

# Dennis L Nordlund

## List of Publications by Citations

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313  
papers

21,276  
citations

70  
h-index

138  
g-index

324  
ext. papers

24,361  
ext. citations

9.3  
avg, IF

6.65  
L-index

#	Paper	IF	Citations
313	Lattice-strain control of the activity in dealloyed core-shell fuel cell catalysts. <i>Nature Chemistry</i> , <b>2010</b> , 2, 454-60	17.6	2116
312	The structure of the first coordination shell in liquid water. <i>Science</i> , <b>2004</b> , 304, 995-9	33.3	1170
311	Ultra-high mobility transparent organic thin film transistors grown by an off-centre spin-coating method. <i>Nature Communications</i> , <b>2014</b> , 5, 3005	17.4	975
310	Surface reconstruction and chemical evolution of stoichiometric layered cathode materials for lithium-ion batteries. <i>Nature Communications</i> , <b>2014</b> , 5, 3529	17.4	860
309	Janus monolayers of transition metal dichalcogenides. <i>Nature Nanotechnology</i> , <b>2017</b> , 12, 744-749	28.7	828
308	Visualizing individual nitrogen dopants in monolayer graphene. <i>Science</i> , <b>2011</b> , 333, 999-1003	33.3	697
307	P3HT/PCBM bulk heterojunction organic photovoltaics: correlating efficiency and morphology. <i>Nano Letters</i> , <b>2011</b> , 11, 561-7	11.5	511
306	The inhomogeneous structure of water at ambient conditions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2009</b> , 106, 15214-8	11.5	468
305	Structure and bonding of water on Pt(111). <i>Physical Review Letters</i> , <b>2002</b> , 89, 276102	7.4	462
304	Connecting dopant bond type with electronic structure in N-doped graphene. <i>Nano Letters</i> , <b>2012</b> , 12, 4025-31	11.5	381
303	Ultrafast X-ray probing of water structure below the homogeneous ice nucleation temperature. <i>Nature</i> , <b>2014</b> , 510, 381-4	50.4	325
302	Synchrotron X-ray Analytical Techniques for Studying Materials Electrochemistry in Rechargeable Batteries. <i>Chemical Reviews</i> , <b>2017</b> , 117, 13123-13186	68.1	291
301	Dendritic core-shell nickel-iron-copper metal/metal oxide electrode for efficient electrocatalytic water oxidation. <i>Nature Communications</i> , <b>2018</b> , 9, 381	17.4	241
300	Orbital-specific mapping of the ligand exchange dynamics of Fe(CO) <sub>5</sub> in solution. <i>Nature</i> , <b>2015</b> , 520, 78-81	81.4	211
299	Targeted Ligand-Exchange Chemistry on Cesium Lead Halide Perovskite Quantum Dots for High-Efficiency Photovoltaics. <i>Journal of the American Chemical Society</i> , <b>2018</b> , 140, 10504-10513	16.4	208
298	Designing Boron Nitride Islands in Carbon Materials for Efficient Electrochemical Synthesis of Hydrogen Peroxide. <i>Journal of the American Chemical Society</i> , <b>2018</b> , 140, 7851-7859	16.4	184
297	Understanding interactions between manganese oxide and gold that lead to enhanced activity for electrocatalytic water oxidation. <i>Journal of the American Chemical Society</i> , <b>2014</b> , 136, 4920-6	16.4	182

296	Elucidating anionic oxygen activity in lithium-rich layered oxides. <i>Nature Communications</i> , <b>2018</b> , 9, 947	17.4	181
295	Metal segregation in hierarchically structured cathode materials for high-energy lithium batteries. <i>Nature Energy</i> , <b>2016</b> , 1,	62.3	179
294	Metal-oxygen decoordination stabilizes anion redox in Li-rich oxides. <i>Nature Materials</i> , <b>2019</b> , 18, 256-265	27	178
293	Local atomic and electronic structure of boron chemical doping in monolayer graphene. <i>Nano Letters</i> , <b>2013</b> , 13, 4659-65	11.5	168
292	Mn <sub>3</sub> O <sub>4</sub> Supported on Glassy Carbon: An Active Non-Precious Metal Catalyst for the Oxygen Reduction Reaction. <i>ACS Catalysis</i> , <b>2012</b> , 2, 2687-2694	13.1	165
291	Oxygen Release Induced Chemomechanical Breakdown of Layered Cathode Materials. <i>Nano Letters</i> , <b>2018</b> , 18, 3241-3249	11.5	163
290	Real-time observation of surface bond breaking with an x-ray laser. <i>Science</i> , <b>2013</b> , 339, 1302-5	33.3	162
289	Defective Carbon-Based Materials for the Electrochemical Synthesis of Hydrogen Peroxide. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2018</b> , 6, 311-317	8.3	153
288	Surface chemistry. Probing the transition state region in catalytic CO oxidation on Ru. <i>Science</i> , <b>2015</b> , 347, 978-82	33.3	150
287	Phase evolution for conversion reaction electrodes in lithium-ion batteries. <i>Nature Communications</i> , <b>2014</b> , 5, 3358	17.4	146
286	Direct Observation of Reversible Magnesium Ion Intercalation into a Spinel Oxide Host. <i>Advanced Materials</i> , <b>2015</b> , 27, 3377-84	24	145
285	X-ray absorption spectroscopy and X-ray Raman scattering of water and ice; an experimental view. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , <b>2010</b> , 177, 99-129	1.7	144
284	Identifying Dense NiSe /CoSe Heterointerfaces Coupled with Surface High-Valence Bimetallic Sites for Synergistically Enhanced Oxygen Electrocatalysis. <i>Advanced Materials</i> , <b>2020</b> , 32, e2000607	24	143
283	Influence of dopant distribution on the plasmonic properties of indium tin oxide nanocrystals. <i>Journal of the American Chemical Society</i> , <b>2014</b> , 136, 7110-6	16.4	135
282	Profiling the nanoscale gradient in stoichiometric layered cathode particles for lithium-ion batteries. <i>Energy and Environmental Science</i> , <b>2014</b> , 7, 3077	35.4	133
281	Strontium Insertion in Methylammonium Lead Iodide: Long Charge Carrier Lifetime and High Fill-Factor Solar Cells. <i>Advanced Materials</i> , <b>2016</b> , 28, 9839-9845	24	127
280	Phase transformation and lithiation effect on electronic structure of Li(x)FePO <sub>4</sub> : an in-depth study by soft X-ray and simulations. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 13708-15	16.4	121
279	Control of Doping in Cu <sub>2</sub> SnS <sub>3</sub> through Defects and Alloying. <i>Chemistry of Materials</i> , <b>2014</b> , 26, 4951-4959	9.6	119

278	A multi-crystal wavelength dispersive x-ray spectrometer. <i>Review of Scientific Instruments</i> , <b>2012</b> , 83, 073114	11.4	115
277	Fully Oxidized NiFe Layered Double Hydroxide with 100% Exposed Active Sites for Catalyzing Oxygen Evolution Reaction. <i>ACS Catalysis</i> , <b>2019</b> , 9, 6027-6032	13.1	112
276	Ultrafast core-hole-induced dynamics in water probed by x-ray emission spectroscopy. <i>Physical Review Letters</i> , <b>2005</b> , 94, 227401	7.4	111
275	Probing the electron delocalization in liquid water and ice at attosecond time scales. <i>Physical Review Letters</i> , <b>2007</b> , 99, 217406	7.4	108
274	Charge Heterogeneity and Surface Chemistry in Polycrystalline Cathode Materials. <i>Joule</i> , <b>2018</b> , 2, 464-477	7.8	107
273	A seven-crystal Johann-type hard x-ray spectrometer at the Stanford Synchrotron Radiation Lightsource. <i>Review of Scientific Instruments</i> , <b>2013</b> , 84, 053102	1.7	107
272	Tunable Polyaniline-Based Porous Carbon with Ultrahigh Surface Area for CO <sub>2</sub> Capture at Elevated Pressure. <i>Advanced Energy Materials</i> , <b>2016</b> , 6, 1502491	21.8	102
271	Development of a reactor with carbon catalysts for modular-scale, low-cost electrochemical generation of H <sub>2</sub> O <sub>2</sub> . <i>Reaction Chemistry and Engineering</i> , <b>2017</b> , 2, 239-245	4.9	100
270	Sodiation Kinetics of Metal Oxide Conversion Electrodes: A Comparative Study with Lithiation. <i>Nano Letters</i> , <b>2015</b> , 15, 5755-63	11.5	100
269	Understanding the Degradation Mechanism of Lithium Nickel Oxide Cathodes for Li-Ion Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 31677-31683	9.5	100
268	Revealing and suppressing surface Mn(II) formation of Na <sub>0.44</sub> MnO <sub>2</sub> electrodes for Na-ion batteries. <i>Nano Energy</i> , <b>2015</b> , 16, 186-195	17.1	98
267	Hole doping in Al-containing nickel oxide materials to improve electrochromic performance. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2013</b> , 5, 301-9	9.5	93
266	Transitions from near-surface to interior redox upon lithiation in conversion electrode materials. <i>Nano Letters</i> , <b>2015</b> , 15, 1437-44	11.5	92
265	An Oxygen-Insensitive Hydrogen Evolution Catalyst Coated by a Molybdenum-Based Layer for Overall Water Splitting. <i>Angewandte Chemie - International Edition</i> , <b>2017</b> , 56, 5780-5784	16.4	89
264	The structure of water in the hydration shell of cations from x-ray Raman and small angle x-ray scattering measurements. <i>Journal of Chemical Physics</i> , <b>2011</b> , 134, 064513	3.9	89
263	Half or full core hole in density functional theory X-ray absorption spectrum calculations of water?. <i>Physical Chemistry Chemical Physics</i> , <b>2005</b> , 7, 2854-8	3.6	88
262	Comparison of Coal-Derived and Petroleum Asphaltenes by <sup>13</sup> C Nuclear Magnetic Resonance, DEPT, and XRS. <i>Energy &amp; Fuels</i> , <b>2011</b> , 25, 3068-3076	4.1	86
261	Re-evaluating the role of sterics and electronic coupling in determining the open-circuit voltage of organic solar cells. <i>Advanced Materials</i> , <b>2013</b> , 25, 6076-82	24	85

260	Understanding the Origin of Highly Selective CO Electroreduction to CO on Ni,N-doped Carbon Catalysts. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 4043-4050	16.4	85
259	Depth-Dependent Redox Behavior of LiNi <sub>0.6</sub> Mn <sub>0.2</sub> Co <sub>0.2</sub> O <sub>2</sub> . <i>Journal of the Electrochemical Society</i> , <b>2018</b> , 165, A696-A704	3.9	84
258	Extremely reduced dielectric confinement in two-dimensional hybrid perovskites with large polar organics. <i>Communications Physics</i> , <b>2018</b> , 1,	5.4	84
257	Synthesis of a copper-supported triplet nitrene complex pertinent to copper-catalyzed amination. <i>Science</i> , <b>2019</b> , 365, 1138-1143	33.3	81
256	Anomalous Behavior of the Homogeneous Ice Nucleation Rate in "No-Man's Land". <i>Journal of Physical Chemistry Letters</i> , <b>2015</b> , 6, 2826-2832	6.4	81
255	Enhancement Effect of Noble Metals on Manganese Oxide for the Oxygen Evolution Reaction. <i>Journal of Physical Chemistry Letters</i> , <b>2015</b> , 6, 4178-83	6.4	79
254	Increasing correlation length in bulk supercooled H <sub>2</sub> O, D <sub>2</sub> O, and NaCl solution determined from small angle x-ray scattering. <i>Journal of Chemical Physics</i> , <b>2010</b> , 133, 134504	3.9	79
253	Electrochemical Oxidation of Size-Selected Pt Nanoparticles Studied Using in Situ High-Energy-Resolution X-ray Absorption Spectroscopy. <i>ACS Catalysis</i> , <b>2012</b> , 2, 2371-2376	13.1	78
252	Molecularly intact and dissociative adsorption of water on clean Cu(110): A comparison with the water/Ru(001) system. <i>Surface Science</i> , <b>2005</b> , 585, L183-L189	1.8	78
251	Enabling Stable Cycling of 4.2 V High-Voltage All-Solid-State Batteries with PEO-Based Solid Electrolyte. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 1909392	15.6	77
250	Interplay between Energetic and Kinetic Factors on the Ambient Stability of n-Channel Organic Transistors Based on Perylene Diimide Derivatives. <i>Chemistry of Materials</i> , <b>2009</b> , 21, 5508-5518	9.6	77
249	On the chemical state of Co oxide electrocatalysts during alkaline water splitting. <i>Physical Chemistry Chemical Physics</i> , <b>2013</b> , 15, 17460-7	3.6	76
248	Linac Coherent Light Source soft x-ray materials science instrument optical design and monochromator commissioning. <i>Review of Scientific Instruments</i> , <b>2011</b> , 82, 093104	1.7	75
247	The hydrogen bond in ice probed by soft x-ray spectroscopy and density functional theory. <i>Journal of Chemical Physics</i> , <b>2005</b> , 122, 154505	3.9	75
246	Charge distribution guided by grain crystallographic orientations in polycrystalline battery materials. <i>Nature Communications</i> , <b>2020</b> , 11, 83	17.4	75
245	Multiconfigurational nature of 5f orbitals in uranium and plutonium intermetallics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2012</b> , 109, 10205-9	11.5	74
244	Atomic-Scale Perspective of Ultrafast Charge Transfer at a Dye-Semiconductor Interface. <i>Journal of Physical Chemistry Letters</i> , <b>2014</b> , 5, 2753-9	6.4	73
243	In situ crystallization of high performing WO <sub>3</sub> -based electrochromic materials and the importance for durability and switching kinetics. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 16817		70

242	Ultrafast molecular dissociation of water in ice. <i>Physical Review Letters</i> , <b>2004</b> , 93, 148302	7.4	69
241	Origin of electrochromism in high-performing nanocomposite nickel oxide. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2013</b> , 5, 3643-9	9.5	67
240	X-ray Absorption Study of Graphene Oxide and Transition Metal Oxide Nanocomposites. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 18706-18712	3.8	64
239	A high resolution and large solid angle x-ray Raman spectroscopy end-station at the Stanford Synchrotron Radiation Lightsource. <i>Review of Scientific Instruments</i> , <b>2012</b> , 83, 043112	1.7	64
238	Probing the hydrogen-bond network of water via time-resolved soft X-ray spectroscopy. <i>Physical Chemistry Chemical Physics</i> , <b>2009</b> , 11, 3951-7	3.6	64
237	Surface structure of thin ice films. <i>Chemical Physics Letters</i> , <b>2004</b> , 395, 161-165	2.5	64
236	Deciphering the Cathode-Electrolyte Interfacial Chemistry in Sodium Layered Cathode Materials. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1801975	21.8	64
235	A setup for resonant inelastic soft x-ray scattering on liquids at free electron laser light sources. <i>Review of Scientific Instruments</i> , <b>2012</b> , 83, 123109	1.7	63
234	The Myth of d Copper(III). <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 18508-18520	16.4	61
233	A different view of structure-making and structure-breaking in alkali halide aqueous solutions through x-ray absorption spectroscopy. <i>Journal of Chemical Physics</i> , <b>2014</b> , 140, 244506	3.9	61
232	Metal-ligand covalency of iron complexes from high-resolution resonant inelastic X-ray scattering. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 17121-34	16.4	61
231	Wide-angle X-ray diffraction and molecular dynamics study of medium-range order in ambient and hot water. <i>Physical Chemistry Chemical Physics</i> , <b>2011</b> , 13, 19997-20007	3.6	60
230	Spontaneous incorporation of gold in palladium-based ternary nanoparticles makes durable electrocatalysts for oxygen reduction reaction. <i>Nature Communications</i> , <b>2016</b> , 7, 11941	17.4	58
229	Structure, Redox Chemistry, and Interfacial Alloy Formation in Monolayer and Multilayer Cu/Au(111) Model Catalysts for CO <sub>2</sub> Electroreduction. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 7954-7961	2.8	58
228	Comparison of x-ray absorption spectra between water and ice: new ice data with low pre-edge absorption cross-section. <i>Journal of Chemical Physics</i> , <b>2014</b> , 141, 034507	3.9	57
227	Electronic structure effects in liquid water studied by photoelectron spectroscopy and density functional theory. <i>Chemical Physics Letters</i> , <b>2008</b> , 460, 86-92	2.5	56
226	Imaging chiral symmetry breaking from Kekulé bond order in graphene. <i>Nature Physics</i> , <b>2016</b> , 12, 950-958	16.2	56
225	L-Edge X-ray Absorption Spectroscopy of Dilute Systems Relevant to Metalloproteins Using an X-ray Free-Electron Laser. <i>Journal of Physical Chemistry Letters</i> , <b>2013</b> , 4, 3641-3647	6.4	55

224	Dopant Distribution in Co-Free High-Energy Layered Cathode Materials. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 9769-9776	9.6	54
223	Orientation of phenylphosphonic acid self-assembled monolayers on a transparent conductive oxide: a combined NEXAFS, PM-IRRAS, and DFT study. <i>Langmuir</i> , <b>2013</b> , 29, 2166-74	4	52
222	Absolute pulse energy measurements of soft x-rays at the Linac Coherent Light Source. <i>Optics Express</i> , <b>2014</b> , 22, 21214-26	3.3	51
221	Elucidation of the surface characteristics and electrochemistry of high-performance LiNiO <sub>2</sub> . <i>Chemical Communications</i> , <b>2016</b> , 52, 4239-42	5.8	50
220	Covalency in metal-oxygen multiple bonds evaluated using oxygen K-edge spectroscopy and electronic structure theory. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 1864-71	16.4	50
219	Experimental and computational X-ray emission spectroscopy as a direct probe of protonation states in oxo-bridged Mn(IV) dimers relevant to redox-active metalloproteins. <i>Inorganic Chemistry</i> , <b>2013</b> , 52, 12915-22	5.1	49
218	Selective ultrafast probing of transient hot chemisorbed and precursor states of CO on Ru(0001). <i>Physical Review Letters</i> , <b>2013</b> , 110, 186101	7.4	49
217	Operando Revealing Dynamic Reconstruction of NiCo Carbonate Hydroxide for High-Rate Energy Storage. <i>Joule</i> , <b>2020</b> , 4, 673-687	27.8	48
216	Precious Metal-Free Nickel Nitride Catalyst for the Oxygen Reduction Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 26863-26871	9.5	47
215	Effect of Backbone Chemistry on the Structure of Polyurea Films Deposited by Molecular Layer Deposition. <i>Chemistry of Materials</i> , <b>2017</b> , 29, 1192-1203	9.6	46
214	Why LiFePO <sub>4</sub> is a safe battery electrode: Coulomb repulsion induced electron-state reshuffling upon lithiation. <i>Physical Chemistry Chemical Physics</i> , <b>2015</b> , 17, 26369-77	3.6	46
213	Ultrafast Electron Transfer at Organic Semiconductor Interfaces: Importance of Molecular Orientation. <i>Journal of Physical Chemistry Letters</i> , <b>2015</b> , 6, 6-12	6.4	46
212	Surface Structure of Aerobically Oxidized Diamond Nanocrystals. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 26695-26702	3.8	44
211	Degradation of bimetallic model electrocatalysts: an in situ X-ray absorption spectroscopy study. <i>Angewandte Chemie - International Edition</i> , <b>2011</b> , 50, 10190-2	16.4	44
210	Hydrogen-bond induced surface core-level shift in pyridine carboxylic acids. <i>Surface Science</i> , <b>2001</b> , 486, 157-166	1.8	44
209	Coherent X-rays reveal the influence of cage effects on ultrafast water dynamics. <i>Nature Communications</i> , <b>2018</b> , 9, 1917	17.4	43
208	Identification of the dominant photochemical pathways and mechanistic insights to the ultrafast ligand exchange of Fe(CO) <sub>5</sub> to Fe(CO) <sub>4</sub> EtOH. <i>Structural Dynamics</i> , <b>2016</b> , 3, 043204	3.2	42
207	Atomistic Interrogation of B-N Co-dopant Structures and Their Electronic Effects in Graphene. <i>ACS Nano</i> , <b>2016</b> , 10, 6574-84	16.7	42

206	Reply to Soper et al.: Fluctuations in water around a bimodal distribution of local hydrogen-bonded structural motifs. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2010</b> , 107, E45-E45	11.5	42
205	Auger decay calculations with core-hole excited-state molecular-dynamics simulations of water. <i>Journal of Chemical Physics</i> , <b>2006</b> , 124, 64307	3.9	42
204	Applications of ALD MnO to electrochemical water splitting. <i>Physical Chemistry Chemical Physics</i> , <b>2015</b> , 17, 14003-11	3.6	40
203	Sequential deposition: optimization of solvent swelling for high-performance polymer solar cells. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 653-61	9.5	40
202	Multi-vendor, multicentre comparison of contrast-enhanced SSFP and T2-STIR CMR for determining myocardium at risk in ST-elevation myocardial infarction. <i>European Heart Journal Cardiovascular Imaging</i> , <b>2016</b> , 17, 744-53	4.1	40
201	Orbital rehybridization in n-octane adsorbed on Cu(110). <i>Journal of Chemical Physics</i> , <b>2003</b> , 118, 3782-3789	3.9	39
200	Chemical and Morphological Control of Interfacial Self-Doping for Efficient Organic Electronics. <i>Advanced Materials</i> , <b>2018</b> , 30, e1705976	24	38
199	Correlation between sp <sup>3</sup> -to-sp <sup>2</sup> Ratio and Surface Oxygen Functionalities in Tetrahedral Amorphous Carbon (ta-C) Thin Film Electrodes and Implications of Their Electrochemical Properties. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 8298-8304	3.8	38
198	Accelerated Evolution of Surface Chemistry Determined by Temperature and Cycling History in Nickel-Rich Layered Cathode Materials. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 23842-23850	9.5	38
197	Surface-to-Bulk Redox Coupling through Thermally Driven Li Redistribution in Li- and Mn-Rich Layered Cathode Materials. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 12079-12086	16.4	38
196	Influence of synthesis conditions on the surface passivation and electrochemical behavior of layered cathode materials. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 19833-19840	13	38
195	Plasma jet printing for flexible substrates. <i>Applied Physics Letters</i> , <b>2016</b> , 108, 123103	3.4	38
194	Biogenic manganese oxides as reservoirs of organic carbon and proteins in terrestrial and marine environments. <i>Geobiology</i> , <b>2017</b> , 15, 158-172	4.3	37
193	Surface characterization of polythiophene:fullerene blends on different electrodes using near edge X-ray absorption fine structure. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2011</b> , 3, 726-32	9.5	37
192	Competing Effects of Fluorination on the Orientation of Aromatic and Aliphatic Phosphonic Acid Monolayers on Indium Tin Oxide. <i>Journal of Physical Chemistry C</i> , <b>2013</b> , 117, 15139-15147	3.8	36
191	Tuning complex transition metal hydroxide nanostructures as active catalysts for water oxidation by a laser-chemical route. <i>Nano Letters</i> , <b>2015</b> , 15, 2498-503	11.5	35
190	Oxidation and crystal field effects in uranium. <i>Physical Review B</i> , <b>2015</b> , 92,	3.3	35
189	Revealing Anisotropic Spinel Formation on Pristine Li- and Mn-Rich Layered Oxide Surface and Its Impact on Cathode Performance. <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 1602010	21.8	34



188	Possible Bose-condensate behavior in a quantum phase originating in a collective excitation in the chemically and optically doped Mott-Hubbard system $UO_{2+x}$ . <i>Physical Review B</i> , <b>2013</b> , 88,	3.3	34
187	Ultrafast terahertz field control of electronic and structural interactions in vanadium dioxide. <i>Physical Review B</i> , <b>2018</b> , 98,	3.3	34
186	Empowering multicomponent cathode materials for sodium ion batteries by exploring three-dimensional compositional heterogeneities. <i>Energy and Environmental Science</i> , <b>2018</b> , 11, 2496-2508	35.4	34
185	Structural and Electrochemical Impacts of Mg/Mn Dual Dopants on the LiNiO Cathode in Li-Metal Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 12874-12882	9.5	33
184	Soft X-Ray Second Harmonic Generation as an Interfacial Probe. <i>Physical Review Letters</i> , <b>2018</b> , 120, 023904	9.1	33
183	Finite temperature effects on the X-ray absorption spectra of lithium compounds: first-principles interpretation of X-ray Raman measurements. <i>Journal of Chemical Physics</i> , <b>2014</b> , 140, 034107	3.9	33
182	Ni <sub>5</sub> Ga <sub>3</sub> catalysts for CO <sub>2</sub> reduction to methanol: Exploring the role of Ga surface oxidation/reduction on catalytic activity. <i>Applied Catalysis B: Environmental</i> , <b>2020</b> , 267, 118369	21.8	33
181	Operando investigation of Au-MnO <sub>x</sub> thin films with improved activity for the oxygen evolution reaction. <i>Electrochimica Acta</i> , <b>2017</b> , 230, 22-28	6.7	32
180	Thermally-driven mesopore formation and oxygen release in delithiated NCA cathode particles. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 12593-12603	13	32
179	Disentangling Transient Charge Density and Metal-Ligand Covalency in Photoexcited Ferricyanide with Femtosecond Resonant Inelastic Soft X-ray Scattering. <i>Journal of Physical Chemistry Letters</i> , <b>2018</b> , 9, 3538-3543	6.4	32
178	Delocalization and occupancy effects of 5f orbitals in plutonium intermetallics using L <sub>3</sub> -edge resonant X-ray emission spectroscopy. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , <b>2014</b> , 194, 57-65	1.7	32
177	X-Ray Spectroscopic Investigation of Chlorinated Graphene: Surface Structure and Electronic Effects. <i>Advanced Functional Materials</i> , <b>2015</b> , 25, 4163-4169	15.6	32
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45	Anomalous dispersion and band gap reduction in UO <sub>2</sub> <sup>+</sup> and its possible coupling to the coherent polaronic quantum state. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2016</b> , 374, 45-50	1.2	5



44	Tuning the Metal Adsorbate Chemical Bond through the Ligand Effect on Platinum Subsurface Alloys. <i>Angewandte Chemie</i> , <b>2012</b> , 124, 7844-7848	3.6	5
43	Bulk electronic structure of K3C60 as revealed by soft x-rays. <i>Physical Review B</i> , <b>2007</b> , 75,	3.3	5
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41	Substrate-Dependent Study of Chain Orientation and Order in Alkylphosphonic Acid Self-Assembled Monolayers for ALD Blocking. <i>Langmuir</i> , <b>2020</b> , 36, 12849-12857	4	5
40	Carrier-specific dynamics in 2H-MoTe observed by femtosecond soft x-ray absorption spectroscopy using an x-ray free-electron laser. <i>Structural Dynamics</i> , <b>2021</b> , 8, 014501	3.2	5
39	Laser power meters as an X-ray power diagnostic for LCLS-II. <i>Journal of Synchrotron Radiation</i> , <b>2018</b> , 25, 72-76	2.4	5
38	Closure of the Mott gap and formation of a superthermal metal in the Fröhlich-type nonequilibrium polaron Bose-Einstein condensate in UO <sub>2+x</sub> . <i>Physical Review B</i> , <b>2017</b> , 96,	3.3	4
37	Stability of Pt-Modified Cu(111) in the Presence of Oxygen and Its Implication on the Overall Electronic Structure. <i>Journal of Physical Chemistry C</i> , <b>2013</b> , 117, 16371-16380	3.8	4
36	Characterization of electronic structure of periodically strained graphene. <i>Applied Physics Letters</i> , <b>2015</b> , 107, 183507	3.4	4
35	Ge doped HfO <sub>2</sub> thin films investigated by x-ray absorption spectroscopy. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2010</b> , 28, 693-696	2.9	4
34	Long-term chemothermal stability of delithiated NCA in polymer solid-state batteries. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 27135-27147	13	4
33	Synthesis and X-ray absorption spectroscopy of potassium transition metal fluoride nanocrystals. <i>CrystEngComm</i> , <b>2019</b> , 21, 135-144	3.3	3
32	High-resolution x-ray-emission study of 1s4p and 1s3d two-electron photoexcitations in Kr. <i>Physical Review A</i> , <b>2014</b> , 90,	2.6	3
31	Mapping chemical bonding of reaction intermediates with femtosecond X-ray laser spectroscopy. <i>EPJ Web of Conferences</i> , <b>2013</b> , 41, 05025	0.3	3
30	Revealing the inhomogeneous surface chemistry on the spherical layered oxide polycrystalline cathode particles. <i>Chinese Physics B</i> , <b>2020</b> , 29, 026103	1.2	3
29	Atmospheric Pressure Plasma Printing of Nanomaterials for IoT Applications. <i>IEEE Open Journal of Nanotechnology</i> , <b>2020</b> , 1, 47-56	2.1	3
28	Uncovering phase transformation, morphological evolution, and nanoscale color heterogeneity in tungsten oxide electrochromic materials. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 20000-20010	13	3
27	Promoting Bandlike Transport in Well-Defined and Highly Conducting Polymer Thin Films upon Controlling Dopant Oxidation Levels and Polaron Effects. <i>ACS Applied Polymer Materials</i> , <b>2021</b> , 3, 2938-2949	4.3	3

26	The origin of impedance rise in Ni-Rich positive electrodes for lithium-ion batteries. <i>Journal of Power Sources</i> , <b>2021</b> , 498, 229885	8.9	3
25	Chemical Modulation of Local Transition Metal Environment Enables Reversible Oxygen Redox in Mn-Based Layered Cathodes. <i>ACS Energy Letters</i> , <b>2021</b> , 6, 2882-2890	20.1	3
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23	Electronic Structure of Naturally Occurring Aromatic Carbon. <i>Energy &amp; Fuels</i> , <b>2019</b> , 33, 2099-2105	4.1	2
22	Tailoring Transition-Metal Hydroxides and Oxides by Photon-Induced Reactions. <i>Angewandte Chemie</i> , <b>2016</b> , 128, 14484-14488	3.6	2
21	In-situ functionalization of tetrahedral amorphous carbon by filtered cathodic arc deposition. <i>AIP Advances</i> , <b>2019</b> , 9, 085325	1.5	2
20	Laser power meters as portable x-ray power monitors <b>2019</b> ,		2
19	Tailoring Disordered/Ordered Phases to Revisit the Degradation Mechanism of High-Voltage LiNi <sub>0.5</sub> Mn <sub>1.5</sub> O <sub>4</sub> Spinel Cathode Materials. <i>Advanced Functional Materials</i> , 2112279	15.6	2
18	A novel method for resonant inelastic soft X-ray scattering via photoelectron spectroscopy detection. <i>Journal of Synchrotron Radiation</i> , <b>2017</b> , 24, 1180-1186	2.4	1
17	Modulation of Carrier Type in Nanocrystal-in-Matrix Composites by Interfacial Doping. <i>Chemistry of Materials</i> , <b>2018</b> , 30, 2544-2549	9.6	1
16	A core-level spectroscopic investigation of the preparation and electrochemical cycling of nitrogen-modified carbon as a model catalyst support. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 443-450 <sup>13</sup>		1
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13	Monoclinic textured HfO <sub>2</sub> films on GeO <sub>x</sub> Ny/Ge(100) stacks using interface reconstruction by controlled thermal processing. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2010</b> , 28, 662-664	2.9	1
12	Metastable Brominated Nanodiamond Surface Enables Room Temperature and Catalysis-Free Amine Chemistry. <i>Journal of Physical Chemistry Letters</i> , <b>2022</b> , 1147-1158	6.4	1
11	Surface reconstruction and chemical evolution of stoichiometric layered cathode materials for lithium-ion batteries		1
10	Atom-specific activation in CO oxidation. <i>Journal of Chemical Physics</i> , <b>2018</b> , 149, 234707	3.9	1
9	Ultrafast epitaxial growth of CuO nanowires using atmospheric pressure plasma with enhanced electrocatalytic and photocatalytic activities. <i>Nano Select</i> ,	3.1	1

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