

Jordi Cabana

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175
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ext. citations

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L-index

#	Paper	IF	Citations
157	Beyond intercalation-based Li-ion batteries: the state of the art and challenges of electrode materials reacting through conversion reactions. <i>Advanced Materials</i> , 2010 , 22, E170-92	24	1859
156	The origin of high electrolyte-electrode interfacial resistances in lithium cells containing garnet type solid electrolytes. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 18294-300	3.6	335
155	Chemical composition mapping with nanometre resolution by soft X-ray microscopy. <i>Nature Photonics</i> , 2014 , 8, 765-769	33.9	293
154	Intergranular Cracking as a Major Cause of Long-Term Capacity Fading of Layered Cathodes. <i>Nano Letters</i> , 2017 , 17, 3452-3457	11.5	248
153	Three-dimensional imaging of chemical phase transformations at the nanoscale with full-field transmission X-ray microscopy. <i>Journal of Synchrotron Radiation</i> , 2011 , 18, 773-81	2.4	200
152	Exploring Anomalous Charge Storage in Anode Materials for Next-Generation Li Rechargeable Batteries. <i>Chemical Reviews</i> , 2020 , 120, 6934-6976	68.1	196
151	Influence of the Benzoquinone Sorption on the Structure and Electrochemical Performance of the MIL-53(Fe) Hybrid Porous Material in a Lithium-Ion Battery. <i>Chemistry of Materials</i> , 2009 , 21, 1602-1611	9.6	191
150	Composition-structure relationships in the Li-ion battery electrode material LiNi(0.5)Mn(1.5)O(4). <i>Chemistry of Materials</i> , 2012 , 24, 2952-2964	9.6	185
149	Mechanism of Zn Insertion into Nanostructured γ -MnO ₂ : A Nonaqueous Rechargeable Zn Metal Battery. <i>Chemistry of Materials</i> , 2017 , 29, 4874-4884	9.6	171
148	Ultrathin Lithium-Ion Conducting Coatings for Increased Interfacial Stability in High Voltage Lithium-Ion Batteries. <i>Chemistry of Materials</i> , 2014 , 26, 3128-3134	9.6	164
147	New materials based on a layered sodium titanate for dual electrochemical Na and Li intercalation systems. <i>Energy and Environmental Science</i> , 2013 , 6, 2538	35.4	163
146	The formation mechanism of fluorescent metal complexes at the Li(x)Ni(0.5)Mn(1.5)O(4)/carbonate ester electrolyte interface. <i>Journal of the American Chemical Society</i> , 2015 , 137, 3533-9	16.4	153
145	Direct Observation of Reversible Magnesium Ion Intercalation into a Spinel Oxide Host. <i>Advanced Materials</i> , 2015 , 27, 3377-84	24	145
144	Single-particle measurements of electrochemical kinetics in NMC and NCA cathodes for Li-ion batteries. <i>Energy and Environmental Science</i> , 2018 , 11, 860-871	35.4	139
143	Effect of microstructure and surface impurity segregation on the electrical and electrochemical properties of dense Al-substituted Li ₇ La ₃ Zr ₂ O ₁₂ . <i>Journal of Materials Chemistry A</i> , 2014 , 2, 172-181	13	136
142	Mechanism of Phase Propagation During Lithiation in Carbon-Free Li ₄ Ti ₅ O ₁₂ Battery Electrodes. <i>Advanced Functional Materials</i> , 2013 , 23, 1214-1222	15.6	134
141	Monodisperse Sn nanocrystals as a platform for the study of mechanical damage during electrochemical reactions with Li. <i>Nano Letters</i> , 2013 , 13, 1800-5	11.5	126

140	Cation Ordering in Li[NixMnxCo(1-x)]O ₂ -Layered Cathode Materials: A Nuclear Magnetic Resonance (NMR), Pair Distribution Function, X-ray Absorption Spectroscopy, and Electrochemical Study. <i>Chemistry of Materials</i> , 2007 , 19, 6277-6289	9.6	124
139	X-ray Absorption Spectra of Dissolved Polysulfides in Lithium-Sulfur Batteries from First-Principles. <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 1547-51	6.4	118
138	Mesoscale phase distribution in single particles of LiFePO ₄ following lithium deintercalation. <i>Chemistry of Materials</i> , 2013 , 25, 1664-1672	9.6	105
137	The effects of moderate thermal treatments under air on LiFePO ₄ -based nano powders. <i>Journal of Materials Chemistry</i> , 2009 , 19, 3979		98
136	Nanocomposites of Titanium Dioxide and Polystyrene-Poly(ethylene oxide) Block Copolymer as Solid-State Electrolytes for Lithium Metal Batteries. <i>Journal of the Electrochemical Society</i> , 2013 , 160, A1611-A1617	3.9	89
135	Reversible Mg-Ion Insertion in a Metastable One-Dimensional Polymorph of V ₂ O ₅ . <i>CheM</i> , 2018 , 4, 564-585.2	5.2	87
134	Three-dimensional localization of nanoscale battery reactions using soft X-ray tomography. <i>Nature Communications</i> , 2018 , 9, 921	17.4	85
133	Revealing High Na-Content P2-Type Layered Oxides as Advanced Sodium-Ion Cathodes. <i>Journal of the American Chemical Society</i> , 2020 , 142, 5742-5750	16.4	84
132	Dependence on Crystal Size of the Nanoscale Chemical Phase Distribution and Fracture in Li _x FePO ₄ . <i>Nano Letters</i> , 2015 , 15, 4282-8	11.5	80
131	Exploring the bottlenecks of anionic redox in Li-rich layered sulfides. <i>Nature Energy</i> , 2019 , 4, 977-987	62.3	78
130	Structural and Electrochemical Characterization of Composite Layered-Spinel Electrodes Containing Ni and Mn for Li-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2009 , 156, A730	3.9	78
129	Graphene quantum dots: structural integrity and oxygen functional groups for high sulfur/sulfide utilization in lithium sulfur batteries. <i>NPG Asia Materials</i> , 2016 , 8, e272-e272	10.3	78
128	Comparison of the Performance of LiNi _{1/2} Mn _{3/2} O ₄ with Different Microstructures. <i>Journal of the Electrochemical Society</i> , 2011 , 158, A997	3.9	75
127	Visualization of electrochemically driven solid-state phase transformations using operando hard X-ray spectro-imaging. <i>Nature Communications</i> , 2015 , 6, 6883	17.4	72
126	Mechanisms of Degradation and Strategies for the Stabilization of Cathode-Electrolyte Interfaces in Li-Ion Batteries. <i>Accounts of Chemical Research</i> , 2018 , 51, 299-308	24.3	70
125	Effective wrapping of graphene on individual Li ₄ Ti ₅ O ₁₂ grains for high-rate Li-ion batteries. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 2023-2027	13	69
124	Fingerprinting Lithium-Sulfur Battery Reaction Products by X-ray Absorption Spectroscopy. <i>Journal of the Electrochemical Society</i> , 2014 , 161, A1100-A1106	3.9	65
123	Titanate Anodes for Sodium Ion Batteries. <i>Journal of Inorganic and Organometallic Polymers and Materials</i> , 2014 , 24, 5-14	3.2	64

122	Structural Underpinnings of the Enhanced Cycling Stability upon Al-Substitution in LiNi _{0.45} Mn _{0.45} Co _{0.1} Al _{0.05} O ₂ Positive Electrode Materials for Li-ion Batteries. <i>Chemistry of Materials</i> , 2012 , 24, 3307-3317	9.6	62
121	Visualization of Electrochemical Reactions in Battery Materials with X-ray Microscopy and Mapping. <i>Chemistry of Materials</i> , 2017 , 29, 3347-3362	9.6	60
120	Enhanced high rate performance of LiMn ₂ O ₄ spinel nanoparticles synthesized by a hard-template route. <i>Journal of Power Sources</i> , 2007 , 166, 492-498	8.9	58
119	Lepidocrocite-type Layered Titanate Structures: New Lithium and Sodium Ion Intercalation Anode Materials. <i>Chemistry of Materials</i> , 2014 , 26, 2502-2512	9.6	56
118	"Rocking-Chair"-Type Metal Hybrid Supercapacitors. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 30853-30862	9.5	54
117	Study of the transition metal ordering in layered Na _x Ni _(x/2) Mn _(1-x/2) O ₂ (2/3 ≤ x ≤ 1) and consequences of Na/Li exchange. <i>Inorganic Chemistry</i> , 2013 , 52, 8540-50	5.1	54
116	Charge Transfer Band Gap as an Indicator of Hysteresis in Li-Disordered Rock Salt Cathodes for Li-Ion Batteries. <i>Journal of the American Chemical Society</i> , 2019 , 141, 11452-11464	16.4	51
115	MAS NMR Study of the Metastable Solid Solutions Found in the LiFePO ₄ /FePO ₄ System. <i>Chemistry of Materials</i> , 2010 , 22, 1249-1262	9.6	51
114	Phase-Controlled Electrochemical Activity of Epitaxial Mg-Spinel Thin Films. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 28438-43	9.5	50
113	Surface Chemistry Consequences of Mg-Based Coatings on LiNi _{0.5} Mn _{1.5} O ₄ Electrode Materials upon Operation at High Voltage. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 10596-10605	3.8	49
112	Asymmetric pathways in the electrochemical conversion reaction of NiO as battery electrode with high storage capacity. <i>Scientific Reports</i> , 2014 , 4, 7133	4.9	48
111	Ex situ NMR and neutron diffraction study of structure and lithium motion in LiMnN. <i>Solid State Ionics</i> , 2005 , 176, 2205-2218	3.3	48
110	Effects of crystallinity and impurities on the electrical conductivity of Li _{1-x} Al _x Zr ₂ O ₇ thin films. <i>Thin Solid Films</i> , 2015 , 576, 55-60	2.2	47
109	Unlocking anionic redox activity in O ₃ -type sodium 3d layered oxides via Li substitution. <i>Nature Materials</i> , 2021 , 20, 353-361	27	47
108	NMR, PDF and RMC study of the positive electrode material Li(Ni _{0.5} Mn _{0.5})O ₂ synthesized by ion-exchange methods. <i>Journal of Materials Chemistry</i> , 2007 , 17, 3167		45
107	Intercalation of Magnesium into a Layered Vanadium Oxide with High Capacity. <i>ACS Energy Letters</i> , 2019 , 4, 1528-1534	20.1	44
106	Layered Oxide Cathodes for Li-Ion Batteries: Oxygen Loss and Vacancy Evolution. <i>Chemistry of Materials</i> , 2019 , 31, 7790-7798	9.6	43
105	Degradation Mechanisms of Magnesium Metal Anodes in Electrolytes Based on (CF ₃ SO) ₂ N at High Current Densities. <i>Langmuir</i> , 2017 , 33, 9398-9406	4	41

104	Beyond Intercalation-Based Li-Ion Batteries: The State of the Art and Challenges of Electrode Materials Reacting Through Conversion Reactions (Adv. Mater. 35/2010). <i>Advanced Materials</i> , 2010 , 22, n/a-n/a	24	41
103	Layered oxysulfides Sr ₂ MnO ₂ Cu _{2m-0.5S} m+1 (m = 1, 2, and 3) as insertion hosts for Li ion batteries. <i>Journal of the American Chemical Society</i> , 2006 , 128, 13354-5	16.4	41
102	2D Copper Tetrahydroxyquinone Conductive Metal-Organic Framework for Selective CO Electro catalysis at Low Overpotentials. <i>Advanced Materials</i> , 2021 , 33, e2004393	24	39
101	Nonequilibrium Pathways during Electrochemical Phase Transformations in Single Crystals Revealed by Dynamic Chemical Imaging at Nanoscale Resolution. <i>Advanced Energy Materials</i> , 2015 , 5, 1402040	21.8	37
100	Formation of a Complete Solid Solution between the Triphylite and Fayalite Olivine Structures. <i>Chemistry of Materials</i> , 2008 , 20, 6798-6809	9.6	36
99	Stabilizing Reversible Oxygen Redox Chemistry in Layered Oxides for Sodium-Ion Batteries. <i>Advanced Energy Materials</i> , 2020 , 10, 1903785	21.8	35
98	Carbon-Free TiO ₂ Battery Electrodes Enabled by Morphological Control at the Nanoscale. <i>Advanced Energy Materials</i> , 2013 , 3, 1286-1291	21.8	35
97	Antifluorite-type lithium chromium oxide nitrides: synthesis, structure, order, and electrochemical properties. <i>Inorganic Chemistry</i> , 2004 , 43, 7050-60	5.1	35
96	The first lithium manganese oxynitride, Li _{7.9} MnN ₅ O ₇ : preparation and use as electrode material in lithium batteries. <i>Journal of Materials Chemistry</i> , 2003 , 13, 2402-2404		34
95	Facet-Dependent Rock-Salt Reconstruction on the Surface of Layered Oxide Cathodes. <i>Chemistry of Materials</i> , 2018 , 30, 692-699	9.6	33
94	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> , 2014 , 140, 034107	3.9	33
93	Structural complexity of layered-spinel composite electrodes for Li-ion batteries. <i>Journal of Materials Research</i> , 2010 , 25, 1601-1616	2.5	33
92	Towards New Negative Electrode Materials for Li-Ion Batteries: Electrochemical Properties of LiNiN. <i>Chemistry of Materials</i> , 2008 , 20, 1676-1678	9.6	33
91	Stabilizing Anionic Redox Chemistry in a Mn-Based Layered Oxide Cathode Constructed by Li-Deficient Pristine State. <i>Advanced Materials</i> , 2021 , 33, e2004280	24	33
90	NaV _{1.25} Ti _{0.75} O ₄ : A Potential Post-Spinel Cathode Material for Mg Batteries. <i>Chemistry of Materials</i> , 2018 , 30, 121-128	9.6	33
89	Investigation of the Structural Changes in Li[NiyMnyCo(1-2y)]O ₂ (y = 0.05) upon Electrochemical Lithium Deintercalation. <i>Chemistry of Materials</i> , 2010 , 22, 1209-1219	9.6	32
88	High rate performance of lithium manganese nitride and oxynitride as negative electrodes in lithium batteries. <i>Electrochemistry Communications</i> , 2010 , 12, 315-318	5.1	31
87	Near-edge X-ray refraction fine structure microscopy. <i>Applied Physics Letters</i> , 2017 , 110, 063101	3.4	30

86	Electrochemical Reduction of a Spinel-Type Manganese Oxide Cathode in Aqueous Electrolytes with Ca ²⁺ or Zn ²⁺ . <i>Journal of Physical Chemistry C</i> , 2018 , 122, 4182-4188	3.8	29
85	Crystal Structure, Physical Properties, and Electrochemistry of Copper Substituted LiFePO ₄ Single Crystals. <i>Chemistry of Materials</i> , 2012 , 24, 166-173	9.6	29
84	Electronic structure study of ordering and interfacial interaction in graphene/Cu composites. <i>Carbon</i> , 2012 , 50, 5316-5322	10.4	29
83	Understanding the defect chemistry of alkali metal strontium silicate solid solutions: insights from experiment and theory. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 17919-17924	13	27
82	Investigating the Intercalation Chemistry of Alkali Ions in Fluoride Perovskites. <i>Chemistry of Materials</i> , 2017 , 29, 1561-1568	9.6	26
81	Probing Mg Migration in Spinel Oxides. <i>Chemistry of Materials</i> , 2020 , 32, 663-670	9.6	26
80	Atomic defects during ordering transitions in LiNi _{0.5} Mn _{1.5} O ₄ and their relationship with electrochemical properties. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 8255-8262	13	26
79	Quasi-Binary Transition Metal Dichalcogenide Alloys: Thermodynamic Stability Prediction, Scalable Synthesis, and Application. <i>Advanced Materials</i> , 2020 , 32, e1907041	24	24
78	High Voltage Mg-Ion Battery Cathode via a Solid Solution Cr/Mn Spinel Oxide. <i>Chemistry of Materials</i> , 2020 , 32, 6577-6587	9.6	23
77	First Example of Protonation of Ruddlesden-Popper Sr ₂ IrO ₄ : A Route to Enhanced Water Oxidation Catalysts. <i>Chemistry of Materials</i> , 2020 , 32, 3499-3509	9.6	22
76	Nanoscale Detection of Intermediate Solid Solutions in Equilibrated LiFePO Microcrystals. <i>Nano Letters</i> , 2017 , 17, 7364-7371	11.5	22
75	Electroanalytical study of the viability of conversion reactions as energy storage mechanisms. <i>RSC Advances</i> , 2014 , 4, 35988-35996	3.7	21
74	Probing Electrochemically Induced Structural Evolution and Oxygen Redox Reactions in Layered Lithium Iridate. <i>Chemistry of Materials</i> , 2019 , 31, 4341-4352	9.6	20
73	Effect of lithium borate addition on the physical and electrochemical properties of the lithium ion conductor Li _{3.4} Si _{0.4} P _{0.6} O ₄ . <i>Solid State Ionics</i> , 2013 , 231, 109-115	3.3	20
72	Effect of ball-milling and lithium insertion on the lithium mobility and structure of Li ₃ Fe ₂ (PO ₄) ₃ . <i>Journal of Materials Chemistry</i> , 2011 , 21, 10012		20
71	Tailoring the electrochemical activity of magnesium chromium oxide towards Mg batteries through control of size and crystal structure. <i>Nanoscale</i> , 2019 , 11, 639-646	7.7	19
70	Multivalent Electrochemistry of Spinel Mg _x Mn _{3-2x} O ₄ Nanocrystals. <i>Chemistry of Materials</i> , 2018 , 30, 1496-1504	15.04	19
69	High Capacity for Mg ²⁺ Deintercalation in Spinel Vanadium Oxide Nanocrystals. <i>ACS Energy Letters</i> , 2020 , 5, 2721-2727	20.1	19

68	Oxynitrides as Electrode Materials for Lithium-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2005 , 152, A2246	3.9	18
67	Probing Electrochemical Mg-Ion Activity in MgCr ₂ VxO ₄ Spinel Oxides. <i>Chemistry of Materials</i> , 2020 , 32, 1162-1171	9.6	17
66	Changes in Electronic Structure upon Li Deintercalation from LiCoPO ₄ Derivatives. <i>Chemistry of Materials</i> , 2018 , 30, 1898-1906	9.6	16
65	Control of Chemical Structure in Core-Shell Nanocrystals for the Stabilization of Battery Electrode/Electrolyte Interfaces. <i>Chemistry of Materials</i> , 2017 , 29, 5896-5905	9.6	16
64	Stabilization of Battery Electrode/Electrolyte Interfaces Employing Nanocrystals with Passivating Epitaxial Shells. <i>Chemistry of Materials</i> , 2015 , 27, 394-399	9.6	16
63	Machine-Learning-Assisted Synthesis of Polar Racemates. <i>Journal of the American Chemical Society</i> , 2020 , 142, 7555-7566	16.4	15
62	The Quest for Functional Oxide Cathodes for Magnesium Batteries: A Critical Perspective. <i>ACS Energy Letters</i> , 2021 , 6, 1892-1900	20.1	15
61	Electronic Structure of LiCoO ₂ Surfaces and Effect of Al Substitution. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 8851-8858	3.8	14
60	Highly Active Rhenium-, Ruthenium-, and Iridium-Based Dichalcogenide Electrocatalysts for Oxygen Reduction and Oxygen Evolution Reactions in Aprotic Media. <i>Chemistry of Materials</i> , 2020 , 32, 2764-2773	9.6	14
59	Effect of Si(IV) substitution on electrochemical, magnetic and spectroscopic performance of nanosized LiMn ₂ SixO ₄ . <i>Journal of Materials Chemistry A</i> , 2013 , 1, 10857	13	14
58	The Effect of Al Substitution on the Chemical and Electrochemical Phase Stability of Orthorhombic LiMnO ₂ . <i>Journal of the Electrochemical Society</i> , 2013 , 160, A46-A52	3.9	14
57	Investigation of cation ordering in triclinic sodium birnessite via ²³ Na MAS NMR spectroscopy. <i>American Mineralogist</i> , 2012 , 97, 883-889	2.9	13
56	Structure and Sodium Ion Dynamics in Sodium Strontium Silicate Investigated by Multinuclear Solid-State NMR. <i>Chemistry of Materials</i> , 2016 , 28, 3850-3861	9.6	13
55	Electronic structure changes upon lithium intercalation into graphite – Insights from ex situ and operando x-ray Raman spectroscopy. <i>Carbon</i> , 2019 , 143, 371-377	10.4	13
54	Synthesis, short-range structure, and electrochemical properties of new phases in the Li-Mn-N-O system. <i>Inorganic Chemistry</i> , 2009 , 48, 5141-53	5.1	12
53	Achieving stable anionic redox chemistry in Li-excess O ₂ -type layered oxide cathode via chemical ion-exchange strategy. <i>Energy Storage Materials</i> , 2021 , 38, 1-8	19.4	12
52	Lithium Metal-Copper Vanadium Oxide Battery with a Block Copolymer Electrolyte. <i>Journal of the Electrochemical Society</i> , 2016 , 163, A2447-A2455	3.9	11
51	High-voltage cathode materials for lithium-ion batteries: freeze-dried LiMn _{0.8} Fe _{0.1} M _{0.1} PO ₄ /C (M = Fe, Co, Ni, Cu) nanocomposites. <i>Inorganic Chemistry</i> , 2015 , 54, 2671-8	5.1	11

50	XAFS Investigations of $\text{LiNi}_{0.45}\text{Mn}_{0.45}\text{Co}_{0.1}\text{Al}_{0.1}\text{O}_2$ Positive Electrode Materials. <i>Journal of the Electrochemical Society</i> , 2012 , 159, A1562-A1571	3.9	11
49	Synthesis of Antiperovskite Solid Electrolytes: Comparing LiSI, NaSI, and AgSI. <i>Inorganic Chemistry</i> , 2020 , 59, 11244-11247	5.1	11
48	Effect of Passivating Shells on the Chemistry and Electrode Properties of LiMnO Nanocrystal Heterostructures. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 3823-3833	9.5	11
47	Synthesis and Electrochemical Study of Antifluorite-type Phases in the Li-M-N-O (M = Ti, V) Systems. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2005 , 631, 2136-2141	1.3	10
46	Visualization of the Phase Propagation within Carbon-Free $\text{Li}_4\text{Ti}_5\text{O}_{12}$ Battery Electrodes. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 29030-29038	3.8	9
45	Charge Transport Properties of Lithium Superoxide in LiO_2 Batteries. <i>ACS Applied Energy Materials</i> , 2020 , 3, 12575-12583	6.1	9
44	Elucidating Anionic Redox Chemistry in P3 Layered Cathode for Na-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 38249-38255	9.5	9
43	Electrochemical Lithium Extraction and Insertion Process of Sol-Gel Synthesized LiMnPO_4 via Two-Phase Mechanism. <i>Journal of the Electrochemical Society</i> , 2019 , 166, A1257-A1265	3.9	8
42	Nanocrystal heterostructures of LiCoO with conformal passivating shells. <i>Nanoscale</i> , 2018 , 10, 6954-6961	7.7	8
41	Characterization of electrode materials for lithium ion and sodium ion batteries using synchrotron radiation techniques. <i>Journal of Visualized Experiments</i> , 2013 , e50594	1.6	8
40	Phase-Dependent Band Gap Engineering in Alloys of Metal-Semiconductor Transition Metal Dichalcogenides. <i>Advanced Functional Materials</i> , 2020 , 30, 2004912	15.6	8
39	Electron Tomography Analysis of Reaction Path during Formation of Nanoporous NiO by Solid State Decomposition. <i>Crystal Growth and Design</i> , 2014 , 14, 2453-2459	3.5	7
38	Electrochemical Reactivity with Lithium of Spinel-type $\text{ZnFe}_2\text{Cr}_2\text{O}_4$ ($0 \leq x \leq 1$). <i>Journal of Physical Chemistry C</i> , 2013 , 117, 24213-24223	3.8	7
37	Does Water Enhance Mg Intercalation in Oxides? The Case of a Tunnel Framework. <i>ACS Energy Letters</i> , 2020 , 5, 3357-3361	20.1	7
36	Direct characterization of the Li intercalation mechanism into V_2O_5 nanowires using in-situ transmission electron microscopy. <i>Applied Physics Letters</i> , 2017 , 110, 213903	3.4	6
35	Enhanced charge storage of nanometric V_2O in Mg electrolytes. <i>Nanoscale</i> , 2020 , 12, 22150-22160	7.7	6
34	Probing Mg Intercalation in the Tetragonal Tungsten Bronze Framework VNbO . <i>Inorganic Chemistry</i> , 2020 , 59, 9783-9797	5.1	6
33	Chemical Activity of the Peroxide/Oxide Redox Couple: Case Study of BaRuO in Aqueous and Organic Solvents. <i>Chemistry of Materials</i> , 2018 , 30, 3882-3893	9.6	6

32	Elucidation of Active Oxygen Sites upon Delithiation of Li ₃ IrO ₄ . <i>ACS Energy Letters</i> , 2021 , 6, 140-147	20.1	5
31	Effect of Synthetic Parameters on Defects, Structure, and Electrochemical Properties of Layered Oxide LiNi _{0.80} Co _{0.15} Al _{0.05} O ₂ . <i>Journal of the Electrochemical Society</i> , 2018 , 165, A3537-A3543	3.9	5
30	Control of Size and Composition of Colloidal Nanocrystals of Manganese Oxide. <i>Inorganic Chemistry</i> , 2018 , 57, 12900-12907	5.1	5
29	Surface Chemistry, Passivation, and Electrode Performance in Core/Shell Architectures of LiCoO ₂ Nanoplates. <i>ACS Applied Energy Materials</i> , 2019 , 2, 2149-2160	6.1	4
28	Mapping and Metastability of Heterogeneity in LiMn ₂ O ₄ Battery Electrodes with High Energy Density. <i>Journal of the Electrochemical Society</i> , 2020 , 167, 020526	3.9	4
27	Definition of Redox Centers in Reactions of Lithium Intercalation in LiRuO Polymorphs. <i>Journal of the American Chemical Society</i> , 2020 , 142, 8160-8173	16.4	4
26	Exploring order/disorder structural transitions in the Li _{1-x} Nb _x O ₂ system: The new antiferroite oxynitride Li ₁₁ Nb ₄ O ₂ . <i>Journal of Solid State Chemistry</i> , 2010 , 183, 1609-1614	3.3	4
25	Database of ab initio L-edge X-ray absorption near edge structure. <i>Scientific Data</i> , 2021 , 8, 153	8.2	4
24	Structural Changes and Reversibility Upon Deintercalation of Li from LiCoPO Derivatives. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 20570-20578	9.5	4
23	Nanostructured Conductive Metal Organic Frameworks for Sustainable Low Charge Overpotentials in Li-Air Batteries.. <i>Small</i> , 2022 , 18, e2102902	11	4
22	Synthesis and X-ray absorption spectroscopy of potassium transition metal fluoride nanocrystals. <i>CrystEngComm</i> , 2019 , 21, 135-144	3.3	3
21	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
20	Direct Evidence of Charge Transfer upon Anion Intercalation in Graphite Cathodes through New Electronic States: An Experimental and Theoretical Study of Hexafluorophosphate. <i>Chemistry of Materials</i> , 2020 , 32, 2036-2043	9.6	3
19	Toward General Rules for the Design of Battery Electrodes Based on Titanium Oxides and Free of Conductive Additives. <i>Energy Technology</i> , 2014 , 2, 383-390	3.5	3
18	Factors Defining the Intercalation Electrochemistry of CaFe ₂ O ₄ -Type Manganese Oxides. <i>Chemistry of Materials</i> , 2020 , 32, 8203-8215	9.6	3
17	NGenE 2021: Electrochemistry Is Everywhere. <i>ACS Energy Letters</i> , 2022 , 7, 368-374	20.1	3
16	Intercalation of Mg into a Few-Layer Phyllosulfate in Nonaqueous Electrolytes at Room Temperature. <i>Chemistry of Materials</i> , 2020 , 32, 6014-6025	9.6	2
15	Intermediate phases during alkali metal intercalation in HfNCl. <i>Solid State Sciences</i> , 2007 , 9, 310-317	3.4	2

14	Structure design enables stable anionic and cationic redox chemistry in a T2-type Li-excess layered oxide cathode. <i>Science Bulletin</i> , 2021 , 67, 381-381	10.6	2
13	Electron-beam-induced Spinel to Defect Rocksalt Phase Transition in MgCrMnO ₄ . <i>Microscopy and Microanalysis</i> , 2020 , 26, 788-790	0.5	1
12	Redox Chemistry and Reversible Structural Changes in Rhombohedral VOF Cathode during Li Intercalation. <i>Inorganic Chemistry</i> , 2020 , 59, 10048-10058	5.1	1
11	Modification of the electrochemical activity of LiMn _{1.95} Si _{0.05} O ₄ spinel via addition of phases with different physico-chemical properties. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 3216	13	1
10	Lithium Ion Batteries: Li ⁶⁷ MAS NMR Studies on Materials 2011 ,		1
9	Electrochemical Insertion of Li into Sr ₂ MO ₂ Cu ₂ S ₂ (M = Mn, Co, Ni). <i>Materials Research Society Symposia Proceedings</i> , 2006 , 988, 1		1
8	Structural Evolution of Layered Manganese Oxysulfides during Reversible Electrochemical Lithium Insertion and Copper Extrusion. <i>Chemistry of Materials</i> , 2021 , 33, 3989-4005	9.6	1
7	Synthesis and Characterization of Core-Shell Nanocrystals of Co-Rich Cathodes. <i>Journal of the Electrochemical Society</i> , 2020 , 167, 050501	3.9	1
6	Control of crystal size tailors the electrochemical performance of VVO as a Mg intercalation host. <i>Nanoscale</i> , 2021 , 13, 10081-10091	7.7	1
5	Intercalation of Ca into a Highly Defective Manganese Oxide at Room Temperature. <i>Chemistry of Materials</i> , 2022 , 34, 836-846	9.6	0
4	sxdm: A python framework for analysis of Scanning X-Ray Diffraction Microscopy data. <i>Software Impacts</i> , 2021 , 10, 100172	1.8	0
3	Spinel-layered Li _{1.1} [Mn _{0.6} Co _{0.8} Ni _{0.6}]O ₄ nanocrystals: Synthesis and electrochemistry at high potentials. <i>Journal of Solid State Chemistry</i> , 2020 , 288, 121365	3.3	
2	Transmission electron microscopy study of CoMnO catalyst nanoparticles. <i>Microscopy and Microanalysis</i> , 2021 , 27, 2440-2442	0.5	
1	Investigation of structural defects and beam induced transitions in MgV ₂ O ₄ nanocrystals using atomic resolved scanning transmission electron microscopy.. <i>Microscopy and Microanalysis</i> , 2021 , 27, 1502-1503	0.5	