Dennis L Nordlund

List of Publications by Year in Descending Order

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	Metastable Brominated Nanodiamond Surface Enables Room Temperature and Catalysis-Free Amine Chemistry.. *Journal of Physical Chemistry Letters*, **2022**, 1147-1158	6.4	1
312	Short-Range Order Tunes Optical Properties in Long-Range Disordered ZnSnN2:ZnO Alloy. *Chemistry of Materials*, **2022**, 34, 3910-3919	9.6	1
311	Revealing the Dynamics and Roles of Iron Incorporation in Nickel Hydroxide Water Oxidation Catalysts. *Journal of the American Chemical Society*, **2021**, 143, 18519-18526	16.4	14
310	Trends in Carbon, Oxygen, and Nitrogen Core in the X-ray Absorption Spectroscopy of Carbon Nanomaterials: A Guide for the Perplexed. *Journal of Physical Chemistry C*, **2021**, 125, 973-988	3.8	8
309	Operando Study of Thermal Oxidation of Monolayer MoS. *Advanced Science*, **2021**, 8, 2002768	13.6	6
308	Promoting Bandlike Transport in Well-Defined and Highly Conducting Polymer Thin Films upon Controlling Dopant Oxidation Levels and Polaron Effects. *ACS Applied Polymer Materials*, **2021**, 3, 2938-2949	4.3	3
307	Reversible Mn/Cr dual redox in cation-disordered Li-excess cathode materials for stable lithium ion batteries. *Acta Materialia*, **2021**, 212, 116935	8.4	7
306	The origin of impedance rise in Ni-Rich positive electrodes for lithium-ion batteries. *Journal of Power Sources*, **2021**, 498, 229885	8.9	3
305	Operando Tailoring of Defects and Strains in Corrugated β-Ni(OH) Nanosheets for Stable and High-Rate Energy Storage. *Advanced Materials*, **2021**, 33, e2006147	24	21
304	Probing Dopant Redistribution, Phase Propagation, and Local Chemical Changes in the Synthesis of Layered Oxide Battery Cathodes. *Advanced Energy Materials*, **2021**, 11, 2002719	21.8	15
303	Carrier-specific dynamics in 2H-MoTe observed by femtosecond soft x-ray absorption spectroscopy using an x-ray free-electron laser. *Structural Dynamics*, **2021**, 8, 014501	3.2	5
302	Chemical Modulation of Local Transition Metal Environment Enables Reversible Oxygen Redox in Mn-Based Layered Cathodes. *ACS Energy Letters*, **2021**, 6, 2882-2890	20.1	3
301	Carrier gradients and the role of charge selective contacts in lateral heterojunction all back contact perovskite solar cells. *Cell Reports Physical Science*, **2021**, 2, 100520	6.1	1
300	Sulfur Kβ X-ray emission spectroscopy: comparison with sulfur K-edge X-ray absorption spectroscopy for speciation of organosulfur compounds. *Physical Chemistry Chemical Physics*, **2021**, 23, 4500-4508	3.6	9
299	Depth-dependent valence stratification driven by oxygen redox in lithium-rich layered oxide. *Nature Communications*, **2020**, 11, 6342	17.4	13
298	Creating compressive stress at the NiOOH/NiO interface for water oxidation. *Journal of Materials Chemistry A*, **2020**, 8, 10747-10754	13	20
297	Bulk and surface structural changes in high nickel cathodes subjected to fast charging conditions. *Chemical Communications*, **2020**, 56, 6973-6976	5.8	8

296	Towards the Quantification of 5f Delocalization. *Applied Sciences (Switzerland)*, **2020**, 10, 2918	2.6	5
295	EXAFS as a probe of actinide oxide formation in the tender X-ray regime. *Surface Science*, **2020**, 698, 121687	1.87	10
294	Identifying Dense NiSe /CoSe Heterointerfaces Coupled with Surface High-Valence Bimetallic Sites for Synergistically Enhanced Oxygen Electrocatalysis. *Advanced Materials*, **2020**, 32, e2000607	24	143
293	[(MeCN)Ni(CF)] and [Ni(CF)]: Foundations toward the Development of Trifluoromethylations at Unsupported Nickel. *Inorganic Chemistry*, **2020**, 59, 9143-9151	5.1	6
292	Structural and Electrochemical Impacts of Mg/Mn Dual Dopants on the LiNiO Cathode in Li-Metal Batteries. *ACS Applied Materials & Interfaces*, **2020**, 12, 12874-12882	9.5	33
291	Operando Revealing Dynamic Reconstruction of NiCo Carbonate Hydroxide for High-Rate Energy Storage. *Joule*, **2020**, 4, 673-687	27.8	48
290	Distinct Surface and Bulk Thermal Behaviors of LiNiMnCoO Cathode Materials as a Function of State of Charge. *ACS Applied Materials & Interfaces*, **2020**, 12, 11643-11656	9.5	8
289	Single-Walled Carbon Nanotube Network Electrodes for the Detection of Fentanyl Citrate. *ACS Applied Nano Materials*, **2020**, 3, 1203-1212	5.6	11
288	Observation of 5f intermediate coupling in uranium x-ray emission spectroscopy. *Journal of Physics Communications*, **2020**, 4, 015013	1.2	12
287	Sub-molecular structural relaxation at a physisorbed interface with monolayer organic single-crystal semiconductors. *Communications Physics*, **2020**, 3,	5.4	8
286	Enabling Stable Cycling of 4.2 V High-Voltage All-Solid-State Batteries with PEO-Based Solid Electrolyte. *Advanced Functional Materials*, **2020**, 30, 1909392	15.6	77
285	A versatile Johansson-type tender x-ray emission spectrometer. *Review of Scientific Instruments*, **2020**, 91, 033101	1.7	18
284	Ni5Ga3 catalysts for CO2 reduction to methanol: Exploring the role of Ga surface oxidation/reduction on catalytic activity. *Applied Catalysis B: Environmental*, **2020**, 267, 118369	21.8	33
283	Understanding the Origin of Highly Selective CO Electroreduction to CO on Ni,N-doped Carbon Catalysts. *Angewandte Chemie - International Edition*, **2020**, 59, 4043-4050	16.4	85
282	Charge distribution guided by grain crystallographic orientations in polycrystalline battery materials. *Nature Communications*, **2020**, 11, 83	17.4	75
281	Thermal stress-induced charge and structure heterogeneity in emerging cathode materials. *Materials Today*, **2020**, 35, 87-98	21.8	23
280	Revealing the inhomogeneous surface chemistry on the spherical layered oxide polycrystalline cathode particles. *Chinese Physics B*, **2020**, 29, 026103	1.2	3
279	High capacity Li/Ni rich Ni-Ti-Mo oxide cathode for Li-ion batteries. *Solid State Ionics*, **2020**, 345, 115172	3.3	5

278	Ultrafast Carrier Dynamics in Two-Dimensional Electron Gas-like K-Doped MoS2. *Journal of Physical Chemistry C*, **2020**, 124, 19187-19195	3.8	
277	Surface functionality and formation mechanisms of carbon and graphene quantum dots. *Diamond and Related Materials*, **2020**, 110, 108101	3.5	6
276	Substrate-Dependent Study of Chain Orientation and Order in Alkylphosphonic Acid Self-Assembled Monolayers for ALD Blocking. *Langmuir*, **2020**, 36, 12849-12857	4	5
275	Tuning the Morphology and Electronic Properties of Single-Crystal LiNiMnO: Exploring the Influence of LiCl-KCl Molten Salt Flux Composition and Synthesis Temperature. *Inorganic Chemistry*, **2020**, 59, 10591-10603	5.1	9
274	Unveiling the critical role of the Mn dopant in a NiFe(OH)2 catalyst for water oxidation. *Journal of Materials Chemistry A*, **2020**, 8, 17471-17476	13	10
273	Atmospheric Pressure Plasma Printing of Nanomaterials for IoT Applications. *IEEE Open Journal of Nanotechnology*, **2020**, 1, 47-56	2.1	3
272	Uncovering phase transformation, morphological evolution, and nanoscale color heterogeneity in tungsten oxide electrochromic materials. *Journal of Materials Chemistry A*, **2020**, 8, 20000-20010	13	3
271	The sensitive surface chemistry of Co-free, Ni-rich layered oxides: identifying experimental conditions that influence characterization results. *Journal of Materials Chemistry A*, **2020**, 8, 17487-17497	13	19
270	Effect of Liquid Electrolyte Soaking on the Interfacial Resistance of LiLaZrO for All-Solid-State Lithium Batteries. *ACS Applied Materials & Interfaces*, **2020**, 12, 20605-20612	9.5	11
269	Chemical control of competing electron transfer pathways in iron tetracyano-polypyridyl photosensitizers. *Chemical Science*, **2020**, 11, 4360-4373	9.4	9
268	Synthesis of a copper-supported triplet nitrene complex pertinent to copper-catalyzed amination. *Science*, **2019**, 365, 1138-1143	33.3	81
267	Targeted Surface Doping with Reversible Local Environment Improves Oxygen Stability at the Electrochemical Interfaces of Nickel-Rich Cathode Materials. *ACS Applied Materials & Interfaces* , **2019**, 11, 37885-37891	9.5	19
266	Persistent organic matter in oxic subseafloor sediment. *Nature Geoscience*, **2019**, 12, 126-131	18.3	31
265	Water-Processable P2-Na0.67Ni0.22Cu0.11Mn0.56Ti0.11O2 Cathode Material for Sodium Ion Batteries. *Journal of the Electrochemical Society*, **2019**, 166, A251-A257	3.9	17
264	Metal-oxygen decoordination stabilizes anion redox in Li-rich oxides. *Nature Materials*, **2019**, 18, 256-265	27	178
263	Synthesis and X-ray absorption spectroscopy of potassium transition metal fluoride nanocrystals. *CrystEngComm*, **2019**, 21, 135-144	3.3	3
262	Structural Degradation of Layered Cathode Materials in Lithium-Ion Batteries Induced by Ball Milling. *Journal of the Electrochemical Society*, **2019**, 166, A1964-A1971	3.9	11
261	Fully Oxidized NiFe Layered Double Hydroxide with 100% Exposed Active Sites for Catalyzing Oxygen Evolution Reaction. *ACS Catalysis*, **2019**, 9, 6027-6032	13.1	112

260	Thermally-driven mesopore formation and oxygen release in delithiated NCA cathode particles. *Journal of Materials Chemistry A*, **2019**, 7, 12593-12603	13	32
259	Underwater Organic Solar Cells via Selective Removal of Electron Acceptors near the Top Electrode. *ACS Energy Letters*, **2019**, 4, 1034-1041	20.1	14
258	Plasma jet based in situ reduction of copper oxide in direct write printing. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2019**, 37, 031203	1.3	8
257	Surface Characterization of Li-Substituted Compositionally Heterogeneous NaLi0.045Cu0.185Fe0.265Mn0.505O2 Sodium-Ion Cathode Material. *Journal of Physical Chemistry C* , **2019**, 123, 11428-11435	3.8	10
256	Separate measurement of the 5f5/2 and 5f7/2 unoccupied density of states of UO2. *Journal of Electron Spectroscopy and Related Phenomena*, **2019**, 232, 100-104	1.7	14
255	Hybrid X-ray Spectroscopy-Based Approach To Acquire Chemical and Structural Information of Single-Walled Carbon Nanotubes with Superior Sensitivity. *Journal of Physical Chemistry C*, **2019**, 123, 6114-6120	3.8	9
254	Electronic Structure of Naturally Occurring Aromatic Carbon. *Energy & Fuels*, **2019**, 33, 2099-2105	4.1	2
253	Precious Metal-Free Nickel Nitride Catalyst for the Oxygen Reduction Reaction. *ACS Applied Materials & Interfaces*, **2019**, 11, 26863-26871	9.5	47
252	Surface-to-Bulk Redox Coupling through Thermally Driven Li Redistribution in Li- and Mn-Rich Layered Cathode Materials. *Journal of the American Chemical Society*, **2019**, 141, 12079-12086	16.4	38
251	In-situ functionalization of tetrahedral amorphous carbon by filtered cathodic arc deposition. *AIP Advances*, **2019**, 9, 085325	1.5	2
250	The Myth of d Copper(III). *Journal of the American Chemical Society*, **2019**, 141, 18508-18520	16.4	61
249	Elucidating the Evolving Atomic Structure in Atomic Layer Deposition Reactions with in Situ XANES and Machine Learning. *Chemistry of Materials*, **2019**, 31, 8937-8947	9.6	14
248	Soft X-ray spectroscopy with transition-edge sensors at Stanford Synchrotron Radiation Lightsource beamline 10-1. *Review of Scientific Instruments*, **2019**, 90, 113101	1.7	25
247	A high-throughput energy-dispersive tender X-ray spectrometer for shot-to-shot sulfur measurements. *Journal of Synchrotron Radiation*, **2019**, 26, 629-634	2.4	10
246	Laser power meters as portable x-ray power monitors **2019**,		2
245	Long-term chemothermal stability of delithiated NCA in polymer solid-state batteries. *Journal of Materials Chemistry A*, **2019**, 7, 27135-27147	13	4
244	Dopant Distribution in Co-Free High-Energy Layered Cathode Materials. *Chemistry of Materials*, **2019**, 31, 9769-9776	9.6	54
243	Electronic structure changes upon lithium intercalation into graphite Insights from ex situ and operando x-ray Raman spectroscopy. *Carbon*, **2019**, 143, 371-377	10.4	13

242	Chemical and Morphological Control of Interfacial Self-Doping for Efficient Organic Electronics. *Advanced Materials*, **2018**, 30, e1705976	24	38
241	Elucidating anionic oxygen activity in lithium-rich layered oxides. *Nature Communications*, **2018**, 9, 947	17.4	181
240	Oxygen Release Induced Chemomechanical Breakdown of Layered Cathode Materials. *Nano Letters* , **2018**, 18, 3241-3249	11.5	163
239	Dendritic core-shell nickel-iron-copper metal/metal oxide electrode for efficient electrocatalytic water oxidation. *Nature Communications*, **2018**, 9, 381	17.4	241
238	Charge Heterogeneity and Surface Chemistry in Polycrystalline Cathode Materials. *Joule*, **2018**, 2, 464-477	27.8	107
237	Intensity modulation of the Shirley background of the Cr 3p spectra with photon energies around the Cr 2p edge. *Surface and Interface Analysis*, **2018**, 50, 246-252	1.5	9
236	Soft X-Ray Second Harmonic Generation as an Interfacial Probe. *Physical Review Letters*, **2018**, 120, 023901	7.4	33
235	Surface transformation by a □ocktail□solvent enables stable cathode materials for sodium ion batteries. *Journal of Materials Chemistry A*, **2018**, 6, 2758-2766	13	17
234	Modulation of Carrier Type in Nanocrystal-in-Matrix Composites by Interfacial Doping. *Chemistry of Materials*, **2018**, 30, 2544-2549	9.6	1
233	Depth-Dependent Redox Behavior of LiNi0.6Mn0.2Co0.2O2. *Journal of the Electrochemical Society*, **2018**, 165, A696-A704	3.9	84
232	Defective Carbon-Based Materials for the Electrochemical Synthesis of Hydrogen Peroxide. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 311-317	8.3	153
231	Targeted Ligand-Exchange Chemistry on Cesium Lead Halide Perovskite Quantum Dots for High-Efficiency Photovoltaics. *Journal of the American Chemical Society*, **2018**, 140, 10504-10513	16.4	208
230	Understanding the critical chemistry to inhibit lithium consumption in lean lithium metal composite anodes. *Journal of Materials Chemistry A*, **2018**, 6, 16003-16011	13	12
229	Importance of standardizing timing of hematocrit measurement when using cardiovascular magnetic resonance to calculate myocardial extracellular volume (ECV) based on pre- and post-contrast T1 mapping. *Journal of Cardiovascular Magnetic Resonance*, **2018**, 20, 46	6.9	12
228	Designing Boron Nitride Islands in Carbon Materials for Efficient Electrochemical Synthesis of Hydrogen Peroxide. *Journal of the American Chemical Society*, **2018**, 140, 7851-7859	16.4	184
227	Disentangling Transient Charge Density and Metal-Ligand Covalency in Photoexcited Ferricyanide with Femtosecond Resonant Inelastic Soft X-ray Scattering. *Journal of Physical Chemistry Letters*, **2018**, 9, 3538-3543	6.4	32
226	Carbon Core Electron Spectra of Polycyclic Aromatic Hydrocarbons. *Journal of Physical Chemistry A*, **2018**, 122, 5730-5734	2.8	9
225	Accelerated Evolution of Surface Chemistry Determined by Temperature and Cycling History in Nickel-Rich Layered Cathode Materials. *ACS Applied Materials & Interfaces*, **2018**, 10, 23842-23850	9.5	38

224	Deciphering the Cathode-Electrolyte Interfacial Chemistry in Sodium Layered Cathode Materials. *Advanced Energy Materials*, **2018**, 8, 1801975	21.8	64
223	Thermally driven mesoscale chemomechanical interplay in Li0.5Ni0.6Mn0.2Co0.2O2 cathode materials. *Journal of Materials Chemistry A*, **2018**, 6, 23055-23061	13	32
222	Selective nitrogen doping of graphene oxide by laser irradiation for enhanced hydrogen evolution activity. *Chemical Communications*, **2018**, 54, 13726-13729	5.8	16
221	Extremely reduced dielectric confinement in two-dimensional hybrid perovskites with large polar organics. *Communications Physics*, **2018**, 1,	5.4	84
220	Atom-specific activation in CO oxidation. *Journal of Chemical Physics*, **2018**, 149, 234707	3.9	1
219	Laser power meters as an X-ray power diagnostic for LCLS-II. *Journal of Synchrotron Radiation*, **2018**, 25, 72-76	2.4	5
218	Coherent X-rays reveal the influence of cage effects on ultrafast water dynamics. *Nature Communications*, **2018**, 9, 1917	17.4	43
217	Plasma Jet Printing and in Situ Reduction of Highly Acidic Graphene Oxide. *ACS Nano*, **2018**, 12, 5473-5481	13.7	25
216	Two-photon absorption of soft X-ray free electron laser radiation by graphite near the carbon K-absorption edge. *Chemical Physics Letters*, **2018**, 703, 112-116	2.5	7
215	Ultrafast terahertz field control of electronic and structural interactions in vanadium dioxide. *Physical Review B*, **2018**, 98,	3.3	34
214	Empowering multicomponent cathode materials for sodium ion batteries by exploring three-dimensional compositional heterogeneities. *Energy and Environmental Science*, **2018**, 11, 2496-2508	35.4	34
213	Revealing Anisotropic Spinel Formation on Pristine Li- and Mn-Rich Layered Oxide Surface and Its Impact on Cathode Performance. *Advanced Energy Materials*, **2017**, 7, 1602010	21.8	34
212	Synthesis and characterization of metastable, 20 nm-sized Pna21-LiCoPO4 nanospheres. *Journal of Solid State Chemistry*, **2017**, 248, 9-17	3.3	11
211	Operando investigation of Au-MnOx thin films with improved activity for the oxygen evolution reaction. *Electrochimica Acta*, **2017**, 230, 22-28	6.7	32
210	A New Anion Receptor for Improving the Interface between Lithium- and Manganese-Rich Layered Oxide Cathode and the Electrolyte. *Chemistry of Materials*, **2017**, 29, 2141-2149	9.6	31
209	Investigating the Intercalation Chemistry of Alkali Ions in Fluoride Perovskites. *Chemistry of Materials*, **2017**, 29, 1561-1568	9.6	26
208	Development of a reactor with carbon catalysts for modular-scale, low-cost electrochemical generation of H2O2. *Reaction Chemistry and Engineering*, **2017**, 2, 239-245	4.9	100
207	An Oxygen-Insensitive Hydrogen Evolution Catalyst Coated by a Molybdenum-Based Layer for Overall Water Splitting. *Angewandte Chemie - International Edition*, **2017**, 56, 5780-5784	16.4	89

206	Janus monolayers of transition metal dichalcogenides. *Nature Nanotechnology*, **2017**, 12, 744-749	28.7	828
205	Dopant Mediated Assembly of CuZnSnS Nanorods into Atomically Coupled 2D Sheets in Solution. *Nano Letters*, **2017**, 17, 3421-3428	11.5	16
204	Direct synthesis and characterization of mixed-valent Li0.5□CoPO4, a Li-deficient derivative of the Cmcm polymorph of LiCoPO4. *RSC Advances*, **2017**, 7, 28069-28081	3.7	2
203	Partially Reduced Graphene Oxide Modified Tetrahedral Amorphous Carbon Thin-Film Electrodes as a Platform for Nanomolar Detection of Dopamine. *Journal of Physical Chemistry C*, **2017**, 121, 8153-8164	3.8	16
202	Charge and Spin-State Characterization of Cobalt Bis(o-dioxolene) Valence Tautomers Using Co K□ X-ray Emission and L-Edge X-ray Absorption Spectroscopies. *Inorganic Chemistry*, **2017**, 56, 737-747	5.1	19
201	Atomic Insights into the Enhanced Surface Stability in High Voltage Cathode Materials by Ultrathin Coating. *Advanced Functional Materials*, **2017**, 27, 1602873	15.6	24
200	Effect of Backbone Chemistry on the Structure of Polyurea Films Deposited by Molecular Layer Deposition. *Chemistry of Materials*, **2017**, 29, 1192-1203	9.6	46
199	In Situ Engineering of the Electrode-Electrolyte Interface for Stabilized Overlithiated Cathodes. *Advanced Materials*, **2017**, 29, 1604549	24	21
198	Revealing the Bonding Environment of Zn in ALD Zn(O,S) Buffer Layers through X-ray Absorption Spectroscopy. *ACS Applied Materials & Interfaces*, **2017**, 9, 39105-39109	9.5	11
197	A novel method for resonant inelastic soft X-ray scattering via photoelectron spectroscopy detection. *Journal of Synchrotron Radiation*, **2017**, 24, 1180-1186	2.4	1
196	Synchrotron X-ray Analytical Techniques for Studying Materials Electrochemistry in Rechargeable Batteries. *Chemical Reviews*, **2017**, 117, 13123-13186	68.1	291
195	Investigation of nanoparticulate silicon as printed layers using scanning electron microscopy, transmission electron microscopy, X-ray absorption spectroscopy and X-ray photoelectron spectroscopy. *Journal of Synchrotron Radiation*, **2017**, 24, 1017-1023	2.4	
194	Soft x-ray absorption spectroscopy of metalloproteins and high-valent metal-complexes at room temperature using free-electron lasers. *Structural Dynamics*, **2017**, 4, 054307	3.2	27
193	Closure of the Mott gap and formation of a superthermal metal in the Fr□lich-type nonequilibrium polaron Bose-Einstein condensate in UO2+x. *Physical Review B*, **2017**, 96,	3.3	4
192	CoLi[(OH)O][(POOH)(PO)], a Lithium-Stabilized, Mixed-Valent Cobalt(II,III) Hydroxide Phosphate Framework. *Inorganic Chemistry*, **2017**, 56, 10950-10961	5.1	6
191	Efficacy of atmospheric pressure dielectric barrier discharge for inactivating airborne pathogens. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2017**, 35, 041101	2.9	6
190	Real-Time Elucidation of Catalytic Pathways in CO Hydrogenation on Ru. *Journal of Physical Chemistry Letters*, **2017**, 8, 3820-3825	6.4	7
189	L-edge spectroscopy of dilute, radiation-sensitive systems using a transition-edge-sensor array. *Journal of Chemical Physics*, **2017**, 147, 214201	3.9	19

188	Anisotropic attosecond charge carrier dynamics and layer decoupling in quasi-2D layered SnS. *Nature Communications*, **2017**, 8, 1369	17.4	23
187	Experimental validation of contrast-enhanced SSFP cine CMR for quantification of myocardium at risk in acute myocardial infarction. *Journal of Cardiovascular Magnetic Resonance*, **2017**, 19, 12	6.9	21
186	Soft X-ray absorption spectroscopy investigation of the surface chemistry and treatments of copper indium gallium diselenide (CIGS). *Solar Energy Materials and Solar Cells*, **2017**, 160, 390-397	6.4	
185	Biogenic manganese oxides as reservoirs of organic carbon and proteins in terrestrial and marine environments. *Geobiology*, **2017**, 15, 158-172	4.3	37
184	Chemical Bond Activation Observed with an X-ray Laser. *Journal of Physical Chemistry Letters*, **2016**, 7, 3647-51	6.4	15
183	Facile, ethylene glycol-promoted microwave-assisted solvothermal synthesis of high-performance LiCoPO4 as a high-voltage cathode material for lithium-ion batteries. *RSC Advances*, **2016**, 6, 82984-82994	3.7	26
182	What Does Nitric Acid Really Do to Carbon Nanofibers?. *Journal of Physical Chemistry C*, **2016**, 120, 22655-22662	4.8	12
181	Strontium Insertion in Methylammonium Lead Iodide: Long Charge Carrier Lifetime and High Fill-Factor Solar Cells. *Advanced Materials*, **2016**, 28, 9839-9845	24	127
180	Degradation mechanism of over-charged LiCoO2/mesocarbon microbeads battery during shallow depth of discharge cycling. *Journal of Power Sources*, **2016**, 329, 255-261	8.9	17
179	Extent of Myocardium at Risk for Left Anterior Descending Artery, Right Coronary Artery, and Left Circumflex Artery Occlusion Depicted by Contrast-Enhanced Steady State Free Precession and T2-Weighted Short Tau Inversion Recovery Magnetic Resonance Imaging. *Circulation: Cardiovascular Imaging*, **2016**, 9,	3.9	14
178	Understanding the Degradation Mechanism of Lithium Nickel Oxide Cathodes for Li-Ion Batteries. *ACS Applied Materials & Interfaces*, **2016**, 8, 31677-31683	9.5	100
177	Tailoring Transition-Metal Hydroxides and Oxides by Photon-Induced Reactions. *Angewandte Chemie*, **2016**, 128, 14484-14488	3.6	2
176	Tailoring Transition-Metal Hydroxides and Oxides by Photon-Induced Reactions. *Angewandte Chemie - International Edition*, **2016**, 55, 14272-14276	16.4	8
175	Metal segregation in hierarchically structured cathode materials for high-energy lithium batteries. *Nature Energy*, **2016**, 1,	62.3	179
174	Spontaneous incorporation of gold in palladium-based ternary nanoparticles makes durable electrocatalysts for oxygen reduction reaction. *Nature Communications*, **2016**, 7, 11941	17.4	58
173	Anti-Stokes resonant x-ray Raman scattering for atom specific and excited state selective dynamics. *New Journal of Physics*, **2016**, 18, 103011	2.9	13
172	Identification of the dominant photochemical pathways and mechanistic insights to the ultrafast ligand exchange of Fe(CO)5 to Fe(CO)4EtOH. *Structural Dynamics*, **2016**, 3, 043204	3.2	42
171	Atomistic Interrogation of B-N Co-dopant Structures and Their Electronic Effects in Graphene. *ACS Nano*, **2016**, 10, 6574-84	16.7	42

170	Anomalous dispersion and band gap reduction in UO2+ and its possible coupling to the coherent polaronic quantum state. *Nuclear Instruments & Methods in Physics Research B*, **2016**, 374, 45-50	1.2	5
169	Correlation between sp3-to-sp2 Ratio and Surface Oxygen Functionalities in Tetrahedral Amorphous Carbon (ta-C) Thin Film Electrodes and Implications of Their Electrochemical Properties. *Journal of Physical Chemistry C*, **2016**, 120, 8298-8304	3.8	38
168	Tuning Composition and Activity of Cobalt Titanium Oxide Catalysts for the Oxygen Evolution Reaction. *Electrochimica Acta*, **2016**, 193, 240-245	6.7	18
167	Relating Electronic and Geometric Structure of Atomic Layer Deposited BaTiO3 to its Electrical Properties. *Journal of Physical Chemistry Letters*, **2016**, 7, 1428-33	6.4	16
166	A core-level spectroscopic investigation of the preparation and electrochemical cycling of nitrogen-modified carbon as a model catalyst support. *Journal of Materials Chemistry A*, **2016**, 4, 443-450	13	1
165	Electronic structure study of the CdS buffer layer in CIGS solar cells by X-ray absorption spectroscopy: Experiment and theory. *Solar Energy Materials and Solar Cells*, **2016**, 149, 275-283	6.4	13
164	Elucidation of the surface characteristics and electrochemistry of high-performance LiNiO2. *Chemical Communications*, **2016**, 52, 4239-42	5.8	50
163	On the valence fluctuation in the early actinide metals. *Journal of Electron Spectroscopy and Related Phenomena*, **2016**, 207, 14-18	1.7	7
162	X-ray absorption spectroscopy using a self-seeded soft X-ray free-electron laser. *Optics Express*, **2016**, 24, 22469-22480	3.3	18
161	Hybridization-Induced Carrier Localization at the C60 /ZnO Interface. *Advanced Materials*, **2016**, 28, 3960-24	24	11
160	Spectroscopic investigation of nitrogen-functionalized carbon materials. *Surface and Interface Analysis*, **2016**, 48, 283-292	1.5	13
159	Tunable Polyaniline-Based Porous Carbon with Ultrahigh Surface Area for CO2 Capture at Elevated Pressure. *Advanced Energy Materials*, **2016**, 6, 1502491	21.8	102
158	Morphological and chemical changes of aerosolized E. coli treated with a dielectric barrier discharge. *Biointerphases*, **2016**, 11, 011009	1.8	7
157	Plasma jet printing for flexible substrates. *Applied Physics Letters*, **2016**, 108, 123103	3.4	38
156	Synthesis of a mixed-valent tin nitride and considerations of its possible crystal structures. *Journal of Chemical Physics*, **2016**, 144, 144201	3.9	23
155	Understanding and Control of Bipolar Self-Doping in Copper Nitride. *Journal of Applied Physics*, **2016**, 119,	2.5	21
154	Imaging chiral symmetry breaking from Kekul bond order in graphene. *Nature Physics*, **2016**, 12, 950-958	16.2	56
153	Cross-linked aluminum dioxybenzene coating for stabilization of silicon electrodes. *Nano Energy*, **2016**, 22, 202-210	17.1	24

152	Structural Changes Correlated with Magnetic Spin State Isomorphism in the S State of the MnCaO Cluster in the Oxygen-Evolving Complex of Photosystem II. *Chemical Science*, **2016**, 7, 5236-5248	9.4	32
151	Multi-vendor, multicentre comparison of contrast-enhanced SSFP and T2-STIR CMR for determining myocardium at risk in ST-elevation myocardial infarction. *European Heart Journal Cardiovascular Imaging*, **2016**, 17, 744-53	4.1	40
150	Probing 5f-state configurations in URu2Si2 with U LIII-edge resonant x-ray emission spectroscopy. *Physical Review B*, **2016**, 94,	3.3	18
149	Tuning complex transition metal hydroxide nanostructures as active catalysts for water oxidation by a laser-chemical route. *Nano Letters*, **2015**, 15, 2498-503	11.5	35
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