

Doron Aurbach

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.

330
papers

36,361
citations

83
h-index

187
g-index

346
ext. papers

41,662
ext. citations

9.4
avg, IF

7.93
L-index

#	Paper	IF	Citations
330	Double gas treatment: A successful approach for stabilizing the Li and Mn-rich NCM cathode materials electrochemical behavior. <i>Energy Storage Materials</i> , 2022 , 45, 74-91	19.4	3
329	Improved Electrochemical Behavior and Thermal Stability of Li and Mn-Rich Cathode Materials Modified by Lithium Sulfate Surface Treatment. <i>Inorganics</i> , 2022 , 10, 39	2.9	0
328	Stabilizing High-Voltage Lithium-Ion Battery Cathodes Using Functional Coatings of 2D Tungsten Diselenide. <i>ACS Energy Letters</i> , 2022 , 7, 1383-1391	20.1	3
327	High Energy Density Rechargeable Batteries Based on Li Metal Anodes. The Role of Unique Surface Chemistry Developed in Solutions Containing Fluorinated Organic Co-solvents. <i>Journal of the American Chemical Society</i> , 2021 ,	16.4	10
326	Evaluation of Mg[B(HFIP)]-Based Electrolyte Solutions for Rechargeable Mg Batteries. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 54894-54905	9.5	1
325	The effect of synthesis and zirconium doping on the performance of nickel-rich NCM622 cathode materials for Li-ion batteries. <i>Journal of Solid State Electrochemistry</i> , 2021 , 25, 1513-1530	2.6	4
324	Studies of Nickel-Rich LiNiCoMnO Cathode Materials Doped with Molybdenum Ions for Lithium-Ion Batteries. <i>Materials</i> , 2021 , 14,	3.5	2
323	Enhanced Performance of Ti3C2Tx (MXene) Electrodes in Concentrated ZnCl2 Solutions: A Combined Electrochemical and EQCM-D Study. <i>Energy Storage Materials</i> , 2021 , 38, 535-541	19.4	13
322	Alumina thin coat on pre-charged soft carbon anode reduces electrolyte breakdown and maintains sodiation sites active in Na-ion battery Insights from NMR measurements. <i>Journal of Solid State Chemistry</i> , 2021 , 298, 122121	3.3	1
321	Influences of Cations Solvation on Charge Storage Performance in Polyimide Anodes for Aqueous Multivalent Ion Batteries. <i>ACS Energy Letters</i> , 2021 , 6, 2638-2644	20.1	4
320	Critical Review on the Unique Interactions and Electroanalytical Challenges Related to Cathodes - Solutions Interfaces in Non-Aqueous Mg Battery Prototypes. <i>ChemElectroChem</i> , 2021 , 8, 3229-3238	4.3	0
319	Electrochemical and Structural Studies of LiNi0.85Co0.1Mn0.05O2, a Cathode Material for High Energy Density Li-Ion Batteries, Stabilized by Doping with Small Amounts of Tungsten. <i>Journal of the Electrochemical Society</i> , 2021 , 168, 060552	3.9	2
318	Fluorination of Ni-Rich Lithium-Ion Battery Cathode Materials by Fluorine Gas: Chemistry, Characterization, and Electrochemical Performance in Full-cells. <i>Batteries and Supercaps</i> , 2021 , 4, 632-645 ^{5,6}	5.6	4
317	Understanding the Role of Alumina (Al2O3), Pentalithium Aluminate (Li5AlO4), and Pentasodium Aluminate (Na5AlO4) Coatings on the Li and Mn-Rich NCM Cathode Material 0.33Li2MnO3/0.67Li(Ni0.4Co0.2Mn0.4)O2 for Enhanced Electrochemical Performance. <i>Advanced Functional Materials</i> , 2021 , 31, 2008083	15.6	13
316	Enhancement of Structural, Electrochemical, and Thermal Properties of Ni-Rich LiNi 0.85 Co 0.1 Mn 0.05 O 2 Cathode Materials for Li-Ion Batteries by Al and Ti Doping. <i>Batteries and Supercaps</i> , 2021 , 4, 221-231	5.6	7
315	Sustainable existence of solid mercury (Hg) nanoparticles at room temperature and their applications. <i>Chemical Science</i> , 2021 , 12, 3226-3238	9.4	4
314	Metal-Metal Bond in the Light of Pauling's Rules. <i>Molecules</i> , 2021 , 26,	4.8	4

313	Combined nanofiltration and advanced oxidation processes with bifunctional carbon nanomembranes.. <i>RSC Advances</i> , 2021 , 11, 14777-14786	3.7	2
312	Electrochemical and Thermal Behavior of Modified Li and Mn-Rich Cathode Materials in Battery Prototypes: Impact of Pentasodium Aluminate Coating and Comprehensive Understanding of Its Evolution upon Cycling through Solid-State Nuclear Magnetic Resonance Analysis. <i>Advanced Energy Materials</i> , 2021 , 11, 2101126	1.6	3
311	Enhancement of Structural, Electrochemical, and Thermal Properties of High-Energy Density Ni-Rich LiNiCoMnO Cathode Materials for Li-Ion Batteries by Niobium Doping. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 34145-34156	9.5	11
310	Fast Charging of Lithium-Ion Batteries: A Review of Materials Aspects. <i>Advanced Energy Materials</i> , 2021 , 11, 2101126	21.8	65
309	High Performance Aqueous and Nonaqueous Ca-Ion Cathodes Based on Fused-Ring Aromatic Carbonyl Compounds. <i>ACS Energy Letters</i> , 2021 , 6, 2659-2665	20.1	3
308	AZ31 Magnesium Alloy Foils as Thin Anodes for Rechargeable Magnesium Batteries. <i>ChemSusChem</i> , 2021 , 14, 4690-4696	8.3	4
307	Multifold Electrochemical Protons and Zinc Ion Storage Behavior in Copper Vanadate Cathodes. <i>ACS Applied Energy Materials</i> , 2021 , 4, 10197-10202	6.1	1
306	Can Anions Be Inserted into MXene?. <i>Journal of the American Chemical Society</i> , 2021 , 143, 12552-12559	16.4	19
305	Unraveling the Role of Fluorinated Alkyl Carbonate Additives in Improving Cathode Performance in Sodium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 46478-46487	9.5	3
304	Novel Inorganic Integrated Membrane Electrodes for Membrane Capacitive Deionization. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 46537-46548	9.5	1
303	Boron doped Ni-rich LiNi _{0.85} Co _{0.10} Mn _{0.05} O ₂ cathode materials studied by structural analysis, solid state NMR, computational modeling, and electrochemical performance. <i>Energy Storage Materials</i> , 2021 , 42, 594-607	19.4	2
302	Horizons for Modern Electrochemistry Related to Energy Storage and Conversion, a Review. <i>Israel Journal of Chemistry</i> , 2021 , 61, 11-25	3.4	1
301	Improved High-Energy Na-NCM Cathode Prepared by Ion Exchange Route via Application of Various ALD Treatments. <i>Journal of the Electrochemical Society</i> , 2021 , 168, 010537	3.9	2
300	Tunnel-Type Sodium Manganese Oxide Cathodes for Sodium-Ion Batteries. <i>ChemElectroChem</i> , 2021 , 8, 798-811	4.3	2
299	Oxidation Stability of Organic Redox Mediators as Mobile Catalysts in Lithium-Oxygen Batteries. <i>ACS Energy Letters</i> , 2020 , 5, 2122-2129	20.1	18
298	A revisit of the bond valence model makes it universal. <i>Physical Chemistry Chemical Physics</i> , 2020 , 22, 13839-13849	3.6	5
297	The Role of Surface Adsorbed Cl ⁻ Complexes in Rechargeable Magnesium Batteries. <i>ACS Catalysis</i> , 2020 , 10, 7773-7784	13.1	14
296	Selected future tasks in electrochemical research related to advanced power sources. <i>Journal of Solid State Electrochemistry</i> , 2020 , 24, 2027-2029	2.6	1

295	Stabilized Behavior of LiNi _{0.85} Co _{0.10} Mn _{0.05} O ₂ Cathode Materials Induced by Their Treatment with SO ₂ . <i>ACS Applied Energy Materials</i> , 2020 , 3, 3609-3618	6.1	16
294	Lithium-Oxygen Batteries and Related Systems: Potential, Status, and Future. <i>Chemical Reviews</i> , 2020 , 120, 6626-6683	68.1	279
293	Enhanced capacitive deionization of an integrated membrane electrode by thin layer spray-coating of ion exchange polymers on activated carbon electrode. <i>Desalination</i> , 2020 , 491, 114460	10.3	7
292	Modification of Li- and Mn-Rich Cathode Materials Formation of the Rock-Salt and Spinel Surface Layers for Steady and High-Rate Electrochemical Performances. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 32698-32711	9.5	8
291	New aqueous energy storage devices comprising graphite cathodes, MXene anodes and concentrated sulfuric acid solutions. <i>Energy Storage Materials</i> , 2020 , 32, 1-10	19.4	17
290	Improved Performance of Li-metal LiNi _{0.8} Co _{0.1} Mn _{0.1} O ₂ Cells with High-Loading Cathodes and Small Amounts of Electrolyte Solutions Containing Fluorinated Carbonates at 30 °C. <i>Journal of the Electrochemical Society</i> , 2020 , 167, 070509	3.9	11
289	Steric and Electrostatic Effects in Compounds with Centered Clusters Quantified by Bond Order Analysis. <i>Crystal Growth and Design</i> , 2020 , 20, 2115-2122	3.5	2
288	Alloy Anode Materials for Rechargeable Mg Ion Batteries. <i>Advanced Energy Materials</i> , 2020 , 10, 2000697	21.8	64
287	Charge-transfer materials for electrochemical water desalination, ion separation and the recovery of elements. <i>Nature Reviews Materials</i> , 2020 , 5, 517-538	73.3	168
286	Evaluating the High-Voltage Stability of Conductive Carbon and Ethylene Carbonate with Various Lithium Salts. <i>Journal of the Electrochemical Society</i> , 2020 , 167, 160522	3.9	11
285	Layered Cathode Materials for Lithium-Ion Batteries: Review of Computational Studies on LiNi _{1-x-y} CoxMnyO ₂ and LiNi _{1-x-y} CoxAl _y O ₂ . <i>Chemistry of Materials</i> , 2020 , 32, 915-952	9.6	76
284	How solution chemistry affects the electrochemical behavior of cathodes for Mg batteries, a classical electroanalytical study. <i>Electrochimica Acta</i> , 2020 , 334, 135614	6.7	9
283	Surface Modification of Li-Rich Mn-Based Layered Oxide Cathodes: Challenges, Materials, Methods, and Characterization. <i>Advanced Energy Materials</i> , 2020 , 10, 2002506	21.8	44
282	Anomalous Sodium Storage Behavior in Al/F Dual-Doped P2-Type Sodium Manganese Oxide Cathode for Sodium-Ion Batteries. <i>Advanced Energy Materials</i> , 2020 , 10, 2002205	21.8	12
281	Interaction between Electrolytes and Sb ₂ O ₃ -Based Electrodes in Sodium Batteries: Uncovering the Detrimental Effects of Diglyme. <i>ChemElectroChem</i> , 2020 , 7, 3487-3495	4.3	3
280	Mass-producible polyhedral macrotube carbon arrays with multi-hole cross-section profiles: superb 3D tertiary porous electrode materials for supercapacitors and capacitive deionization cells. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 16312-16322	13	13
279	Current status and future directions of multivalent metal-ion batteries. <i>Nature Energy</i> , 2020 , 5, 646-656	62.3	307
278	Enhancement of Electrochemical Performance of Lithium and Manganese-Rich Cathode Materials via Thermal Treatment with SO ₂ . <i>Journal of the Electrochemical Society</i> , 2020 , 167, 110563	3.9	9

277	On the challenge of large energy storage by electrochemical devices. <i>Electrochimica Acta</i> , 2020 , 354, 136771	6.7	25
276	Electrolyte Solutions for Rechargeable Li-Ion Batteries Based on Fluorinated Solvents. <i>ACS Applied Energy Materials</i> , 2020 , 3, 7485-7499	6.1	10
275	Boosting Tunnel-Type Manganese Oxide Cathodes by Lithium Nitrate for Practical Aqueous Na-Ion Batteries. <i>ACS Applied Energy Materials</i> , 2020 , 3, 10744-10751	6.1	0
274	Electrochemical Activation of LiMnO Electrodes at 0 °C and Its Impact on the Subsequent Performance at Higher Temperatures. <i>Materials</i> , 2020 , 13,	3.5	5
273	Vacancy-Driven High Rate Capabilities in Calcium-Doped Na _{0.4} MnO ₂ Cathodes for Aqueous Sodium-Ion Batteries. <i>Advanced Energy Materials</i> , 2020 , 10, 2002077	21.8	12
272	Capacitive deionization for wastewater treatment: Opportunities and challenges. <i>Chemosphere</i> , 2020 , 241, 125003	8.4	32
271	Controllable and stable organometallic redox mediators for lithium oxygen batteries. <i>Materials Horizons</i> , 2020 , 7, 214-222	14.4	13
270	The Sodium Storage Mechanism in Tunnel-Type Na _{0.44} MnO ₂ Cathodes and the Way to Ensure Their Durable Operation. <i>Advanced Energy Materials</i> , 2020 , 10, 2000564	21.8	20
269	Unidirectional electron injection and accelerated proton transport in bacteriorhodopsin based Bio-p-n junctions. <i>Biosensors and Bioelectronics</i> , 2020 , 173, 112811	11.8	3
268	Improving Amorphous Carbon Anodes for Na Ion Batteries by Surface Treatment of a Presodiated Electrode with AlO. <i>Langmuir</i> , 2019 , 35, 11670-11678	4	9
267	Quantification of porosity in extensively nanoporous thin films in contact with gases and liquids. <i>Nature Communications</i> , 2019 , 10, 4394	17.4	5
266	Review Multifunctional Separators: A Promising Approach for Improving the Durability and Performance of Li-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2019 , 166, A5369-A5377	3.9	15
265	Li/Fe substitution in Li-rich Ni, Co, Mn oxides for enhanced electrochemical performance as cathode materials. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 15215-15224	13	17
264	Fluorination of Li-Rich Lithium-Ion-Battery Cathode Materials by Fluorine Gas: Chemistry, Characterization, and Electrochemical Performance in Half Cells. <i>ChemElectroChem</i> , 2019 , 6, 3337-3349	4.3	20
263	EQCM-D technique for complex mechanical characterization of energy storage electrodes: Background and practical guide. <i>Energy Storage Materials</i> , 2019 , 21, 399-413	19.4	29
262	The Power of Stoichiometry: Conditioning and Speciation of MgCl/AlCl in Tetraethylene Glycol Dimethyl Ether-Based Electrolytes. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 24057-24066	9.5	23
261	Modulation, Characterization, and Engineering of Advanced Materials for Electrochemical Energy Storage Applications: MoO ₃ /V ₂ O ₅ Bilayer Model System. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 16577-16587	3.8	2
260	LNMO-Graphite Cells Performance Enhancement by the Use of Acid Scavenging Separators. <i>ChemElectroChem</i> , 2019 , 6, 3690-3698	4.3	4

259	Improving Performance of LiNi _{0.8} Co _{0.1} Mn _{0.1} O ₂ Cathode Materials for Lithium-Ion Batteries by Doping with Molybdenum-Ions: Theoretical and Experimental Studies. <i>ACS Applied Energy Materials</i> , 2019 , 2, 4521-4534	6.1	48
258	SiO ₂ -Modified Separators: Stability in LiPF ₆ -Containing Electrolyte Solutions and Effect on Cycling Performance of Li Batteries. <i>Journal of the Electrochemical Society</i> , 2019 , 166, A1685-A1691	3.9	7
257	Assessing the Strength of Metal-Metal Interactions. <i>Inorganic Chemistry</i> , 2019 , 58, 7466-7471	5.1	4
256	Investigation of Li _{1.17} Ni _{0.20} Mn _{0.53} Co _{0.10} O ₂ as an Interesting Li- and Mn-Rich Layered Oxide Cathode Material through Electrochemistry, Microscopy, and In Situ Electrochemical Dilatometry. <i>ChemElectroChem</i> , 2019 , 6, 2812-2819	4.3	13
255	The Ratio between the Surface Charge and Electrode's Capacitance as a Fast Tool for Assessing the Charge Efficiency in Capacitive Deionization Processes. <i>Journal of the Electrochemical Society</i> , 2019 , 166, H119-H125	3.9	5
254	Superfast high-energy storage hybrid device composed of MXene and Chevrel-phase electrodes operated in saturated LiCl electrolyte solution. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 19761-19773	13	24
253	Stable LiNi _{0.8} Co _{0.1} Mn _{0.1} O ₂ Li Metal Cells with Practical Loading at 30 Degrees C and Elevated Temperatures. <i>Journal of the Electrochemical Society</i> , 2019 , 166, A2834-A2839	3.9	7
252	Aqueous Energy Storage Device Based on LiMn ₂ O ₄ (Spinel) Positive Electrode and Anthraquinone-Modified Carbon-Negative Electrode. <i>Energy Technology</i> , 2019 , 7, 1900589	3.5	4
251	Diffusion-Induced Transient Stresses in Li-Battery Electrodes Imaged by Electrochemical Quartz Crystal Microbalance with Dissipation Monitoring and Environmental Scanning Electron Microscopy. <i>ACS Energy Letters</i> , 2019 , 4, 1907-1917	20.1	15
250	Anode-Electrolyte Interfaces in Secondary Magnesium Batteries. <i>Joule</i> , 2019 , 3, 27-52	27.8	153
249	New Insights Related to Rechargeable Lithium Batteries: Li Metal Anodes, Ni Rich LiNi _x Co _y Mn _z O ₂ Cathodes and Beyond Them. <i>Journal of the Electrochemical Society</i> , 2019 , 166, A5265-A5274	3.9	31
248	Metal-Sulfur Batteries: Overview and Research Methods. <i>ACS Energy Letters</i> , 2019 , 4, 436-446	20.1	71
247	Ultrafine Ruthenium Oxide Nanoparticles Supported on Molybdenum Oxide Nanosheets as Highly Efficient Electrocatalyst for Hydrogen Evolution in Acidic Medium. <i>ChemCatChem</i> , 2019 , 11, 1495-1502	5.2	8
246	Structural and Electrochemical Aspects of LiNi _{0.8} Co _{0.1} Mn _{0.1} O ₂ Cathode Materials Doped by Various Cations. <i>ACS Energy Letters</i> , 2019 , 4, 508-516	20.1	189
245	Anion Effects on Cathode Electrochemical Activity in Rechargeable Magnesium Batteries: A Case Study of V ₂ O ₅ . <i>ACS Energy Letters</i> , 2019 , 4, 209-214	20.1	28
244	Shedding Light on the Oxygen Reduction Reaction Mechanism in Ether-Based Electrolyte Solutions: A Study Using Operando UV-Vis Spectroscopy. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 10860-10869	10.5	5
243	Reaching Highly Stable Specific Capacity with Integrated 0.6Li ₂ MnO ₃ : 0.4LiNi _{0.6} Co _{0.2} Mn _{0.2} O ₂ Cathode Materials. <i>ChemElectroChem</i> , 2018 , 5, 1137-1146	4.3	17
242	Ammonia Treatment of 0.35Li ₂ MnO ₃ ∩0.65LiNi _{0.35} Mn _{0.45} Co _{0.20} O ₂ Material: Insights from Solid-State NMR Analysis. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 3773-3779	3.8	13

241	In Situ Real-Time Mechanical and Morphological Characterization of Electrodes for Electrochemical Energy Storage and Conversion by Electrochemical Quartz Crystal Microbalance with Dissipation Monitoring. <i>Accounts of Chemical Research</i> , 2018 , 51, 69-79	24.3	62
240	In Situ Acoustic Diagnostics of Particle-Binder Interactions in Battery Electrodes. <i>Joule</i> , 2018 , 2, 988-1003	7.8	24
239	From Surface ZrO ₂ Coating to Bulk Zr Doping by High Temperature Annealing of Nickel-Rich Lithiated Oxides and Their Enhanced Electrochemical Performance in Lithium Ion Batteries. <i>Advanced Energy Materials</i> , 2018 , 8, 1701682	21.8	304
238	Horizons for Li-Ion Batteries Relevant to Electro-Mobility: High-Specific-Energy Cathodes and Chemically Active Separators. <i>Advanced Materials</i> , 2018 , 30, e1801348	24	71
237	Na-ion battery cathode materials prepared by electrochemical ion exchange from alumina-coated Li _{1+x} Mn _{0.54} Co _{0.13} Ni _{0.1+y} O ₂ . <i>Journal of Materials Chemistry A</i> , 2018 , 6, 14816-14827	13	16
236	Bromide Ions Specific Removal and Recovery by Electrochemical Desalination. <i>Environmental Science & Technology</i> , 2018 , 52, 6275-6281	10.3	24
235	Solvent Effects on the Reversible Intercalation of Magnesium-Ions into V ₂ O ₅ Electrodes. <i>ChemElectroChem</i> , 2018 , 5, 3514-3524	4.3	30
234	NMR-Detected Dynamics of Sodium Co-Intercalation with Diglyme Solvent Molecules in Graphite Anodes Linked to Prolonged Cycling. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 21172-21184	3.8	15
233	Practical anodes for Li-ion batteries comprising metallurgical silicon particles and multiwall carbon nanotubes. <i>Journal of Solid State Electrochemistry</i> , 2018 , 22, 3289-3301	2.6	4
232	Understanding the Role of Minor Molybdenum Doping in LiNiCoMnO Electrodes: from Structural and Surface Analyses and Theoretical Modeling to Practical Electrochemical Cells. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 29608-29621	9.5	60
231	Review A Comparative Evaluation of Redox Mediators for Li-O ₂ Batteries: A Critical Review. <i>Journal of the Electrochemical Society</i> , 2018 , 165, A2274-A2293	3.9	51
230	Direct Assessment of Nanoconfined Water in 2D TiC Electrode Interspaces by a Surface Acoustic Technique. <i>Journal of the American Chemical Society</i> , 2018 , 140, 8910-8917	16.4	66
229	Battery Systems Based on Multivalent Metals and Metal Ions. <i>Series on Chemistry, Energy and the Environment</i> , 2018 , 237-318	0.2	5
228	Review on Challenges and Recent Advances in the Electrochemical Performance of High Capacity Li- and Mn-Rich Cathode Materials for Li-Ion Batteries. <i>Advanced Energy Materials</i> , 2018 , 8, 1702397	21.8	340
227	Bond Order Conservation Principle and Peculiarities of the Metal-Metal Bonding. <i>Inorganic Chemistry</i> , 2018 , 57, 15550-15557	5.1	6
226	Predicting accurate cathode properties of layered oxide materials using the SCAN meta-GGA density functional. <i>Npj Computational Materials</i> , 2018 , 4,	10.9	52
225	On the Feasibility of Practical Mg-S Batteries: Practical Limitations Associated with Metallic Magnesium Anodes. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 36910-36917	9.5	44
224	Do the basic crystal chemistry principles agree with a plethora of recent quantum chemistry data?. <i>IUCrJ</i> , 2018 , 5, 542-547	4.7	7

223	Elucidating the Li-Ion Battery Performance Benefits Enabled by Multifunctional Separators. <i>ACS Applied Energy Materials</i> , 2018 , 1, 1878-1882	6.1	8
222	High-Performance Cells Containing Lithium Metal Anodes, LiNiCoMnO (NCM 622) Cathodes, and Fluoroethylene Carbonate-Based Electrolyte Solution with Practical Loading. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 19773-19782	9.5	60
221	High-Performance LiNiO ₂ Cathodes with Practical Loading Cycled with Li metal Anodes in Fluoroethylene Carbonate-Based Electrolyte Solution. <i>ACS Applied Energy Materials</i> , 2018 , 1, 2600-2607	6.1	24
220	Redox Mediators for Li-O Batteries: Status and Perspectives. <i>Advanced Materials</i> , 2018 , 30, 1704162	24	206
219	Review Multifunctional Materials for Enhanced Li-Ion Batteries Durability: A Brief Review of Practical Options. <i>Journal of the Electrochemical Society</i> , 2017 , 164, A6315-A6323	3.9	49
218	Understanding the influence of Mg doping for the stabilization of capacity and higher discharge voltage of Li- and Mn-rich cathodes for Li-ion batteries. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 6142-6152	3.6	48
217	Review Recent Advances and Remaining Challenges for Lithium Ion Battery Cathodes. <i>Journal of the Electrochemical Society</i> , 2017 , 164, A6341-A6348	3.9	128
216	Unraveling the Effects of Al Doping on the Electrochemical Properties of LiNi _{0.5} Co _{0.2} Mn _{0.3} O ₂ Using First Principles. <i>Journal of the Electrochemical Society</i> , 2017 , 164, A6359-A6365	3.9	80
215	Single-Wall Carbon Nanotube Doping in Lead-Acid Batteries: A New Horizon. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 3634-3643	9.5	42
214	On the Oxidation State of Manganese Ions in Li-Ion Battery Electrolyte Solutions. <i>Journal of the American Chemical Society</i> , 2017 , 139, 1738-1741	16.4	88
213	Enhanced capacity and lower mean charge voltage of Li-rich cathodes for lithium ion batteries resulting from low-temperature electrochemical activation. <i>RSC Advances</i> , 2017 , 7, 7116-7121	3.7	22
212	Electrochemical Performance of Li- and Mn-Rich Cathodes in Full Cells with Prelithiated Graphite Negative Electrodes. <i>ACS Energy Letters</i> , 2017 , 2, 544-548	20.1	33
211	Large-Scale Li ₂ O ₂ Pouch Type Cells for Practical Evaluation and Applications. <i>Advanced Functional Materials</i> , 2017 , 27, 1605500	15.6	30
210	The importance of solvent selection in Li-O cells. <i>Chemical Communications</i> , 2017 , 53, 3269-3272	5.8	21
209	Electrochemical performance of Na _{0.6} [Li _{0.2} Ni _{0.2} Mn _{0.6}]O ₂ cathodes with high-working average voltage for Na-ion batteries. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 5858-5864	13	30
208	In Situ Porous Structure Characterization of Electrodes for Energy Storage and Conversion by EQCM-D: a Review. <i>Electrochimica Acta</i> , 2017 , 232, 271-284	6.7	52
207	Studies of Spinel-to-Layered Structural Transformations in LiMn ₂ O ₄ Electrodes Charged to High Voltages. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 9120-9130	3.8	18
206	Carbon-based composite materials for supercapacitor electrodes: a review. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 12653-12672	13	842

205	In Situ Monitoring of Gravimetric and Viscoelastic Changes in 2D Intercalation Electrodes. <i>ACS Energy Letters</i> , 2017 , 2, 1407-1415	20.1	48
204	Fluoroethylene Carbonate as an Important Component for the Formation of an Effective Solid Electrolyte Interphase on Anodes and Cathodes for Advanced Li-Ion Batteries. <i>ACS Energy Letters</i> , 2017 , 2, 1337-1345	20.1	263
203	Very Stable Lithium Metal Stripping/Plating at a High Rate and High Areal Capacity in Fluoroethylene Carbonate-Based Organic Electrolyte Solution. <i>ACS Energy Letters</i> , 2017 , 2, 1321-1326	20.1	283
202	Aprotic metal-oxygen batteries: recent findings and insights. <i>Journal of Solid State Electrochemistry</i> , 2017 , 21, 1861-1878	2.6	21
201	X-ray Photodecomposition of Bis(trifluoromethanesulfonyl)imide, Bis(fluorosulfonyl)imide, and Hexafluorophosphate. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 3744-3751	3.8	9
200	High-Temperature Treatment of Li-Rich Cathode Materials with Ammonia: Improved Capacity and Mean Voltage Stability during Cycling. <i>Advanced Energy Materials</i> , 2017 , 7, 1700708	21.8	102
199	Electrochemistry of Organoaluminum Compounds 2017 , 1-18		
198	High-Voltage Supercapacitors with Solutions Based on Adiponitrile Solvent. <i>Journal of the Electrochemical Society</i> , 2017 , 164, A231-A236	3.9	14
197	Increasing the durability of Li-ion batteries by means of manganese ion trapping materials with nitrogen functionalities. <i>Journal of Power Sources</i> , 2017 , 341, 457-465	8.9	38
196	ReviewRecent Advances and Remaining Challenges for Lithium Ion Battery Cathodes. <i>Journal of the Electrochemical Society</i> , 2017 , 164, A6220-A6228	3.9	442
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