Petr Novak

List of Publications by Year
in descending order

252 papers	30,575 citations	8208 78 h-index	5347 170 g-index
262 all docs	262 docs citations	262 times ranked	25289 citing authors

#	ARTICLE	IF	CITATIONS
1	Evidence for stepwise formation of solid electrolyte interphase in a Li-ion battery. Energy Storage Materials, 2022, 44, 156-167.	9.5	20
2	Elucidating the Humidity-Induced Degradation of Ni-Rich Layered Cathodes for Li-Ion Batteries. ACS Applied Materials & Interfaces, 2022, 14, 13240-13249.	4.0	9
3	Nonlinear Electrochemical Analysis: Worth the Effort to Reveal New Insights into Energy Materials. Advanced Energy Materials, 2022, 12, .	10.2	11
4	Rechargeable Batteries for Simultaneous Demand Peak Shaving and Price Arbitrage Business. IEEE Transactions on Sustainable Energy, 2021, 12, 148-157.	5.9	32
5	Instability of PVDF Binder in the LiFePO₄<i>versus</i> Li₄Ti₅O₁₂ Liâ€ion Battery Cell. Helvetica Chimica Acta, 2021, 104, .	1.0	13
6	Performance-limiting factors of graphite in sulfide-based all-solid-state lithium-ion batteries. Electrochimica Acta, 2021, 389, 138735.	2.6	14
7	Reactivity and Potential Profile across the Electrochemical LiCoO₂â€“Li₃PS₄ Interface Probed by <i>Operando</i> X-ray Photoelectron Spectroscopy. ACS Applied Materials & Interfaces, 2021, 13, 42670-42681.	4.0	11
8	Unveiling the Complex Redox Reactions of SnO₂ in Li-Ion Batteries Using <i>Operando</i> X-ray Photoelectron Spectroscopy and <i>In Situ</i> X-ray Absorption Spectroscopy. ACS Applied Materials & Interfaces, 2021, 13, 2547-2557.	4.0	20
9	Cation Ordering and Redox Chemistry of Layered Ni-Rich Li<i>_x</i>Ni_{1â€“2<i>y</i>}Co<i>_y</i>Mn<i>_y</i>O<sub>2</sub An Operando Raman Spectroscopy Study. Chemistry of Materials, 2020, 32, 186-194.	3.2	61
10	Operando investigation of the solid electrolyte interphase mechanical and transport properties formed from vinylene carbonate and fluoroethylene carbonate. Journal of Power Sources, 2020, 477, 228567.	4.0	61
11	Lithium-ion batteries â€“ Current state of the art and anticipated developments. Journal of Power Sources, 2020, 479, 228708.	4.0	401
12	Cr-Doped Li-Rich Nickel Cobalt Manganese Oxide as a Positive Electrode Material in Li-Ion Batteries to Enhance Cycling Stability. ACS Applied Energy Materials, 2020, 3, 8646-8657.	2.5	23
13	Multi-length-scale x-ray spectroscopies for determination of surface reactivity at high voltages of LiNi0.8Co0.15Al0.05O2 vs Li4Ti5O12. Journal of Chemical Physics, 2020, 152, 184705.	1.2	9
14	Graphite Particle-Size Induced Morphological and Performance Changes of Graphiteâ€“Silicon Electrodes. Journal of the Electrochemical Society, 2020, 167, 100535.	1.3	24
15	Influence of Water Contamination on the SEI Formation in Li-Ion Cells: An Operando EQCM-D Study. ACS Applied Materials & Interfaces, 2020, 12, 15934-15942.	4.0	50
16	Influence of Na/Mn arrangements and P2/Pâ€²2 phase ratio on the electrochemical performance of Na_xMnO₂ cathodes for sodium-ion batteries. Journal of Materials Chemistry A, 2020, 8, 6022-6033.	5.2	39
17	Effect of a Boron Based Anion Receptor on Graphite and LiFePO₄ Electrodes. Journal of the Electrochemical Society, 2020, 167, 020525.	1.3	2
18	Insights into the chemical and electronic interface evolution of Li₄Ti₅O₁₂ cycled in Li₂Sâ€“P₂S₅ enabled by <i>operando</i> X-ray photoelectron spectroscopy. Journal of Materials Chemistry A, 2020, 8, 5138-5146.	5.2	23

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19	Engineering of Sn and Preâ€Lithiated Sn as Negative Electrode Materials Coupled to Garnet Taâ€LLZO Solid Electrolyte for Allâ€Solidâ€State Li Batteries. Batteries and Supercaps, 2020, 3, 557-565.	2.4	10
20	Coating of NCM 851005 Cathode Material with Al0@Al2O3 and Subsequent Treatment with Anhydrous HF. Journal of the Electrochemical Society, 2020, 167, 070510.	1.3	10
21	<i>Post Mortem</i> and <i>Operando</i> XPEEM: a Surface-Sensitive Tool for Studying Single Particles in Li-Ion Battery Composite Electrodes. Analytical Chemistry, 2020, 92, 3023-3031.	3.2	27
22	Insights into the Charge Storage Mechanism of Li₃VO₄ Anode Materials for Liâ€Ion Batteries. ChemElectroChem, 2020, 7, 2033-2041.	1.7	12
23	Study of Graphite Cycling in Sulfide Solid Electrolytes. Journal of the Electrochemical Society, 2020, 167, 110558.	1.3	23
24	Coating of Li_{1+x}[Ni_{0.85}Co_{0.10}Mn_{0.05}]_{1âˆ’x}O₂ Cathode Active Material with Gaseous BF₃. Journal of the Electrochemical Society, 2020, 167, 120505.	1.3	3
25	Solid Electrolyte Interphase (SEI) Formation on the Graphite Anode in Electrolytes Containing the Anion Receptor Tris(hexafluoroisopropyl)borate (THFIPB). Journal of the Electrochemical Society, 2020, 167, 130504.	1.3	3
26	Towards more Durable Electrochemical Capacitors by Elucidating the Ageing Mechanisms under Different Testing Procedures. ChemElectroChem, 2019, 6, 566-573.	1.7	21
27	Stable and Unstable Diglyme-Based Electrolytes for Batteries with Sodium or Graphite as Electrode. ACS Applied Materials & Interfaces, 2019, 11, 32844-32855.	4.0	77
28	A modeling framework to assess specific energy, costs and environmental impacts of Li-ion and Na-ion batteries. Sustainable Energy and Fuels, 2019, 3, 3061-3070.	2.5	36
29	Electrochemistry and morphology of graphite negative electrodes containing silicon as capacity-enhancing electrode additive. Electrochimica Acta, 2019, 320, 134602.	2.6	20
30	Revealing the Dual Surface Reactions on a HE-NCM Li-Ion Battery Cathode and Their Impact on the Surface Chemistry of the Counter Electrode. ACS Applied Materials & Interfaces, 2019, 11, 6054-6065.	4.0	23
31	Li/Fe substitution in Li-rich Ni, Co, Mn oxides for enhanced electrochemical performance as cathode materials. Journal of Materials Chemistry A, 2019, 7, 15215-15224.	5.2	34
32	Surface Degradation and Chemical Electrolyte Oxidation Induced by the Oxygen Released from Layered Oxide Cathodes in Liâˆ’Ion Batteries. Batteries and Supercaps, 2019, 2, 482-492.	2.4	29
33	Operando EQCM-D with Simultaneous in Situ EIS: New Insights into Interphase Formation in Li Ion Batteries. Analytical Chemistry, 2019, 91, 2296-2303.	3.2	54
34	(Invited) Raman Microscopy: What Can the Technique Tell Us?. ECS Meeting Abstracts, 2019, , .	0.0	1
35	Online Electrochemical Mass Spectrometry for Rechargeable Batteries. ECS Meeting Abstracts, 2019, , .	0.0	0
36	Graphite as Cointercalation Electrode for Sodiumâ€Ion Batteries: Electrode Dynamics and the Missing Solid Electrolyte Interphase (SEI). Advanced Energy Materials, 2018, 8, 1702724.	10.2	191

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37	Switch of the Charge Storage Mechanism of Li_{<i>x</i>}Ni_{0.80}Co_{0.15}Al_{0.05}O₂ at Overdischarge Conditions. Chemistry of Materials, 2018, 30, 1907-1911.	3.2	32
38	Phosphorus anionic redox activity revealed by operando P K-edge X-ray absorption spectroscopy on diphosphonate-based conversion materials in Li-ion batteries. Chemical Communications, 2018, 54, 4939-4942.	2.2	7
39	SnO₂ Model Electrode Cycled in Li-Ion Battery Reveals the Formation of Li₂SnO₃ and Li₈SnO₆ Phases through Conversion Reactions. ACS Applied Materials & Interfaces, 2018, 10, 8712-8720.	4.0	59
40	Solving the puzzle of Li₄Ti₅O₁₂ surface reactivity in aprotic electrolytes in Li-ion batteries by nanoscale XPEEM spectromicroscopy. Journal of Materials Chemistry A, 2018, 6, 3534-3542.	5.2	17
41	Do imaging techniques add real value to the development of better post-Li-ion batteries?. Journal of Materials Chemistry A, 2018, 6, 3304-3327.	5.2	36
42	Monitoring the chemical and electronic properties of electrolyteâ€"electrode interfaces in all-solid-state batteries using<i>operando</i>X-ray photoelectron spectroscopy. Physical Chemistry Chemical Physics, 2018, 20, 11123-11129.	1.3	48
43	Multiple redox couples cathode material for Li-ion battery: Lithium chromium phosphate. Journal of Energy Storage, 2018, 15, 266-273.	3.9	2
44	Lanthanum Manganite-based Air Electrode Catalysts and Their Application to Lithium-air Batteries: Effects of Carbon Support Oxidation. Electrochemistry, 2018, 86, 265-271.	0.6	5
45	Elucidation of Li_{<i>x</i>}Ni_{0.8}Co_{0.15}Al_{0.05}O₂ Redox Chemistry by <i>Operando</i> Raman Spectroscopy. Chemistry of Materials, 2018, 30, 4694-4703.	3.2	76
46	In situ and Operando Raman Spectroscopy of Layered Transition Metal Oxides for Li-ion Battery Cathodes. Frontiers in Energy Research, 2018, 6, .	1.2	85
47	A Cylindrical Cell for Operando Neutron Diffraction of Li-Ion Battery Electrode Materials. Frontiers in Energy Research, 2018, 6, .	1.2	30
48	The counterintuitive impact of separatorâ€"electrolyte combinations on the cycle life of graphiteâ€"silicon composite electrodes. Journal of Power Sources, 2017, 343, 142-147.	4.0	7
49	Fe and Co methylene diphosphonates as conversion materials for Li-ion batteries. Journal of Power Sources, 2017, 342, 879-885.	4.0	5
50	Ligand influence in Li-ion battery hybrid active materials: Ni methylenediphosphonate vs. Ni dimethylamino methylenediphosphonate. Chemical Communications, 2017, 53, 5420-5423.	2.2	4
51	Electrochemical impedance spectroscopy of a Liâ€"S battery: Part 1. Influence of the electrode and electrolyte compositions on the impedance of symmetric cells. Electrochimica Acta, 2017, 244, 61-68.	2.6	64
52	Comparative operando study of degradation mechanisms in carbon-based electrochemical capacitors with Li2SO4 and LiNO3 electrolytes. Carbon, 2017, 120, 281-293.	5.4	46
53	Publisher's Note: XPS Study of the Interface Evolution of Carbonaceous Electrodes for Li-O₂Batteries during the 1st Cycle [<i>J. Electrochem. Soc.,</i>163, A2545 (2016)]. Journal of the Electrochemical Society, 2017, 164, X6-X6.	1.3	0
54	Relationship between the Properties and Cycle Life of Si/C Composites as Performance-Enhancing Additives to Graphite Electrodes for Li-Ion Batteries. Journal of the Electrochemical Society, 2017, 164, A190-A203.	1.3	12

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55	Cycling Behavior of Silicon-Containing Graphite Electrodes, Part B: Effect of the Silicon Source. Journal of Physical Chemistry C, 2017, 121, 25718-25728.	1.5	22
56	Electrochemical impedance spectroscopy of a Liâ€"S battery: Part 2. Influence of separator chemistry on the lithium electrode/electrolyte interface. Electrochimica Acta, 2017, 255, 379-390.	2.6	23
57	Colloidal Synthesis and Electrochemistry of Surface Coated Nano-LiNi0.80Co0.15Al0.05O2. Journal of the Electrochemical Society, 2017, 164, A2617-A2624.	1.3	4
58	A New Concept of an Air-Electrode Catalyst for Li2O2 Decomposition Using MnO2 Nanosheets on Rechargeable Li-O2 Batteries. Electrochimica Acta, 2017, 252, 192-199.	2.6	9
59	Cycling Behavior of Silicon-Containing Graphite Electrodes, Part A: Effect of the Lithiation Protocol. Journal of Physical Chemistry C, 2017, 121, 18423-18429.	1.5	20
60	Crystal structure evolution <i>via</i> operando neutron diffraction during long-term cycling of a customized 5 V full Li-ion cylindrical cell LiNi_{0.5}Mn_{1.5}O₄<i>vs.</i> graphite. Journal of Materials Chemistry A, 2017, 5, 25574-25582.	5.2	31
61	Versatile Approach Combining Theoretical and Experimental Aspects of Raman Spectroscopy To Investigate Battery Materials: The Case of the LiNi_{0.5}Mn_{1.5}O₄ Spinel. Journal of Physical Chemistry C, 2016, 120, 16377-16382.	1.5	23
62	Performance-Enhancing Asymmetric Separator for Lithiumâ€"Sulfur Batteries. ACS Applied Materials & Interfaces, 2016, 8, 18822-18831.	4.0	55
63	Decomposition of LiPF₆in High Energy Lithium-Ion Batteries Studied with Online Electrochemical Mass Spectrometry. Journal of the Electrochemical Society, 2016, 163, A1095-A1100.	1.3	185
64	On the correlation between electrode expansion and cycling stability of graphite/Si electrodes for Li-ion batteries. Carbon, 2016, 105, 42-51.	5.4	55
65	Pitfalls in Liâ€"S Rate-Capability Evaluation. Journal of the Electrochemical Society, 2016, 163, A1139-A1145.	1.3	23
66	Operando Neutron Powder Diffraction Using Cylindrical Cell Design: The Case of LiNi0.5Mn1.5O4 vs Graphite. Journal of Physical Chemistry C, 2016, 120, 17268-17273.	1.5	30
67	Mechanism of the carbonate-based-electrolyte degradation and its effects on the electrochemical performance of Li 1+x (Ni a Co b Mn 1-a-b) 1-x O 2 cells. Journal of Power Sources, 2016, 335, 91-97.	4.0	7
68	Elucidating the Surface Reactions of an Amorphous Si Thin Film as a Model Electrode for Li-Ion Batteries. ACS Applied Materials & Interfaces, 2016, 8, 29791-29798.	4.0	41
69	XPS Study of the Interface Evolution of Carbonaceous Electrodes for Li-O₂Batteries during the 1st Cycle. Journal of the Electrochemical Society, 2016, 163, A2545-A2550.	1.3	26
70	Influence of aqueous electrolyte concentration on parasitic reactions in high-voltage electrochemical capacitors. Energy Storage Materials, 2016, 5, 111-115.	9.5	39
71	Electrode-electrolyte interface characterization of carbon electrodes in Li-O2 batteries: capabilities and limitations of infrared spectroscopy. Electrochimica Acta, 2016, 190, 753-757.	2.6	10
72	Ageing phenomena in high-voltage aqueous supercapacitors investigated by in situ gas analysis. Energy and Environmental Science, 2016, 9, 623-633.	15.6	204

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73	Effects of Solvent, Lithium Salt, and Temperature on Stability of Carbonate-Based Electrolytes for 5.0ÂV LiNi_{0.5}Mn_{1.5}O₄Electrodes. Journal of the Electrochemical Society, 2016, 163, A83-A89.	1.3	52
74	Online Electrochemical Mass Spectrometry of High Energy Lithium Nickel Cobalt Manganese Oxide/Graphite Half- and Full-Cells with Ethylene Carbonate and Fluoroethylene Carbonate Based Electrolytes. Journal of the Electrochemical Society, 2016, 163, A964-A970.	1.3	46
75	Investigation of Li-Ion Solvation in Carbonate Based Electrolytes Using Near Ambient Pressure Photoemission. Topics in Catalysis, 2016, 59, 628-634.	1.3	10
76	Understanding Inhomogeneous Reactions in Liâ€Ion Batteries: Operando Synchrotron Xâ€Ray Diffraction on Twoâ€Layer Electrodes. Advanced Science, 2015, 2, 1500083.	5.6	35
77	Influence of graphite edge crystallographic orientation on the first lithium intercalation in Li-ion battery. Carbon, 2015, 91, 458-467.	5.4	10
78	Lithium chromium pyrophosphate as an insertion material for Li-ion batteries. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2015, 71, 661-667.	0.5	4
79	Visualization of O-O peroxo-like dimers in high-capacity layered oxides for Li-ion batteries. Science, 2015, 350, 1516-1521.	6.0	659
80	Activation Mechanism of LiNi_{0.80}Co_{0.15}Al_{0.05}O₂: Surface and Bulk Operando Electrochemical, Differential Electrochemical Mass Spectrometry, and X-ray Diffraction Analyses. Chemistry of Materials, 2015, 27, 526-536.	3.2	198
81	Simultaneous in Situ X-ray Absorption Spectroscopy and X-ray Diffraction Studies on Battery Materials: The Case of Fe_{0.5}TiOPO₄. Journal of Physical Chemistry C, 2015, 119, 3466-3471.	1.5	26
82	Influence of Conversion Material Morphology on Electrochemistry Studied with Operando Xâ€Ray Tomography and Diffraction. Advanced Materials, 2015, 27, 1676-1681.	11.1	48
83	Understanding the Interaction of the Carbonates and Binder in Na-Ion Batteries: A Combined Bulk and Surface Study. Chemistry of Materials, 2015, 27, 1210-1216.	3.2	88
84	MoS2 coating on MoO3 nanobelts: A novel approach for a high specific charge electrode for rechargeable Li-ion batteries. Journal of Power Sources, 2015, 279, 636-644.	4.0	29
85	In situ X-ray diffraction characterisation of Fe0.5TiOPO4 and Cu0.5TiOPO4 as electrode material for sodium-ion batteries. Electrochimica Acta, 2015, 176, 18-21.	2.6	44
86	Structural Changes and Microstrain Generated on LiNi_{0.80}Co_{0.15}Al_{0.05}O₂during Cycling: Effects on the Electrochemical Performance. Journal of the Electrochemical Society, 2015, 162, A1823-A1828.	1.3	59
87	A low-temperature benzyl alcohol/benzyl mercaptan synthesis of iron oxysulfide/iron oxide composite materials for electrodes in Li-ion batteries. Journal of Materials Chemistry A, 2015, 3, 16112-16119.	5.2	6
88	Electrochemical study of Si/C composites with particulate and fibrous morphology as negative electrodes for lithium-ion batteries. Journal of Power Sources, 2015, 294, 128-135.	4.0	18
89	Reversible Li-Intercalation through Oxygen Reactivity in Li-Rich Li-Fe-Te Oxide Materials. Journal of the Electrochemical Society, 2015, 162, A1341-A1351.	1.3	47
90	Progress Towards Commercially Viable Liâ€"S Battery Cells. Advanced Energy Materials, 2015, 5, 1500118.	10.2	355

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91	Surface/Interface Study on Full xLi₂MnO₃Â·(1 â^’ x)LiMO₂(M = Ni,) Tj ETQq1 1 0.784314 rgBT /C	1.3	21
92	Understanding the Roles of Anionic Redox and Oxygen Release during Electrochemical Cycling of Lithium-Rich Layered Li₄FeSbO₆. Journal of the American Chemical Society, 2015, 137, 4804-4814.	6.6	155
93	In Situ Gas Analysis of Li₄Ti₅O₁₂Based Electrodes at Elevated Temperatures. Journal of the Electrochemical Society, 2015, 162, A870-A876.	1.3	89
94	Consequences of Electrolyte Degradation for the Electrochemical Performance of Li_{1+x}(Ni_aCo_bMn_{1-a-b})_{1-x}O₂. Journal of the Electrochemical Society, 2015, 162, A7072-A7077.	1.3	14
95	Concentration Effects on the Entropy of Electrochemical Lithium Deposition: Implications for Li⁺ Solvation. Journal of Physical Chemistry B, 2015, 119, 13385-13390.	1.2	11
96	Rechargeable Batteries: Grasping for the Limits of Chemistry. Journal of the Electrochemical Society, 2015, 162, A2468-A2475.	1.3	211
97	Freeze-dryed LixMoO3 nanobelts used as cathode materials for lithium-ion batteries: A bulk and interface study. Journal of Power Sources, 2015, 297, 276-282.	4.0	8
98	Combined operando X-ray diffractionâ€“electrochemical impedance spectroscopy detecting solid solution reactions of LiFePO4 in batteries. Nature Communications, 2015, 6, 8169.	5.8	60
99	Taming the polysulphide shuttle in Liâ€“S batteries by plasma-induced asymmetric functionalisation of the separator. RSC Advances, 2015, 5, 79654-79660.	1.7	33
100	Lithium Iron Methylenediphosphonate: A Model Material for New Organicâ€“Inorganic Hybrid Positive Electrode Materials for Li Ion Batteries. Chemistry of Materials, 2015, 27, 7889-7895.	3.2	16
101	MSnS₂(M = Cu, Fe) Electrode Family as Dual-Performance Electrodes for Liâ€“S and Liâ€“Ion Batteries. Journal of the Electrochemical Society, 2015, 162, A284-A287.	1.3	7
102	Important Aspects for Reliable Electrochemical Impedance Spectroscopy Measurements of Li-Ion Battery Electrodes. Journal of the Electrochemical Society, 2015, 162, A218-A222.	1.3	38
103	Towards a Stable Organic Electrolyte for the Lithium Oxygen Battery. Advanced Energy Materials, 2015, 5, 1400867.	10.2	192
104	Polyacrylate bound TiSb2 electrodes for Li-ion batteries. Journal of Power Sources, 2015, 273, 174-179.	4.0	11
105	Combined In Situ Raman and IR Microscopy at the Interface of a Single Graphite Particle with Ethylene Carbonate/Dimethyl Carbonate. Journal of the Electrochemical Society, 2014, 161, A1555-A1563.	1.3	49
106	Reducing Mass Transfer Effects on the Kinetics of 5V HE-NCM Electrode Materials for Li-Ion Batteries. Journal of the Electrochemical Society, 2014, 161, A871-A874.	1.3	5
107	Importance of â€˜unimportantâ€™ experimental parameters in Liâ€“S battery development. Journal of Power Sources, 2014, 249, 497-502.	4.0	79
108	Ex situ and in situ Raman microscopic investigation of the differences between stoichiometric LiMO2 and high-energy xLi2MnO3Â·(1â€“x)LiMO2 (M = Ni, Co, Mn). Electrochimica Acta, 2014, 130, 206-212.	2.6	93

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109	Enhancement of the high potential specific charge in layered electrode materials for lithium-ion batteries. Journal of Materials Chemistry A, 2014, 2, 8589.	5.2	92
110	Bulk and surface analyses of ageing of a 5V-NCM positive electrode material for lithium-ion batteries. Journal of Materials Chemistry A, 2014, 2, 6488.	5.2	23
111	Elucidation of the reaction mechanism upon lithiation and delithiation of Cu_{0.5}TiOPO₄. Journal of Materials Chemistry A, 2014, 2, 12513-12518.	5.2	20
112	Differential Electrochemical Mass Spectrometry Study of the Interface of <i>x</i>Li₂MnO₃Â·(1â€"<i>x</i>)LiMO₂ (M = Ni, Co, and Mn) Material as a Positive Electrode in Li-Ion Batteries. Chemistry of Materials, 2014, 26, 5051-5057.	3.2	146
113	Electrochemical impedance spectroscopy: Understanding the role of the reference electrode. Electrochemistry Communications, 2013, 34, 208-210.	2.3	35
114	A metastable Î²-sulfur phase stabilized at room temperature during cycling of high efficiency carbon fibreâ€"sulfur composites for Liâ€"S batteries. Journal of Materials Chemistry A, 2013, 1, 13089.	5.2	36
115	Effect of metal ion and ball milling on the electrochemical properties of M0.5TiOPO4 (M=Ni, Cu, Mg). Electrochimica Acta, 2013, 93, 179-188.	2.6	11
116	Antimony based negative electrodes for next generation Li-ion batteries. Journal of Materials Chemistry A, 2013, 1, 13011.	5.2	28
117	Circular in situneutron powder diffraction cell for study of reaction mechanism in electrode materials for Li-ion batteries. RSC Advances, 2013, 3, 757-763.	1.7	35
118	Electrochemical activation of Li2MnO3 at elevated temperature investigated by in situ Raman microscopy. Electrochimica Acta, 2013, 109, 426-432.	2.6	33
119	Shrinking annuli mechanism and stage-dependent rate capability of thin-layer graphite electrodes for lithium-ion batteries. Electrochimica Acta, 2013, 106, 149-158.	2.6	109
120	Oxygen release from high-energy xLi2MnO3Â·(1âˆ'x)LiMO2 (M=Mn, Ni, Co): Electrochemical, differential electrochemical mass spectrometric, in situ pressure, and in situ temperature characterization. Electrochimica Acta, 2013, 93, 114-119.	2.6	64
121	Critical aspects in the development of lithiumâ€"air batteries. Journal of Solid State Electrochemistry, 2013, 17, 1793-1807.	1.2	71
122	Memory effect in a lithium-ion battery. Nature Materials, 2013, 12, 569-575.	13.3	287
123	Size controlled CuO nanoparticles for Li-ion batteries. Journal of Power Sources, 2013, 241, 415-422.	4.0	79
124	Ammonolyzed MoO₃ Nanobelts as Novel Cathode Material of Rechargeable Liâ€ion Batteries. Advanced Energy Materials, 2013, 3, 606-614.	10.2	102
125	Influence of Cut-Off Potential on the Electrochemistry of M_{0.5}TiOPO₄(M =) Tj ETQq1 1 0.784314 rgBT /Ov	1.3	15
126	Microcalorimetric Measurements of the Solvent Contribution to the Entropy Changes upon Electrochemical Lithium Bulk Deposition. Angewandte Chemie - International Edition, 2013, 52, 13233-13237.	7.2	26

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127	Chemical surface treatments for decreasing irreversible charge loss and preventing exfoliation of graphite in Li-ion batteries. Electrochimica Acta, 2012, 82, 233-242.	2.6	22
128	Lithium-Sulfur Battery Development. ECS Meeting Abstracts, 2012, , .	0.0	0
129	Formation of artificial solid electrolyte interphase by grafting for improving Li-ion intercalation and preventing exfoliation of graphite. Carbon, 2012, 50, 2599-2614.	5.4	46
130	A structural and electrochemical study of Ni0.5TiOPO4 synthesized via modified solution route. Electrochimica Acta, 2012, 77, 244-249.	2.6	12
131	Influence of different electrode compositions and binder materials on the performance of lithiumâ€“sulfur batteries. Journal of Power Sources, 2012, 205, 420-425.	4.0	109
132	Reactions in the Rechargeable Lithiumâ€“O₂ Battery with Alkyl Carbonate Electrolytes. Journal of the American Chemical Society, 2011, 133, 8040-8047.	6.6	1,157
133	Microwave-assisted solution synthesis of doped LiFePO4 with high specific charge and outstanding cycling performance. Journal of Materials Chemistry, 2011, 21, 5881.	6.7	76
134	Continuous flame aerosol synthesis of carbon-coated nano-LiFePO4 for Li-ion batteries. Journal of Aerosol Science, 2011, 42, 657-667.	1.8	48
135	Synthesis of a polymeric 2,5-di-t-butyl-1,4-dialkoxybenzene and its evaluation as a novel cathode material. Synthetic Metals, 2011, 161, 259-262.	2.1	21
136	Hybridization of electrochemical capacitors and rechargeable batteries: An experimental analysis of the different possible approaches utilizing activated carbon, Li4Ti5O12 and LiMn2O4. Journal of Power Sources, 2011, 196, 10305-10313.	4.0	150
137	Mixed bi-material electrodes based on LiMn2O4 and activated carbon for hybrid electrochemical energy storage devices. Electrochimica Acta, 2011, 56, 8403-8411.	2.6	44
138	Electrochemical and spectroscopic characterization of lithium titanate spinel Li4Ti5O12. Electrochimica Acta, 2011, 56, 9324-9328.	2.6	7
139	Interplay Between Size and Crystal Structure of Molybdenum Dioxide Nanoparticlesâ€”Synthesis, Growth Mechanism, and Electrochemical Performance. Small, 2011, 7, 377-387.	5.2	85
140	A novel combinative Raman and SEM mapping method for the detection of exfoliation of graphite in electrodes at very positive potentials. Journal of Raman Spectroscopy, 2011, 42, 1754-1760.	1.2	6
141	Oxygen Reactions in a Nonâ€Aqueous Li⁺ Electrolyte. Angewandte Chemie - International Edition, 2011, 50, 6351-6355.	7.2	518
142	Concatenation of electrochemical grafting with chemical or electrochemical modification for preparing electrodes with specific surface functionality. Electrochimica Acta, 2011, 56, 3555-3561.	2.6	17
143	The influence of the local current density on the electrochemical exfoliation of graphite in lithium-ion battery negative electrodes. Electrochimica Acta, 2011, 56, 3799-3808.	2.6	38
144	Colorimetric determination of lithium-ion mobility in graphite composite electrodes. Journal of Electroanalytical Chemistry, 2010, 644, 127-131.	1.9	50

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145	Simulation of a supercapacitor/Li-ion battery hybrid for pulsed applications. Journal of Power Sources, 2010, 195, 2731-2736.	4.0	72
146	In situ neutron diffraction study of Li insertion in Li4Ti5O12. Electrochemistry Communications, 2010, 12, 804-807.	2.3	65
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