

Louis F J Piper

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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	Oxygen Loss in Layered Oxide Cathodes for Li-Ion Batteries: Mechanisms, Effects, and Mitigation.. <i>Chemical Reviews</i> , 2022 ,	68.1	10
180	Laboratory-based Hard X-ray Photoelectron Spectroscopy for Fundamental and Industrial Research. <i>Vacuum and Surface Science</i> , 2021 , 64, 493-498	0	1
179	Perspectives for next generation lithium-ion battery cathode materials. <i>APL Materials</i> , 2021 , 9, 109201	5.7	8
178	Experimental and Theoretical Study of the Electronic Structures of Lanthanide Indium Perovskites LnInO. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 6387-6400	3.8	3
177	Digital Tuning of the Transition Temperature of Epitaxial VO ₂ Thin Films on MgF ₂ Substrates by Strain Engineering. <i>Advanced Materials Interfaces</i> , 2021 , 8, 2001790	4.6	3
176	Operando XAS to Illustrate the Importance of Electronic Conductivity in Vanadyl Phosphate Systems. <i>Journal of the Electrochemical Society</i> , 2021 , 168, 050502	3.9	0
175	An Electrochemical Study on NH ₄ VOPO ₄ : Can Ion-Exchange Improve Side Reactions?. <i>Journal of the Electrochemical Society</i> , 2021 , 168, 050513	3.9	1
174	Enhanced High-Rate Performance of Nanosized Single Crystal VOPO ₄ with Niobium Substitution for Lithium-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2021 , 168, 060519	3.9	1
173	Role of V-V dimers on structural, electronic, magnetic, and vibrational properties of VO ₂ by first-principles simulations and Raman spectroscopic analysis. <i>Physical Review B</i> , 2021 , 103,	3.3	3
172	Electrochemical Oxidative Fluorination of an Oxide Perovskite. <i>Chemistry of Materials</i> , 2021 , 33, 5757-5768	3.8	2
171	Regeneration of degraded Li-rich layered oxide materials through heat treatment-induced transition metal reordering. <i>Energy Storage Materials</i> , 2021 , 35, 99-107	19.4	12
170	Could Irradiation Introduce Oxidized Oxygen Signals in Resonant Inelastic X-ray Scattering of Battery Electrodes?. <i>Journal of Physical Chemistry Letters</i> , 2021 , 12, 1138-1143	6.4	5
169	Dual-stage K ⁺ ion intercalation in V ₂ O ₅ -conductive polymer composites. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 15629-15636	13	6
168	Experimental considerations to study Li-excess disordered rock salt cathode materials. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 1720-1732	13	5
167	Electrochemical Utilization of Iron IV in the Li _{1.3} Fe _{0.4} Nb _{0.3} O ₂ Disordered Rocksalt Cathode. <i>Batteries and Supercaps</i> , 2021 , 4, 771-777	5.6	1
166	Whither Mn Oxidation in Mn-Rich Alkali-Excess Cathodes?. <i>ACS Energy Letters</i> , 2021 , 6, 1055-1064	20.1	7
165	Structure, Composition, and Electrochemistry of Chromium-Substituted LiVOPO ₄ . <i>ACS Applied Energy Materials</i> , 2021 , 4, 1421-1430	6.1	3

164	Structural Phase Transitions of NbO ₂ : Bulk versus Surface. <i>Chemistry of Materials</i> , 2021 , 33, 1416-1425	9.6	4
163	Microwave-assisted solvothermal synthesis of LiV _{1-x} M _x VOPO ₄ (M = Mn, Cr, Ti, Zr, Nb, Mo, W) cathode materials for lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 6933-6944	13	3
162	Simultaneous Structural and Electronic Transitions in Epitaxial VO ₂ /TiO ₂ (001). <i>Physical Review Letters</i> , 2020 , 124, 196402	7.4	18
161	Mapping Competitive Reduction upon Charging in LiNi _{0.8} Co _{0.15} Al _{0.05} O ₂ Primary Particles. <i>Chemistry of Materials</i> , 2020 , 32, 6161-6175	9.6	3
160	Designing catalysts for water splitting based on electronic structure considerations. <i>Electronic Structure</i> , 2020 , 2, 023001	2.6	21
159	Ultrafast ion transport at a cathode electrolyte interface and its strong dependence on salt solvation. <i>Nature Energy</i> , 2020 , 5, 578-586	62.3	35
158	Dissociate lattice oxygen redox reactions from capacity and voltage drops of battery electrodes. <i>Science Advances</i> , 2020 , 6, eaaw3871	14.3	55
157	How Bulk Sensitive is Hard X-ray Photoelectron Spectroscopy: Accounting for the Cathode-Electrolyte Interface when Addressing Oxygen Redox. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 2106-2112	6.4	25
156	Quantifying the Capacity Contributions during Activation of Li ₂ MnO ₃ . <i>ACS Energy Letters</i> , 2020 , 5, 634-641	41.1	68
155	Transition Metal Migration Can Facilitate Ionic Diffusion in Defect Garnet-Based Intercalation Electrodes. <i>ACS Energy Letters</i> , 2020 , 5, 1448-1455	20.1	3
154	The morphology of VO ₂ /TiO ₂ (001): terraces, facets, and cracks. <i>Scientific Reports</i> , 2020 , 10, 22374	4.9	4
153	Valence-to-core X-ray emission spectroscopy of vanadium oxide and lithiated vanadyl phosphate materials. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 16332-16344	13	8
152	Vanadyl Phosphates AxVOPO ₄ (A = Li, Na, K) as Multielectron Cathodes for Alkali-Ion Batteries. <i>Advanced Energy Materials</i> , 2020 , 10, 2002638	21.8	11
151	Directly measuring the structural transition pathways of strain-engineered VO thin films. <i>Nanoscale</i> , 2020 , 12, 18857-18863	7.7	8
150	Influence of Polymorphism on the Electronic Structure of Ga ₂ O ₃ . <i>Chemistry of Materials</i> , 2020 , 32, 8460-8470	9.6	21
149	Elucidating the Mechanistic Origins of Photocatalytic Hydrogen Evolution Mediated by MoS ₂ /CdS Quantum-Dot Heterostructures. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 43728-43740	9.5	24
148	Resonant doping for high mobility transparent conductors: the case of Mo-doped In ₂ O ₃ . <i>Materials Horizons</i> , 2020 , 7, 236-243	14.4	30
147	Energy Spotlight. <i>ACS Energy Letters</i> , 2019 , 4, 2763-2769	20.1	0

146	Band edge evolution of transparent ZnM ₂ IIIIO ₄ (MIII=Co, Rh, Ir) spinels. <i>Physical Review B</i> , 2019 , 100,	3.3	10
145	Room Temperature Metallic Conductivity in a Metal-Organic Framework Induced by Oxidation. <i>Journal of the American Chemical Society</i> , 2019 , 141, 16323-16330	16.4	49
144	Intrinsic Challenges to the Electrochemical Reversibility of the High Energy Density Copper(II) Fluoride Cathode Material. <i>ACS Applied Energy Materials</i> , 2019 , 2, 5243-5253	6.1	15
143	Nonstoichiometry and Defects in Hydrothermally Synthesized LiVOPO ₄ . <i>ACS Applied Energy Materials</i> , 2019 , 2, 4792-4800	6.1	6
142	Distinction between Intrinsic and X-ray-Induced Oxidized Oxygen States in Li-Rich 3d Layered Oxides and LiAlO ₂ . <i>Journal of Physical Chemistry C</i> , 2019 , 123, 13201-13207	3.8	28
141	Rational synthesis and electrochemical performance of LiVOPO ₄ polymorphs. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 8423-8432	13	16
140	An improved laboratory-based x-ray absorption fine structure and x-ray emission spectrometer for analytical applications in materials chemistry research. <i>Review of Scientific Instruments</i> , 2019 , 90, 024106	1.7	51
139	Comprehensive study of a versatile polyol synthesis approach for cathode materials for Li-ion batteries. <i>Nano Research</i> , 2019 , 12, 2238-2249	10	5
138	Direct observation of delithiation as the origin of analog memristance in Li _x NbO ₂ . <i>APL Materials</i> , 2019 , 7, 071103	5.7	7
137	Revisiting the charge compensation mechanisms in LiNi _{0.8} Co _{0.2} Al _y O ₂ systems. <i>Materials Horizons</i> , 2019 , 6, 2112-2123	14.4	41
136	Structural water and disordered structure promote aqueous sodium-ion energy storage in sodium-birnessite. <i>Nature Communications</i> , 2019 , 10, 4975	17.4	46
135	Diffusion-driven ultralow thermal conductivity in amorphous Nb ₂ O ₅ thin films. <i>Physical Review Materials</i> , 2019 , 3,	3.2	15
134	Evidence of a second-order Peierls-driven metal-insulator transition in crystalline NbO ₂ . <i>Physical Review Materials</i> , 2019 , 3,	3.2	10
133	Adsorption-controlled growth and properties of epitaxial SnO films. <i>Physical Review Materials</i> , 2019 , 3,	3.2	9
132	Cooperative effects of strain and electron correlation in epitaxial VO ₂ and NbO ₂ . <i>Journal of Applied Physics</i> , 2019 , 125, 082539	2.5	10
131	Transition from electron accumulation to depletion at Ga ₂ O ₃ surfaces: The role of hydrogen and the charge neutrality level. <i>APL Materials</i> , 2019 , 7, 022528	5.7	38
130	Surface Chemistry Dependence on Aluminum Doping in Ni-rich LiNiCoAlO Cathodes. <i>Scientific Reports</i> , 2019 , 9, 17720	4.9	13
129	Type-II heterostructures of ZnO nanowires interfaced with cadmium chalcogenide quantum dots: Programmable energetic offsets, ultrafast charge transfer, and photocatalytic hydrogen evolution. <i>Journal of Chemical Physics</i> , 2019 , 151, 224702	3.9	3

128	Accelerated optimization of transparent, amorphous zinc-tin-oxide thin films for optoelectronic applications. <i>APL Materials</i> , 2019 , 7, 022509	5.7	12
127	High Reversibility of Lattice Oxygen Redox Quantified by Direct Bulk Probes of Both Anionic and Cationic Redox Reactions. <i>Joule</i> , 2019 , 3, 518-541	27.8	156
126	The Middle Road Less Taken: Electronic-Structure-Inspired Design of Hybrid Photocatalytic Platforms for Solar Fuel Generation. <i>Accounts of Chemical Research</i> , 2019 , 52, 645-655	24.3	20
125	Electronic and transport properties of Li-doped NiO epitaxial thin films. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 2275-2282	7.1	85
124	Evolution of the Electrode/Electrolyte Interface of LiNi _{0.8} Co _{0.15} Al _{0.05} O ₂ Electrodes Due to Electrochemical and Thermal Stress. <i>Chemistry of Materials</i> , 2018 , 30, 958-969	9.6	60
123	Automated generation and ensemble-learned matching of X-ray absorption spectra. <i>Npj Computational Materials</i> , 2018 , 4,	10.9	54
122	Electrochemical Performance of Nanosized Disordered LiVOPO. <i>ACS Omega</i> , 2018 , 3, 7310-7323	3.9	22
121	KVOPO ₄ : A New High Capacity Multielectron Na-Ion Battery Cathode. <i>Advanced Energy Materials</i> , 2018 , 8, 1800221	21.8	28
120	Interconversion of intrinsic defects in SrTiO ₃ (001). <i>Physical Review B</i> , 2018 , 97,	3.3	13
119	Enabling multi-electron reaction of LiVOPO to reach theoretical capacity for lithium-ion batteries. <i>Chemical Communications</i> , 2018 , 54, 7802-7805	5.8	36
118	Scalable Memdiodes Exhibiting Rectification and Hysteresis for Neuromorphic Computing. <i>Scientific Reports</i> , 2018 , 8, 12935	4.9	11
117	Surface Structural and Chemical Evolution of Layered LiNi _{0.8} Co _{0.15} Al _{0.05} O ₂ (NCA) under High Voltage and Elevated Temperature Conditions. <i>Chemistry of Materials</i> , 2018 , 30, 8431-8445	9.6	32
116	Hole Extraction by Design in Photocatalytic Architectures Interfacing CdSe Quantum Dots with Topochemically Stabilized Tin Vanadium Oxide. <i>Journal of the American Chemical Society</i> , 2018 , 140, 17163-17174	16.4	21
115	Role of disorder in limiting the true multi-electron redox in LiVOPO ₄ . <i>Journal of Materials Chemistry A</i> , 2018 , 6, 20669-20677	13	17
114	Correlated Polyhedral Rotations in the Absence of Polarons during Electrochemical Insertion of Lithium in ReO ₃ . <i>ACS Energy Letters</i> , 2018 , 3, 2513-2519	20.1	23
113	Structural Changes in a High-Energy Density VO ₂ F Cathode upon Heating and Li Cycling. <i>ACS Applied Energy Materials</i> , 2018 , 1, 4514-4521	6.1	7
112	Teaching advanced science concepts through Freshman Research Immersion. <i>European Journal of Physics</i> , 2017 , 38, 025704	0.8	3
111	High-efficiency in situ resonant inelastic x-ray scattering (iRIXS) endstation at the Advanced Light Source. <i>Review of Scientific Instruments</i> , 2017 , 88, 033106	1.7	86

110	Structure Evolution and Thermal Stability of High-Energy- Density Li-Ion Battery Cathode Li ₂ VO ₂ F. <i>Journal of the Electrochemical Society</i> , 2017 , 164, A1552-A1558	3.9	20
109	Electrolyte-Induced Surface Transformation and Transition-Metal Dissolution of Fully Delithiated LiNiCoAlO. <i>Langmuir</i> , 2017 , 33, 9333-9353	4	57
108	Reducing orbital occupancy in VO ₂ suppresses Mott physics while Peierls distortions persist. <i>Physical Review B</i> , 2017 , 96,	3.3	20
107	Reaction Heterogeneity in LiNi _{0.8} Co _{0.15} Al _{0.05} O ₂ Induced by Surface Layer. <i>Chemistry of Materials</i> , 2017 , 29, 7345-7352	9.6	108
106	Mitigating Cation Diffusion Limitations and Intercalation-Induced Framework Transitions in a 1D Tunnel-Structured Polymorph of V ₂ O ₅ . <i>Chemistry of Materials</i> , 2017 , 29, 10386-10397	9.6	18
105	Editors' Choice: Growth of Ambient Induced Surface Impurity Species on Layered Positive Electrode Materials and Impact on Electrochemical Performance. <i>Journal of the Electrochemical Society</i> , 2017 , 164, A3727-A3741	3.9	104
104	X-ray photoelectron spectra for single-crystal Ti ₂ O ₃ : Experiment and theory. <i>Physical Review B</i> , 2017 , 96,	3.3	15
103	Electrochemical and Thermal Stress of LiNi _{0.8} Co _{0.15} Al _{0.05} O ₂ Electrodes: Evolution of Aluminum Surface Environments. <i>ECS Transactions</i> , 2017 , 80, 197-206	1	3
102	Stability of the M ₂ phase of vanadium dioxide induced by coherent epitaxial strain. <i>Physical Review B</i> , 2016 , 94,	3.3	51
101	Tuning a strain-induced orbital selective Mott transition in epitaxial VO ₂ . <i>Physical Review B</i> , 2016 , 93,	3.3	24
100	Direct Observation of Electrostatically Driven Band Gap Renormalization in a Degenerate Perovskite Transparent Conducting Oxide. <i>Physical Review Letters</i> , 2016 , 116, 027602	7.4	83
99	Mapping polaronic states and lithiation gradients in individual V ₂ O ₅ nanowires. <i>Nature Communications</i> , 2016 , 7, 12022	17.4	85
98	Lone-Pair Stabilization in Transparent Amorphous Tin Oxides: A Potential Route to p-Type Conduction Pathways. <i>Chemistry of Materials</i> , 2016 , 28, 4706-4713	9.6	26
97	Visible Light-Driven H ₂ Production over Highly Dispersed Ruthenium on Rutile TiO ₂ Nanorods. <i>ACS Catalysis</i> , 2016 , 6, 407-417	13.1	63
96	The Anode Challenge for Lithium-Ion Batteries: A Mechanochemically Synthesized Sn-Fe-C Composite Anode Surpasses Graphitic Carbon. <i>Advanced Science</i> , 2016 , 3, 1500229	13.6	23
95	Thermodynamics, Kinetics and Structural Evolution of LiVPO ₄ over Multiple Lithium Intercalation. <i>Chemistry of Materials</i> , 2016 , 28, 1794-1805	9.6	56
94	Uniform second Li ion intercalation in solid state α -LiVPO ₄ . <i>Applied Physics Letters</i> , 2016 , 109, 053904	3.4	17
93	Programming Interfacial Energetic Offsets and Charge Transfer in Pb _{0.33} V ₂ O ₅ /Quantum-Dot Heterostructures: Tuning Valence-Band Edges to Overlap with Midgap States. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 28992-29001	3.8	9

92	Surface degradation of $\text{Li}_{1-x}\text{Ni}_{0.80}\text{Co}_{0.15}\text{Al}_{0.05}\text{O}_2$ cathodes: Correlating charge transfer impedance with surface phase transformations. <i>Applied Physics Letters</i> , 2016 , 108, 263902	3.4	55
91	Three-dimensional ruthenium-doped TiO_2 sea urchins for enhanced visible-light-responsive H_2 production. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 15972-9	3.6	40
90	What Happens to LiMnPO_4 upon Chemical Delithiation?. <i>Inorganic Chemistry</i> , 2016 , 55, 4335-43	5.1	14
89	Molybdenum Substituted Vanadyl Phosphate VVOPO_4 with Enhanced Two-Electron Transfer Reversibility and Kinetics for Lithium-Ion Batteries. <i>Chemistry of Materials</i> , 2016 , 28, 3159-3170	9.6	31
88	Correlating Lithium Hydroxyl Accumulation with Capacity Retention in V_2O_5 Aerogel Cathodes. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 11532-8	9.5	19
87	Electrode Reaction Mechanism of $\text{Ag}_2\text{VO}_2\text{PO}_4$ Cathode. <i>Chemistry of Materials</i> , 2016 , 28, 3428-3434	9.6	5
86	Integrating $\text{Pb}_{0.33}\text{V}_2\text{O}_5$ Nanowires with CdSe Quantum Dots: Toward Nanoscale Heterostructures with Tunable Interfacial Energetic Offsets for Charge Transfer. <i>Chemistry of Materials</i> , 2015 , 27, 2468-2479	9.6	17
85	Potassium and ion beam induced electron accumulation in InN . <i>Surface Science</i> , 2015 , 632, 154-157	1.8	5
84	Band Gap Dependence on Cation Disorder in ZnSnN_2 Solar Absorber. <i>Advanced Energy Materials</i> , 2015 , 5, 1501462	21.8	75
83	Hole-induced insulator-to-metal transition in $\text{La}_{1-x}\text{Sr}_x\text{CrO}_3$ epitaxial films. <i>Physical Review B</i> , 2015 , 91,	3.3	60
82	Evidence of extreme type-III band offset at buried n-type CdO /p-type SnTe interfaces. <i>Physical Review B</i> , 2015 , 91,	3.3	7
81	Deep subgap feature in amorphous indium gallium zinc oxide: Evidence against reduced indium. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2015 , 212, 1471-1475	1.6	22
80	Perovskite Sr-Doped LaCrO_3 as a New p-Type Transparent Conducting Oxide. <i>Advanced Materials</i> , 2015 , 27, 5191-5	24	125
79	X-Ray Spectroscopy of Ultra-Thin Oxide/Oxide Heteroepitaxial Films: A Case Study of Single-Nanometer VO_2/TiO_2 . <i>Materials</i> , 2015 , 8, 5452-5466	3.5	19
78	Electronic and magnetic properties of epitaxial perovskite SrCrO_3 (0 0 1). <i>Journal of Physics Condensed Matter</i> , 2015 , 27, 245605	1.8	8
77	Interfacial Effects in Li_xVOPO_4 and Evolution of the Electronic Structure. <i>Chemistry of Materials</i> , 2015 , 27, 8211-8219	9.6	33
76	Hierarchical Heterogeneity at the $\text{CeO}_x/\text{TiO}_2$ Interface: Electronic and Geometric Structural Influence on the Photocatalytic Activity of Oxide on Oxide Nanostructures. <i>Journal of Physical Chemistry C</i> , 2015 , 150127101000001	3.8	40
75	Electronic Structure of $\text{Li}_{1-x}\text{V}_2\text{O}_5$ ($x \in [0, 0.33]$) Polycrystalline Films: Growth, Spectroscopy, and Theory. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 1081-1094	3.8	17

74	Understanding the stability of MnPO ₄ . <i>Journal of Materials Chemistry A</i> , 2014 , 2, 12827	13	19
73	Low-energy V t _{2g} orbital excitations in NdVO ₃ . <i>Journal of Physics Condensed Matter</i> , 2014 , 26, 455603	1.8	3
72	Bi-induced band gap reduction in epitaxial InSbBi alloys. <i>Applied Physics Letters</i> , 2014 , 105, 212101	3.4	38
71	Origin of deep subgap states in amorphous indium gallium zinc oxide: Chemically disordered coordination of oxygen. <i>Applied Physics Letters</i> , 2014 , 104, 232108	3.4	61
70	Electron lone pair distortion facilitated metal-insulator transition in EPb _{0.33} V ₂ O ₅ nanowires. <i>Applied Physics Letters</i> , 2014 , 104, 182108	3.4	14
69	Characterization of Tin Oxide Grown by Molecular Beam Epitaxy. <i>Materials Research Society Symposia Proceedings</i> , 2014 , 1633, 13-18		1
68	Nature of the metal insulator transition in ultrathin epitaxial vanadium dioxide. <i>Nano Letters</i> , 2013 , 13, 4857-61	11.5	77
67	Understanding the defect chemistry of tin monoxide. <i>Journal of Materials Chemistry C</i> , 2013 , 1, 8194	7.1	59
66	La-doped BaSnO ₃ Degenerate perovskite transparent conducting oxide: Evidence from synchrotron x-ray spectroscopy. <i>Applied Physics Letters</i> , 2013 , 103, 042105	3.4	74
65	Origin of the Bipolar Doping Behavior of SnO from X-ray Spectroscopy and Density Functional Theory. <i>Chemistry of Materials</i> , 2013 , 25, 3114-3123	9.6	107
64	Adsorption-controlled growth of BiVO ₄ by molecular-beam epitaxy. <i>APL Materials</i> , 2013 , 1, 042112	5.7	54
63	The band structure of WO ₃ and non-rigid-band behaviour in Na _{0.67} WO ₃ derived from soft x-ray spectroscopy and density functional theory. <i>Journal of Physics Condensed Matter</i> , 2013 , 25, 165501	1.8	7
62	Elucidating the Nature of Pseudo Jahn-Teller Distortions in Li _x MnPO ₄ : Combining Density Functional Theory with Soft and Hard X-ray Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 10383-10396	3.8	61
61	Determination of the individual atomic site contribution to the electronic structure of 3,4,9,10-perylene-tetracarboxylic-dianhydride (PTCDA). <i>Journal of Chemical Physics</i> , 2013 , 139, 184711	3.9	11
60	Electronic band structure of graphene from resonant soft x-ray spectroscopy: The role of core-hole effects. <i>Physical Review B</i> , 2012 , 86,	3.3	25
59	Role of lone pair electrons in determining the optoelectronic properties of BiCuOSe. <i>Physical Review B</i> , 2012 , 85,	3.3	37
58	Photoemission evidence for crossover from Peierls-like to Mott-like transition in highly strained VO ₂ . <i>Physical Review B</i> , 2012 , 86,	3.3	29
57	Strain dependence of bonding and hybridization across the metal-insulator transition of VO ₂ . <i>Physical Review B</i> , 2012 , 85,	3.3	24

56	Probing the effect of relative molecular orientation on the photovoltaic device performance of an organic bilayer heterojunction using soft x-ray spectroscopies. <i>Applied Physics Letters</i> , 2012 , 100, 263302 ^{3,4}	3.4	11
55	First-principles calculation of resonant x-ray emission spectra applied to ZnO. <i>Physical Review B</i> , 2011 , 83,	3.3	5
54	Vapor phase polymerization of poly (3,4-ethylenedioxythiophene) on flexible substrates for enhanced transparent electrodes. <i>Synthetic Metals</i> , 2011 , 161, 1159-1165	3.6	43
53	The nature of electron lone pairs in BiVO ₄ . <i>Applied Physics Letters</i> , 2011 , 98, 212110	3.4	81
52	Soft X-Ray Spectroscopic Study of Dense Strontium-Doped Lanthanum Manganite Cathodes for Solid Oxide Fuel Cell Applications. <i>Journal of the Electrochemical Society</i> , 2011 , 158, B99	3.9	21
51	Orbital anisotropy and low-energy excitations of the quasi-one-dimensional conductor Bi _{0.17} V ₂ O ₅ . <i>Physical Review B</i> , 2011 , 84,	3.3	13
50	Electronic band structure information of GdN extracted from x-ray absorption and emission spectroscopy. <i>Applied Physics Letters</i> , 2010 , 96, 032101	3.4	18
49	Direct evidence of metallicity at ZnO (0001) (111) surfaces from angle-resolved photoemission spectroscopy. <i>Physical Review B</i> , 2010 , 81,	3.3	45
48	Soft x-ray spectroscopic study of the ferromagnetic insulator V _{0.82} Cr _{0.18} O ₂ . <i>Physical Review B</i> , 2010 , 82,	3.3	23
47	Soft x-ray spectroscopy study of the element and orbital contributions to the electronic structure of copper hexadecafluoro-phthalocyanine. <i>Physical Review B</i> , 2010 , 81,	3.3	25
46	Electronic Structure of C ₆₀ /Phthalocyanine/ITO Interfaces Studied using Soft X-ray Spectroscopies. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 1928-1933	3.8	91
45	Soft X-ray Spectroscopy of C ₆₀ /Copper Phthalocyanine/MoO ₃ Interfaces: Role of Reduced MoO ₃ on Energetic Band Alignment and Improved Performance. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 18252-18257	3.8	33
44	Elucidating the factors that determine the open circuit voltage in discrete heterojunction organic photovoltaic cells. <i>Journal of Materials Chemistry</i> , 2010 , 20, 1173-1178		25
43	Electronic structure of N,N'-ethylene-bis(1,1,1-trifluoropentane-2,4-dioneiminato)-copper(II) (Cu-TFAC), from soft X-ray spectroscopies and density functional theory calculations. <i>Physical Chemistry Chemical Physics</i> , 2010 , 12, 3171-7	3.6	3
42	Electronic structure of In ₂ O ₃ from resonant x-ray emission spectroscopy. <i>Applied Physics Letters</i> , 2009 , 94, 022105	3.4	38
41	SURFACE SEGREGATION STUDIES OF SOFC CATHODES: COMBINING SOFT X-RAYS AND ELECTROCHEMICAL IMPEDENCE SPECTROSCOPY. <i>Materials Research Society Symposia Proceedings</i> , 2009 , 1217, 1		
40	Electronic structure of the organic semiconductor copper tetraphenylporphyrin (CuTPP). <i>Applied Surface Science</i> , 2009 , 256, 720-725	6.7	18
39	Comparative study of bandwidths in copper delafossites from x-ray emission spectroscopy. <i>Physical Review B</i> , 2009 , 80,	3.3	33

38	X-ray spectroscopic study of the electronic structure of CuCrO ₂ . <i>Physical Review B</i> , 2009 , 79,	3.3	82
37	Electronic structure of the organic semiconductor Alq ₃ (aluminum tris-8-hydroxyquinoline) from soft x-ray spectroscopies and density functional theory calculations. <i>Journal of Chemical Physics</i> , 2008 , 129, 224705	3.9	23
36	Nature of the band gap of In ₂ O ₃ revealed by first-principles calculations and x-ray spectroscopy. <i>Physical Review Letters</i> , 2008 , 100, 167402	7.4	498
35	Soft X-ray spectroscopy study of electronic structure in the organic semiconductor titanyl phthalocyanine (TiO-Pc). <i>Journal of Materials Chemistry</i> , 2008 , 18, 1792		20
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