Jordi Cabana

List of Publications by Year
in descending order

164	11,566	31902 53	29081 104
papers	citations	h-index	g-index

175	175	175	13014
all docs	docs citations	times ranked	citing authors

#	ARTICLE	IF	CITATIONS
1	Beyond Intercalationâ€Based Liâ€Ion Batteries: The State of the Art and Challenges of Electrode Materials Reacting Through Conversion Reactions. Advanced Materials, 2010, 22, E170-92.	11.1	2,063
2	The origin of high electrolyteâ€“electrode interfacial resistances in lithium cells containing garnet type solid electrolytes. Physical Chemistry Chemical Physics, 2014, 16, 18294-18300.	1.3	431
3	Exploring Anomalous Charge Storage in Anode Materials for Next-Generation Li Rechargeable Batteries. Chemical Reviews, 2020, 120, 6934-6976.	23.0	382
4	Chemical composition mapping with nanometre resolution by soft X-ray microscopy. Nature Photonics, 2014, 8, 765-769.	15.6	371
5	Intergranular Cracking as a Major Cause of Long-Term Capacity Fading of Layered Cathodes. Nano Letters, 2017, 17, 3452-3457.	4.5	361
6	Three-dimensional imaging of chemical phase transformations at the nanoscale with full-field transmission X-ray microscopy. Journal of Synchrotron Radiation, 2011, 18, 773-781.	1.0	228
7	Mechanism of Zn Insertion into Nanostructured Î´-MnO₂: A Nonaqueous Rechargeable Zn Metal Battery. Chemistry of Materials, 2017, 29, 4874-4884.	3.2	225
8	Single-particle measurements of electrochemical kinetics in NMC and NCA cathodes for Li-ion batteries. Energy and Environmental Science, 2018, 11, 860-871.	15.6	224
9	Influence of the Benzoquinone Sorption on the Structure and Electrochemical Performance of the MIL-53(Fe) Hybrid Porous Material in a Lithium-Ion Battery. Chemistry of Materials, 2009, 21, 1602-1611.	3.2	214
10	Composition-Structure Relationships in the Li-Ion Battery Electrode Material LiNi_{0.5}Mn_{1.5}O₄. Chemistry of Materials, 2012, 24, 2952-2964.	3.2	211
11	Revealing High Na-Content P2-Type Layered Oxides as Advanced Sodium-Ion Cathodes. Journal of the American Chemical Society, 2020, 142, 5742-5750.	6.6	206
12	Ultrathin Lithium-Ion Conducting Coatings for Increased Interfacial Stability in High Voltage Lithium-Ion Batteries. Chemistry of Materials, 2014, 26, 3128-3134.	3.2	192
13	New materials based on a layered sodium titanate for dual electrochemical Na and Li intercalation systems. Energy and Environmental Science, 2013, 6, 2538.	15.6	191
14	The Formation Mechanism of Fluorescent Metal Complexes at the Li_{<i>x</i>}Ni_{0.5}Mn_{1.5}O_{4âˆ’Î´}/Carbonate Ester Electrolyte Interface. Journal of the American Chemical Society, 2015, 137, 3533-3539.	6.6	182
15	Direct Observation of Reversible Magnesium Ion Intercalation into a Spinel Oxide Host. Advanced Materials, 2015, 27, 3377-3384.	11.1	178
16	Effect of microstructure and surface impurity segregation on the electrical and electrochemical properties of dense Al-substituted Li₇La₃Zr₂O₁₂. Journal of Materials Chemistry A, 2014, 2, 172-181.	5.2	170
17	Cation Ordering in Li[Ni_{<i>x</i>}Mn_{<i>x</i>}Co_(1â€“2<i>x</i>)]O₂-Layered Cathode Materials: A Nuclear Magnetic Resonance (NMR), Pair Distribution Function, X-ray Absorption Spectroscopy, and Electrochemical Study. Chemistry of Materials, 2007, 19, 6277-6289.	3.2	161
18	Unlocking anionic redox activity in O3-type sodium 3d layered oxides via Li substitution. Nature Materials, 2021, 20, 353-361.	13.3	155

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19	Mechanism of Phase Propagation During Lithiation in Carbonâ€Free Li₄Ti₅O₁₂ Battery Electrodes. Advanced Functional Materials, 2013, 23, 1214-1222.	7.8	140
20	Monodisperse Sn Nanocrystals as a Platform for the Study of Mechanical Damage during Electrochemical Reactions with Li. Nano Letters, 2013, 13, 1800-1805.	4.5	134
21	X-ray Absorption Spectra of Dissolved Polysulfides in Lithiumâ€“Sulfur Batteries from First-Principles. Journal of Physical Chemistry Letters, 2014, 5, 1547-1551.	2.1	134
22	Reversible Mg-Ion Insertion in a Metastable One-Dimensional Polymorph of V2O5. CheM, 2018, 4, 564-585.	5.8	126
23	Exploring the bottlenecks of anionic redox in Li-rich layered sulfides. Nature Energy, 2019, 4, 977-987.	19.8	123
24	Mesoscale Phase Distribution in Single Particles of LiFePO₄ following Lithium Deintercalation. Chemistry of Materials, 2013, 25, 1664-1672.	3.2	120
25	2D Copper Tetrahydroxyquinone Conductive Metalâ€“Organic Framework for Selective CO₂ Electrocatalysis at Low Overpotentials. Advanced Materials, 2021, 33, e2004393.	11.1	120
26	Three-dimensional localization of nanoscale battery reactions using soft X-ray tomography. Nature Communications, 2018, 9, 921.	5.8	107
27	The effects of moderate thermal treatments under air on LiFePO4-based nano powders. Journal of Materials Chemistry, 2009, 19, 3979.	6.7	106
28	Graphene quantum dots: structural integrity and oxygen functional groups for high sulfur/sulfide utilization in lithium sulfur batteries. NPG Asia Materials, 2016, 8, e272-e272.	3.8	105
29	Dependence on Crystal Size of the Nanoscale Chemical Phase Distribution and Fracture in Li_{<i>x</i>}FePO₄. Nano Letters, 2015, 15, 4282-4288.	4.5	99
30	Nanocomposites of Titanium Dioxide and Polystyrene-Poly(ethylene oxide) Block Copolymer as Solid-State Electrolytes for Lithium Metal Batteries. Journal of the Electrochemical Society, 2013, 160, A1611-A1617.	1.3	96
31	Mechanisms of Degradation and Strategies for the Stabilization of Cathodeâ€“Electrolyte Interfaces in Li-Ion Batteries. Accounts of Chemical Research, 2018, 51, 299-308.	7.6	94
32	Stabilizing Reversible Oxygen Redox Chemistry in Layered Oxides for Sodiumâ€Ion Batteries. Advanced Energy Materials, 2020, 10, 1903785.	10.2	87
33	â€œRocking-Chairâ€•Type Metal Hybrid Supercapacitors. ACS Applied Materials & Interfaces, 2016, 8, 30853-30862.	4.0	86
34	Structural and Electrochemical Characterization of Composite Layered-Spinel Electrodes Containing Ni and Mn for Li-Ion Batteries. Journal of the Electrochemical Society, 2009, 156, A730.	1.3	82
35	Comparison of the Performance of LiNi1/2Mn3/2O4 with Different Microstructures. Journal of the Electrochemical Society, 2011, 158, A997.	1.3	81
36	Charge Transfer Band Gap as an Indicator of Hysteresis in Li-Disordered Rock Salt Cathodes for Li-Ion Batteries. Journal of the American Chemical Society, 2019, 141, 11452-11464.	6.6	81

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37	Visualization of electrochemically driven solid-state phase transformations using operando hard X-ray spectro-imaging. Nature Communications, 2015, 6, 6883.	5.8	80
38	Visualization of Electrochemical Reactions in Battery Materials with X-ray Microscopy and Mapping. Chemistry of Materials, 2017, 29, 3347-3362.	3.2	80
39	Effective wrapping of graphene on individual Li₄Ti₅O₁₂grains for high-rate Li-ion batteries. Journal of Materials Chemistry A, 2014, 2, 2023-2027.	5.2	76
40	Fingerprinting Lithium-Sulfur Battery Reaction Products by X-ray Absorption Spectroscopy. Journal of the Electrochemical Society, 2014, 161, A1100-A1106.	1.3	76
41	Layered Oxide Cathodes for Li-Ion Batteries: Oxygen Loss and Vacancy Evolution. Chemistry of Materials, 2019, 31, 7790-7798.	3.2	76
42	Intercalation of Magnesium into a Layered Vanadium Oxide with High Capacity. ACS Energy Letters, 2019, 4, 1528-1534.	8.8	75
43	Titanate Anodes for Sodium Ion Batteries. Journal of Inorganic and Organometallic Polymers and Materials, 2014, 24, 5-14.	1.9	73
44	Structural Underpinnings of the Enhanced Cycling Stability upon Al-Substitution in LiNi_{0.45}Mn_{0.45}Co_{0.1â€“<i>y</i>}Al_{<i>y</i>}O₂ Positive Electrode Materials for Li-ion Batteries. Chemistry of Materials, 2012, 24, 3307-3317.	3.2	70
45	Degradation Mechanisms of Magnesium Metal Anodes in Electrolytes Based on (CF₃SO₂)₂N^{â€“} at High Current Densities. Langmuir, 2017, 33, 9398-9406.	1.6	70
46	Enhanced high rate performance of LiMn2O4 spinel nanoparticles synthesized by a hard-template route. Journal of Power Sources, 2007, 166, 492-498.	4.0	68
47	Lepidocrocite-type Layered Titanate Structures: New Lithium and Sodium Ion Intercalation Anode Materials. Chemistry of Materials, 2014, 26, 2502-2512.	3.2	68
48	Stabilizing Anionic Redox Chemistry in a Mnâ€Based Layered Oxide Cathode Constructed by Liâ€Deficient Pristine State. Advanced Materials, 2021, 33, e2004280.	11.1	67
49	NMR, PDF and RMC study of the positive electrode material Li(Ni0.5Mn0.5)O2 synthesized by ion-exchange methods. Journal of Materials Chemistry, 2007, 17, 3167.	6.7	66
50	Study of the Transition Metal Ordering in Layered Na_{<i>x</i>}Ni_{<i>x</i>/2}Mn_{1â€“<i>x</i>/2}O₂ (2/3 â‰) Tj ETQq0 0 0 rgBT /Overlock	0.9	64
51	Effects of crystallinity and impurities on the electrical conductivity of Liâ€“Laâ€“Zrâ€“O thin films. Thin Solid Films, 2015, 576, 55-60.	0.8	61
52	MAS NMR Study of the Metastable Solid Solutions Found in the LiFePO₄/FePO₄ System. Chemistry of Materials, 2010, 22, 1249-1262.	3.2	57
53	Phase-Controlled Electrochemical Activity of Epitaxial Mg-Spinel Thin Films. ACS Applied Materials & Interfaces, 2015, 7, 28438-28443.	4.0	56
54	Surface Chemistry Consequences of Mg-Based Coatings on LiNi_{0.5}Mn_{1.5}O₄ Electrode Materials upon Operation at High Voltage. Journal of Physical Chemistry C, 2014, 118, 10596-10605.	1.5	53

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55	Facet-Dependent Rock-Salt Reconstruction on the Surface of Layered Oxide Cathodes. Chemistry of Materials, 2018, 30, 692-699.	3.2	53
56	Probing Mg Migration in Spinel Oxides. Chemistry of Materials, 2020, 32, 663-670.	3.2	53
57	Ex situ NMR and neutron diffraction study of structure and lithium motion in LiMnN. Solid State Ionics, 2005, 176, 2205-2218.	1.3	52
58	Asymmetric pathways in the electrochemical conversion reaction of NiO as battery electrode with high storage capacity. Scientific Reports, 2014, 4, 7133.	1.6	51
59	First Example of Protonation of Ruddlesdenâ€“Popper Sr₂IrO₄: A Route to Enhanced Water Oxidation Catalysts. Chemistry of Materials, 2020, 32, 3499-3509.	3.2	51
60	Layered Oxysulfides Sr2MnO2Cu2m-0.5Sm+1(m= 1, 2, and 3) as Insertion Hosts for Li Ion Batteries. Journal of the American Chemical Society, 2006, 128, 13354-13355.	6.6	49
61	High Voltage Mg-Ion Battery Cathode via a Solid Solution Crâ€“Mn Spinel Oxide. Chemistry of Materials, 2020, 32, 6577-6587.	3.2	48
62	High Capacity for Mg²⁺ Deintercalation in Spinel Vanadium Oxide Nanocrystals. ACS Energy Letters, 2020, 5, 2721-2727.	8.8	48
63	Beyond Intercalationâ€Based Liâ€Ion Batteries: The State of the Art and Challenges of Electrode Materials Reacting Through Conversion Reactions (Adv. Mater. 35/2010). Advanced Materials, 2010, 22, .	11.1	47
64	Achieving stable anionic redox chemistry in Li-excess O2-type layered oxide cathode via chemical ion-exchange strategy. Energy Storage Materials, 2021, 38, 1-8.	9.5	46
65	Quasiâ€Binary Transition Metal Dichalcogenide Alloys: Thermodynamic Stability Prediction, Scalable Synthesis, and Application. Advanced Materials, 2020, 32, e1907041.	11.1	46
66	Investigating the Intercalation Chemistry of Alkali Ions in Fluoride Perovskites. Chemistry of Materials, 2017, 29, 1561-1568.	3.2	44
67	Antifluorite-Type Lithium Chromium Oxide Nitrides:Â Synthesis, Structure, Order, and Electrochemical Properties. Inorganic Chemistry, 2004, 43, 7050-7060.	1.9	43
68	Finite temperature effects on the X-ray absorption spectra of lithium compounds: First-principles interpretation of X-ray Raman measurements. Journal of Chemical Physics, 2014, 140, 034107.	1.2	43
69	Nonequilibrium Pathways during Electrochemical Phase Transformations in Single Crystals Revealed by Dynamic Chemical Imaging at Nanoscale Resolution. Advanced Energy Materials, 2015, 5, 1402040.	10.2	42
70	The Quest for Functional Oxide Cathodes for Magnesium Batteries: A Critical Perspective. ACS Energy Letters, 2021, 6, 1892-1900.	8.8	42
71	Formation of a Complete Solid Solution between the Triphylite and Fayalite Olivine Structures. Chemistry of Materials, 2008, 20, 6798-6809.	3.2	41
72	Carbonâ€Free TiO₂ Battery Electrodes Enabled by Morphological Control at the Nanoscale. Advanced Energy Materials, 2013, 3, 1286-1291.	10.2	41

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73	Atomic defects during ordering transitions in LiNi_{0.5}Mn_{1.5}O₄and their relationship with electrochemical properties. Journal of Materials Chemistry A, 2016, 4, 8255-8262.	5.2	41
74	Reversible anionic redox chemistry in layered Li4/7[â–¡1/7Mn6/7]O2 enabled by stable Liâ€“O-vacancy configuration. Joule, 2022, 6, 1290-1303.	11.7	41
75	Near-edge X-ray refraction fine structure microscopy. Applied Physics Letters, 2017, 110, .	1.5	39
76	Towards New Negative Electrode Materials for Li-Ion Batteries: Electrochemical Properties of LiNiN. Chemistry of Materials, 2008, 20, 1676-1678.	3.2	38
77	High rate performance of lithium manganese nitride and oxynitride as negative electrodes in lithium batteries. Electrochemistry Communications, 2010, 12, 315-318.	2.3	37
78	Investigation of the Structural Changes in Li[NiyMnyCo(1â^'2y)]O2 (y = 0.05) upon Electrochemical Lithium Deintercalation. Chemistry of Materials, 2010, 22, 1209-1219.	3.2	37
79	NaV_{1.25}Ti_{0.75}O₄: A Potential Post-Spinel Cathode Material for Mg Batteries. Chemistry of Materials, 2018, 30, 121-128.	3.2	37
80	The first lithium manganese oxynitride, Li7.9MnN5 â^' yOy: preparation and use as electrode material in lithium batteries. Journal of Materials Chemistry, 2003, 13, 2402-2404.	6.7	35
81	Structural complexity of layered-spinel composite electrodes for Li-ion batteries. Journal of Materials Research, 2010, 25, 1601-1616.	1.2	34
82	Understanding the defect chemistry of alkali metal strontium silicate solid solutions: insights from experiment and theory. Journal of Materials Chemistry A, 2014, 2, 17919-17924.	5.2	34
83	Capturing dynamic ligand-to-metal charge transfer with a long-lived cationic intermediate for anionic redox. Nature Materials, 2022, 21, 1165-1174.	13.3	34
84	Electrochemical Reduction of a Spinel-Type Manganese Oxide Cathode in Aqueous Electrolytes with Ca²⁺ or Zn²⁺. Journal of Physical Chemistry C, 2018, 122, 4182-4188.	1.5	33
85	Electronic structure study of ordering and interfacial interaction in graphene/Cu composites. Carbon, 2012, 50, 5316-5322.	5.4	32
86	Crystal Structure, Physical Properties, and Electrochemistry of Copper Substituted LiFePO₄ Single Crystals. Chemistry of Materials, 2012, 24, 166-173.	3.2	31
87	Probing Electrochemical Mg-Ion Activity in MgCr_{2â€“<i>x</i>}V<i>_x</i>O₄ Spinel Oxides. Chemistry of Materials, 2020, 32, 1162-1171.	3.2	31
88	Elucidating Anionic Redox Chemistry in P3 Layered Cathode for Na-Ion Batteries. ACS Applied Materials & Interfaces, 2020, 12, 38249-38255.	4.0	30
89	Nanoscale Detection of Intermediate Solid Solutions in Equilibrated Li_{<i>x</i>}FePO₄ Microcrystals. Nano Letters, 2017, 17, 7364-7371.	4.5	27
90	Tailoring the electrochemical activity of magnesium chromium oxide towards Mg batteries through control of size and crystal structure. Nanoscale, 2019, 11, 639-646.	2.8	27

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91	Electroanalytical study of the viability of conversion reactions as energy storage mechanisms. RSC Advances, 2014, 4, 35988-35996.	1.7	26
92	Changes in Electronic Structure upon Li Deintercalation from LiCoPO₄ Derivatives. Chemistry of Materials, 2018, 30, 1898-1906.	3.2	26
93	Probing Electrochemically Induced Structural Evolution and Oxygen Redox Reactions in Layered Lithium Iridate. Chemistry of Materials, 2019, 31, 4341-4352.	3.2	26
94	Effect of lithium borate addition on the physical and electrochemical properties of the lithium ion conductor Li3.4Si0.4P0.6O4. Solid State Ionics, 2013, 231, 109-115.	1.3	24
95	Structure and Sodium Ion Dynamics in Sodium Strontium Silicate Investigated by Multinuclear Solid-State NMR. Chemistry of Materials, 2016, 28, 3850-3861.	3.2	24
96	Electronic Structure of LiCoO₂ Surfaces and Effect of Al Substitution. Journal of Physical Chemistry C, 2019, 123, 8851-8858.	1.5	24
97	Machine-Learning-Assisted Synthesis of Polar Racemates. Journal of the American Chemical Society, 2020, 142, 7555-7566.	6.6	24
98	Multivalent Electrochemistry of Spinel Mg_{<i>x</i>}Mn_{3â€“<i>x</i>}O₄ Nanocrystals. Chemistry of Materials, 2018, 30, 1496-1504.	3.2	23
99	Highly Active Rhenium-, Ruthenium-, and Iridium-Based Dichalcogenide Electrocatalysts for Oxygen Reduction and Oxygen Evolution Reactions in Aprotic Media. Chemistry of Materials, 2020, 32, 2764-2773.	3.2	23
100	Electronic structure changes upon lithium intercalation into graphite â€“ Insights from ex situ and operando x-ray Raman spectroscopy. Carbon, 2019, 143, 371-377.	5.4	22
101	Nanostructured Conductive Metal Organic Frameworks for Sustainable Low Charge Overpotentials in Liâ€“Air Batteries. Small, 2022, 18, e2102902.	5.2	22
102	Oxynitrides as Electrode Materials for Lithium-Ion Batteries. Journal of the Electrochemical Society, 2005, 152, A2246.	1.3	21
103	Effect of ball-milling and lithium insertion on the lithium mobility and structure of Li3Fe2(PO4)3. Journal of Materials Chemistry, 2011, 21, 10012.	6.7	21
104	Database of ab initio L-edge X-ray absorption near edge structure. Scientific Data, 2021, 8, 153.	2.4	21
105	Effect of Si(iv) substitution on electrochemical, magnetic and spectroscopic performance of nanosized LiMn2âˆ’xSixO4. Journal of Materials Chemistry A, 2013, 1, 10857.	5.2	18
106	Triggering and Stabilizing Oxygen Redox Chemistry in Layered Li[Na_{1/3}Ru_{2/3}]O₂ Enabled by Stable Liâ€“Oâ€“Na Configuration. ACS Energy Letters, 2022, 7, 2349-2356.	8.8	18
107	Stabilization of Battery Electrode/Electrolyte Interfaces Employing Nanocrystals with Passivating Epitaxial Shells. Chemistry of Materials, 2015, 27, 394-399.	3.2	17
108	Control of Chemical Structure in Coreâ€“Shell Nanocrystals for the Stabilization of Battery Electrode/Electrolyte Interfaces. Chemistry of Materials, 2017, 29, 5896-5905.	3.2	17

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109	Effect of Passivating Shells on the Chemistry and Electrode Properties of LiMn₂O₄ Nanocrystal Heterostructures. ACS Applied Materials & Interfaces, 2019, 11, 3823-3833.	4.0	17
110	Charge Transport Properties of Lithium Superoxide in Liâ€"O₂Batteries. ACS Applied Energy Materials, 2020, 3, 12575-12583.	2.5	17
111	The Effect of Al Substitution on the Chemical and Electrochemical Phase Stability of Orthorhombic LiMnO₂. Journal of the Electrochemical Society, 2013, 160, A46-A52.	1.3	16
112	Synthesis of Antiperovskite Solid Electrolytes: Comparing Li₃SI, Na₃SI, and Ag₃SI. Inorganic Chemistry, 2020, 59, 11244-11247.	1.9	16
113	Enhanced charge storage of nanometric Î¶-V₂O₅ in Mg electrolytes. Nanoscale, 2020, 12, 22150-22160.	2.8	15
114	Synthesis, Short-Range Structure, and Electrochemical Properties of New Phases in the Liâˆ'Mnâˆ'Nâˆ'O System. Inorganic Chemistry, 2009, 48, 5141-5153.	1.9	14
115	Investigation of cation ordering in triclinic sodium birnessite via 23Na MAS NMR spectroscopy. American Mineralogist, 2012, 97, 883-889.	0.9	14
116	Does Water Enhance Mg Intercalation in Oxides? The Case of a Tunnel Framework. ACS Energy Letters, 2020, 5, 3357-3361.	8.8	13
117	Phaseâ€Dependent Band Gap Engineering in Alloys of Metalâ€Semiconductor Transition Metal Dichalcogenides. Advanced Functional Materials, 2020, 30, 2004912.	7.8	13
118	Structure design enables stable anionic and cationic redox chemistry in a T2-type Li-excess layered oxide cathode. Science Bulletin, 2022, 67, 381-388.	4.3	13
119	High-Voltage Cathode Materials for Lithium-Ion Batteries: Freeze-Dried LiMn0.8Fe0.1M0.1PO4/C (M = Fe,) Tj ETQq1 1 0.784314 rgBT /O	1.9	12
120	Electrochemical Lithium Extraction and Insertion Process of Sol-Gel Synthesized LiMnPO₄via Two-Phase Mechanism. Journal of the Electrochemical Society, 2019, 166, A1257-A1265.	1.3	12
121	Definition of Redox Centers in Reactions of Lithium Intercalation in Li₃RuO₄ Polymorphs. Journal of the American Chemical Society, 2020, 142, 8160-8173.	6.6	12
122	Elucidation of Active Oxygen Sites upon Delithiation of Li₃IrO₄. ACS Energy Letters, 2021, 6, 140-147.	8.8	12
123	Synthesis and Electrochemical Study of Antifluorite-type Phases in the Li-M-N-O (M = Ti, V) Systems. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2005, 631, 2136-2141.	0.6	11
124	XAFS Investigations of LiNi_{0.45}Mn_{0.45}Co_{0.1âˆ'y}Al_yO₂Positive Electrode Materials. Journal of the Electrochemical Society, 2012, 159, A1562-A1571.	1.3	11
125	Lithium Metal-Copper Vanadium Oxide Battery with a Block Copolymer Electrolyte. Journal of the Electrochemical Society, 2016, 163, A2447-A2455.	1.3	11
126	Direct characterization of the Li intercalation mechanism into Î±-V2O5 nanowires using <i>in-situ</i> transmission electron microscopy. Applied Physics Letters, 2017, 110, .	1.5	11

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127	Visualization of the Phase Propagation within Carbon-Free Li4Ti5O12 Battery Electrodes. Journal of Physical Chemistry C, 2016, 120, 29030-29038.	1.5	10
128	Intercalation of Ca into a Highly Defective Manganese Oxide at Room Temperature. Chemistry of Materials, 2022, 34, 836-846.	3.2	10
129	Characterization of Electrode Materials for Lithium Ion and Sodium Ion Batteries Using Synchrotron Radiation Techniques. Journal of Visualized Experiments, 2013, , e50594.	0.2	8
130	Electron Tomography Analysis of Reaction Path during Formation of Nanoporous NiO by Solid State Decomposition. Crystal Growth and Design, 2014, 14, 2453-2459.	1.4	8
131	Nanocrystal heterostructures of LiCoO₂ with conformal passivating shells. Nanoscale, 2018, 10, 6954-6961.	2.8	8
132	Chemical Activity of the Peroxide/Oxide Redox Couple: Case Study of Ba₅Ru₂O₁₁ in Aqueous and Organic Solvents. Chemistry of Materials, 2018, 30, 3882-3893.	3.2	8
133	Electrochemical Reactivity with Lithium of Spinel-type ZnFe_{2â€“<i>y</i>}Cr_{<i>y</i>}O₄ (0 â‰ <i>y</i> â‰ 2). Journal of Physical Chemistry C, 2013, 117, 24213-24223.	1.5	7
134	Effect of Synthetic Parameters on Defects, Structure, and Electrochemical Properties of Layered Oxide LiNi_{0.80}Co_{0.15}Al_{0.05}O₂. Journal of the Electrochemical Society, 2018, 165, A3537-A3543.	1.3	7
135	Probing Mg Intercalation in the Tetragonal Tungsten Bronze Framework V₄Nb₁₈O₅₅. Inorganic Chemistry, 2020, 59, 9783-9797.	1.9	7
136	Structural Changes and Reversibility Upon Deintercalation of Li from LiCoPO₄ Derivatives. ACS Applied Materials & Interfaces, 2020, 12, 20570-20578.	4.0	7
137	Control of crystal size tailors the electrochemical performance of Î±-V₂O₅ as a Mg²⁺ intercalation host. Nanoscale, 2021, 13, 10081-10091.	2.8	7
138	Control of Size and Composition of Colloidal Nanocrystals of Manganese Oxide. Inorganic Chemistry, 2018, 57, 12900-12907.	1.9	6
139	Factors Defining the Intercalation Electrochemistry of CaFe₂O₄-Type Manganese Oxides. Chemistry of Materials, 2020, 32, 8203-8215.	3.2	6
140	NGenE 2021: Electrochemistry Is Everywhere. ACS Energy Letters, 2022, 7, 368-374.	8.8	6
141	Exploring orderâ€“disorder structural transitions in the Liâ€“Nbâ€“Nâ€“O system: The new antifluorite oxynitride Li11NbN4O2. Journal of Solid State Chemistry, 2010, 183, 1609-1614.	1.4	5
142	Surface Chemistry, Passivation, and Electrode Performance in Coreâ€“Shell Architectures of LiCoO₂ Nanoplates. ACS Applied Energy Materials, 2019, 2, 2149-2160.	2.5	5
143	Mapping and Metastability of Heterogeneity in LiMn₂O₄ Battery Electrodes with High Energy Density. Journal of the Electrochemical Society, 2020, 167, 020526.	1.3	5
144	Mapping Competitive Reduction upon Charging in LiNi_{0.8}Co_{0.15}Al_{0.05}O₂ Primary Particles. Chemistry of Materials, 2020, 32, 6161-6175.	3.2	5

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145	Direct Evidence of Charge Transfer upon Anion Intercalation in Graphite Cathodes through New Electronic States: An Experimental and Theoretical Study of Hexafluorophosphate. Chemistry of Materials, 2020, 32, 2036-2043.	3.2	5
146	Facile Electrochemical Mg-Ion Transport in a Defect-Free Spinel Oxide. Chemistry of Materials, 2022, 34, 3789-3797.	3.2	5
147	Unprecedented Multifunctionality in 1D Nb_{1â€‹}<i>_x</i>Ta<i>_x</i>S₃ Transition Metal Trichalcogenide Alloy. Advanced Functional Materials, 2022, 32, .	7.8	5
148	Synthesis and X-ray absorption spectroscopy of potassium transition metal fluoride nanocrystals. CrystEngComm, 2019, 21, 135-144.	1.3	4
149	Toward General Rules for the Design of Battery Electrodes Based on Titanium Oxides and Free of Conductive Additives. Energy Technology, 2014, 2, 383-390.	1.8	3
150	Intercalation of Mg into a Few-Layer Phyllomanganate in Nonaqueous Electrolytes at Room Temperature. Chemistry of Materials, 2020, 32, 6014-6025.	3.2	3
151	Structural Evolution of Layered Manganese Oxysulfides during Reversible Electrochemical Lithium Insertion and Copper Extrusion. Chemistry of Materials, 2021, 33, 3989-4005.	3.2	3
152	Access to Ru(IV)â€“Ru(V) and Ru(V)â€“Ru(VI) Redox in Layered Li₇RuO₆ via Intercalation Reactions. Chemistry of Materials, 2022, 34, 3724-3735.	3.2	3
153	Intermediate phases during alkali metal intercalation in HfNCl. Solid State Sciences, 2007, 9, 310-317.	1.5	2
154	Modification of the electrochemical activity of LiMn1.95Si0.05O4 spinel via addition of phases with different physico-chemical properties. Journal of Materials Chemistry A, 2014, 2, 3216.	5.2	2
155	Electrochemical Insertion of Li into Sr2MO2Cu2S2 (M = Mn, Co, Ni). Materials Research Society Symposia Proceedings, 2006, 988, 1.	0.1	1
156	Synthesis and Characterization of Core-Shell Nanocrystals of Co-Rich Cathodes. Journal of the Electrochemical Society, 2020, 167, 050501.	1.3	1
157	Electron-beam-induced Spinel to Defect Rocksalt Phase Transition in MgCrMnO₄. Microscopy and Microanalysis, 2020, 26, 788-790.	0.2	1
158	Redox Chemistry and Reversible Structural Changes in Rhombohedral VO₂F Cathode during Li Intercalation. Inorganic Chemistry, 2020, 59, 10048-10058.	1.9	1
159	sxdmâ€”A python framework for analysis of Scanning X-Ray Diffraction Microscopy data. Software Impacts, 2021, 10, 100172.	0.8	1
160	Antifluorite-Type Lithium Chromium Oxide Nitrides: Synthesis, Structure, Order, and Electrochemical Properties.. ChemInform, 2005, 36, no.	0.1	0
161	Spinel-layered Li1.1[Mn0.6Co0.8Ni0.6]O4-Ïƒ nanocrystals: Synthesis and electrochemistry at high potentials. Journal of Solid State Chemistry, 2020, 288, 121365.	1.4	0
162	Evolution of Oxygen Ligands upon Large Redox Swings of Li3IrO4. Journal of the Electrochemical Society, 0, , .	1.3	0

#	Article	IF	Citations
163	Transmission electron microscopy study of CoMnO catalyst nanoparticles. Microscopy and Microanalysis, 2021, 27, 2440-2442.	0.2	0
164	Investigation of structural defects and beam induced transitions in MgV2O4 nanocrystals using atomic resolved scanning transmission electron microscopy.. Microscopy and Microanalysis, 2021, 27, 1502-1503.	0.2	0