSe Quantum Dots: Toward Nanoscale Heterostructures with Tunable Interfacial Energetic Offsets for Charge Transfer. *Chemistry of Materials*, **2015**, 27, 2468-2479	9.6	17
76	Electronic Structure of NaxV2O5 (x 0.33) Polycrystalline Films: Growth, Spectroscopy, and Theory. *Journal of Physical Chemistry C*, **2014**, 118, 1081-1094	3.8	17
75	X-ray photoemission studies of the electronic structure of single-crystalline CdO(100). *Superlattices and Microstructures*, **2007**, 42, 197-200	2.8	17

74	Uniform second Li ion intercalation in solid state ?-LiVOPO4. *Applied Physics Letters*, **2016**, 109, 053904	3.4	17
73	Role of disorder in limiting the true multi-electron redox in □LiVOPO4. *Journal of Materials Chemistry A*, **2018**, 6, 20669-20677	13	17
72	Rational synthesis and electrochemical performance of LiVOPO4 polymorphs. *Journal of Materials Chemistry A*, **2019**, 7, 8423-8432	13	16
71	Electronic structure of InN studied using soft x-ray emission, soft x-ray absorption, and quasiparticle band structure calculations. *Physical Review B*, **2007**, 76,	3.3	16
70	Scanning tunnelling spectroscopy of quantized electron accumulation at InxGa1⊠N surfaces. *Physica Status Solidi (A) Applications and Materials Science*, **2006**, 203, 85-92	1.6	16
69	Intrinsic Challenges to the Electrochemical Reversibility of the High Energy Density Copper(II) Fluoride Cathode Material. *ACS Applied Energy Materials*, **2019**, 2, 5243-5253	6.1	15
68	X-ray photoelectron spectra for single-crystal Ti2O3: Experiment and theory. *Physical Review B*, **2017**, 96,	3.3	15
67	Diffuson-driven ultralow thermal conductivity in amorphous Nb2O5 thin films. *Physical Review Materials*, **2019**, 3,	3.2	15
66	Electron lone pair distortion facilitated metal-insulator transition in □Pb0.33V2O5 nanowires. *Applied Physics Letters*, **2014**, 104, 182108	3.4	14
65	What Happens to LiMnPO4 upon Chemical Delithiation?. *Inorganic Chemistry*, **2016**, 55, 4335-43	5.1	14
64	Interconversion of intrinsic defects in SrTiO3(001). *Physical Review B*, **2018**, 97,	3.3	13
63	Orbital anisotropy and low-energy excitations of the quasi-one-dimensional conductor □Sr0.17V2O5. *Physical Review B*, **2011**, 84,	3.3	13
62	Dilute antimonide nitrides for very long wavelength infrared applications **2006**, 6206, 201		13
61	Surface Chemistry Dependence on Aluminum Doping in Ni-rich LiNiCoAlO Cathodes. *Scientific Reports*, **2019**, 9, 17720	4.9	13
60	Accelerated optimization of transparent, amorphous zinc-tin-oxide thin films for optoelectronic applications. *APL Materials*, **2019**, 7, 022509	5.7	12
59	Regeneration of degraded Li-rich layered oxide materials through heat treatment-induced transition metal reordering. *Energy Storage Materials*, **2021**, 35, 99-107	19.4	12
58	Determination of the individual atomic site contribution to the electronic structure of 3,4,9,10-perylene-tetracarboxylic-dianhydride (PTCDA). *Journal of Chemical Physics*, **2013**, 139, 184711	3.9	11
57	Probing the effect of relative molecular orientation on the photovoltaic device performance of an organic bilayer heterojunction using soft x-ray spectroscopies. *Applied Physics Letters*, **2012**, 100, 263302	3.4	11

56	Vanadyl Phosphates AxVOPO4 (A = Li, Na, K) as Multielectron Cathodes for Alkali-Ion Batteries. *Advanced Energy Materials*, **2020**, 10, 2002638	21.8	11
55	Scalable Memdiodes Exhibiting Rectification and Hysteresis for Neuromorphic Computing. *Scientific Reports*, **2018**, 8, 12935	4.9	11
54	Band edge evolution of transparent ZnM2IIIO4 (MIII=Co, Rh, Ir) spinels. *Physical Review B*, **2019**, 100,	3.3	10
53	Oxygen Loss in Layered Oxide Cathodes for Li-Ion Batteries: Mechanisms, Effects, and Mitigation.. *Chemical Reviews*, **2022**,	68.1	10
52	Pushing the limit of 3d transition metal-based layered oxides that use both cation and anion redox for energy storage. *Nature Reviews Materials*,	73.3	10
51	Evidence of a second-order Peierls-driven metal-insulator transition in crystalline NbO2. *Physical Review Materials*, **2019**, 3,	3.2	10
50	Cooperative effects of strain and electron correlation in epitaxial VO 2 and NbO 2. *Journal of Applied Physics*, **2019**, 125, 082539	2.5	10
49	Adsorption-controlled growth and properties of epitaxial SnO films. *Physical Review Materials*, **2019**, 3,	3.2	9
48	Programming Interfacial Energetic Offsets and Charge Transfer in □Pb0.33V2O5/Quantum-Dot Heterostructures: Tuning Valence-Band Edges to Overlap with Midgap States. *Journal of Physical Chemistry C*, **2016**, 120, 28992-29001	3.8	9
47	Electronic and magnetic properties of epitaxial perovskite SrCrO□(0 0 1). *Journal of Physics Condensed Matter*, **2015**, 27, 245605	1.8	8
46	Growth of dilute nitride alloys of GaInSb lattice-matched to GaSb. *Journal of Crystal Growth*, **2007**, 304, 338-341	1.6	8
45	Perspectives for next generation lithium-ion battery cathode materials. *APL Materials*, **2021**, 9, 109201	5.7	8
44	Valence-to-core X-ray emission spectroscopy of vanadium oxide and lithiated vanadyl phosphate materials. *Journal of Materials Chemistry A*, **2020**, 8, 16332-16344	13	8
43	Directly measuring the structural transition pathways of strain-engineered VO thin films. *Nanoscale*, **2020**, 12, 18857-18863	7.7	8
42	Direct observation of delithiation as the origin of analog memristance in LixNbO2. *APL Materials*, **2019**, 7, 071103	5.7	7
41	Evidence of extreme type-III band offset at buried n-type CdO/p-type SnTe interfaces. *Physical Review B*, **2015**, 91,	3.3	7
40	The band structure of WO3 and non-rigid-band behaviour in Na0.67WO3 derived from soft x-ray spectroscopy and density functional theory. *Journal of Physics Condensed Matter*, **2013**, 25, 165501	1.8	7
39	Observation of an inverted band structure near the surface of InN. *Europhysics Letters*, **2008**, 83, 47003	1.6	7

38	Electron spectroscopy of dilute nitrides. *Journal of Physics Condensed Matter*, **2004**, 16, S3201-S3214	1.8	7
37	Whither Mn Oxidation in Mn-Rich Alkali-Excess Cathodes?. *ACS Energy Letters*, **2021**, 6, 1055-1064	20.1	7
36	Structural Changes in a High-Energy Density VO2F Cathode upon Heating and Li Cycling. *ACS Applied Energy Materials*, **2018**, 1, 4514-4521	6.1	7
35	Nonstoichiometry and Defects in Hydrothermally Synthesized □LiVOPO4. *ACS Applied Energy Materials*, **2019**, 2, 4792-4800	6.1	6
34	The local electronic structure of tin phthalocyanine studied by resonant soft X-ray emission spectroscopies. *Applied Surface Science*, **2008**, 255, 764-766	6.7	6
33	Dual-stage K+ ion intercalation in V2O5-conductive polymer composites. *Journal of Materials Chemistry A*, **2021**, 9, 15629-15636	13	6
32	Potassium and ion beam induced electron accumulation in InN. *Surface Science*, **2015**, 632, 154-157	1.8	5
31	Comprehensive study of a versatile polyol synthesis approach for cathode materials for Li-ion batteries. *Nano Research*, **2019**, 12, 2238-2249	10	5
30	First-principles calculation of resonant x-ray emission spectra applied to ZnO. *Physical Review B*, **2011**, 83,	3.3	5
29	Electrode Reaction Mechanism of Ag2VO2PO4 Cathode. *Chemistry of Materials*, **2016**, 28, 3428-3434	9.6	5
28	Could Irradiation Introduce Oxidized Oxygen Signals in Resonant Inelastic X-ray Scattering of Battery Electrodes?. *Journal of Physical Chemistry Letters*, **2021**, 12, 1138-1143	6.4	5
27	Experimental considerations to study Li-excess disordered rock salt cathode materials. *Journal of Materials Chemistry A*, **2021**, 9, 1720-1732	13	5
26	Doping-dependence of subband energies in quantized electron accumulation at InN surfaces. *Physica Status Solidi (A) Applications and Materials Science*, **2007**, 204, 536-542	1.6	4
25	InN: Fermi level stabilization by low-energy ion bombardment. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2006**, 3, 1841-1845		4
24	The morphology of VO/TiO(001): terraces, facets, and cracks. *Scientific Reports*, **2020**, 10, 22374	4.9	4
23	Structural Phase Transitions of NbO2: Bulk versus Surface. *Chemistry of Materials*, **2021**, 33, 1416-1425	9.6	4
22	Teaching advanced science concepts through Freshman Research Immersion. *European Journal of Physics*, **2017**, 38, 025704	0.8	3
21	Mapping Competitive Reduction upon Charging in LiNi0.8Co0.15Al0.05O2 Primary Particles. *Chemistry of Materials*, **2020**, 32, 6161-6175	9.6	3

20	Transition Metal Migration Can Facilitate Ionic Diffusion in Defect Garnet-Based Intercalation Electrodes. *ACS Energy Letters*, **2020**, 5, 1448-1455	20.1	3
19	Electrochemical and Thermal Stress of LiNi0.8Co0.15Al0.05O2Electrodes: Evolution of Aluminum Surface Environments. *ECS Transactions*, **2017**, 80, 197-206	1	3
18	Low-energy V t2g orbital excitations in NdVO3. *Journal of Physics Condensed Matter*, **2014**, 26, 455603	1.8	3
17	Electronic structure of N,NQethylene-bis(1,1,1-trifluoropentane-2,4-dioneiminato)-copper(II) (Cu-TFAC), from soft X-ray spectroscopies and density functional theory calculations. *Physical Chemistry Chemical Physics*, **2010**, 12, 3171-7	3.6	3
16	Experimental and Theoretical Study of the Electronic Structures of Lanthanide Indium Perovskites LnInO. *Journal of Physical Chemistry C*, **2021**, 125, 6387-6400	3.8	3
15	Digital Tuning of the Transition Temperature of Epitaxial VO2 Thin Films on MgF2 Substrates by Strain Engineering. *Advanced Materials Interfaces*, **2021**, 8, 2001790	4.6	3
14	Role of V-V dimers on structural, electronic, magnetic, and vibrational properties of VO2 by first-principles simulations and Raman spectroscopic analysis. *Physical Review B*, **2021**, 103,	3.3	3
13	Type-II heterostructures of □VO nanowires interfaced with cadmium chalcogenide quantum dots: Programmable energetic offsets, ultrafast charge transfer, and photocatalytic hydrogen evolution. *Journal of Chemical Physics*, **2019**, 151, 224702	3.9	3
12	Structure, Composition, and Electrochemistry of Chromium-Substituted □LiVOPO4. *ACS Applied Energy Materials*, **2021**, 4, 1421-1430	6.1	3
11	Microwave-assisted solvothermal synthesis of LiVyM1□OPO4 (M = Mn, Cr, Ti, Zr, Nb, Mo, W) cathode materials for lithium-ion batteries. *Journal of Materials Chemistry A*, **2021**, 9, 6933-6944	13	3
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