Table of Contents

Opening and Honors

1 Technological Innovation: A Strategic Asset
   T. Vandal

2 Challenges for Rechargeable Li Batteries
   J. Goodenough

General & National Projects

3 NEDO's Development of High-Performance Batteries for Next-Generation Vehicles and
   Grid-Connection of New Energy Resources
   S. Yumitori

4 Advanced Battery Development for Green Cars in Korea
   J. Park

5 Developing Power Li-Ion Batteries for EV & HEV and Advanced Materials for New Generation
   Lithium Batteries, Based on Chinese National Projects
   X. Liu, C. Xiao, F. Wang, F. Ding, L. Zhang and J. Wang

6 Current Directions in Automotive Electrochemical Energy Storage R&D
   T. Duong, D. Howell and J. Barnes

7 The Role of Size and Morphology in Li-Based Batteries
   J. Maier
Anode Materials 1

8 High Precision Measurements of the Coulombic Efficiency of Electrode Materials for Li-Ion Batteries
   A. Smith, J. Burns, S. Trussler, A. van Bommel and J. Dahn
9 Diffusion and Phase-Front Movement in Active Materials of Lithium-Ion Batteries
   Z. Ogumi
10 More Silicon for More Miles? A Way to High-Energy Lithium-Ion Batteries through Finishing the Silicon-Anode with Fluorinated Aromatic Isocyanates (FAI)
11 High Cyclability of All-Solid-State Lithium Microbatteries Based on Si or Ge Thin Film Negative Electrode
   B. Pecquenard, F. Le Cras, V. Phan and J. Manaud
12 High Performance Silicon Anode Materials for Next Generation Lithiumim-Ion Batteries
   M. Loveridge, M. Lain, F. Liu, F. Coowar, B. Macklin and M. Green

Anode Materials 2

13 A Promising High Potential Negative Electrode with a High Specific Capacity: TiO$_2$(B)
14 Si-Ge-Mo Composite Film Anode Materials with Remarkable Cycle Performance for Bulk Lithium-Ion Batteries
   C. Hwang and J. Park
15 Silicon Nanoparticle-Graphene Paper Composites for Li-Ion Battery Anodes
   H. Kung, J. Lee, C. Hayner and K. Smith
16 Hierarchical Bottom-Up Approach for High-Performance Si-Based Li-Ion Battery Anodes
   A. Magasinski, B. Hertzberg, P. Dixon and G. Yushin
17 New Insight on the Failure Mechanism of Nano-Si Based Anodes for Li-Ion Batteries
   D. Munao, M. Valvo, J. van Erven and E. Kelder
18 Highly Patterned Micron-Sized Sn-Based Alloys with 3-Dimensionally Ordered Macroporous Structure as Anode for Lithium Batteries
   M. Kotobuki, N. Okada, S. Woo, H. Munakata and K. Kanamura

General, Anodes, and Electrolytes Poster Session

19 Si-Cu Composite Anode in Room Temperature Ionic liquid Electrolyte for Lithium-Ion Batteries
   C. Nguyen and S. Song
20 Effect of Aging Time on the Tin Film and Its Anode Behaviors in Lithium-Ion Batteries
   R. Hu, H. Liu, M. Zeng and M. Zhu
21 Synthesis and Electrochemical Properties of Microporous Carbon Coated Silicon Core-Shell Nanocomposite for Li-Ion Battery Anode Material
   P. Gao, J. Yang, J. Wang and Y. Nuli
22 Tin Sulfide and Tin Oxide/Graphite Composite Anodes for Lithium-ion Batteries  
C. Chang, H. Su, J. Yen and C. Lee

23 Tin Oxide Nanoparticles Supported on Carbonaceous Materials as Anode Active Materials of Lithium Secondary Batteries  
D. Jung and E. Oh

24 Evaluations of Advanced Si-Mo Composite Anodes Using RF/DC Magnetron Sputtering for Bulk Lithium Ion Batteries  
C. Hwang and J. Park

25 Different Approaches for Si- and Sn-Based Anode Materials for Lithium Ion Batteries  
C. Arbizzani, S. Beninati, L. Damen and M. Mastragostino

26 On the Role of the CMC Binder for Si Negative Composite Electrodes  
B. Lestriez, D. Mazouzi, P. Moreau, N. Dupré, L. Roué and D. Guyomard

27 Combinatorial Study of the Sn-Cu-C System for Li-Ion Battery Negative Electrode Materials  
J. Thorne, R. Sanderson, J. Dahn and R. Dunlap

28 Electrochemical Reaction of Mn3Sn2 as Anode for Lithium-Ion Batteries  

29 Graphene and SnO2/Graphene as Anodes of Lithium-Ion Batteries  
X. Li, D. Geng, X. Meng, J. Wang, J. Liu, Y. Li, D. Wang, J. Yang, R. Li and A. Sun

30 Needle and Fuzz Structured SnO2 Nanowires as Anodes of Li-Ion Batteries  
D. Wang, X. Li, R. Li, T. Sham and A. Sun

31 The Negative-Electrode Material of SiO-C Composite for High-Energy Density Lithium-Ion Batteries  
M. Yamada, A. Inaba, A. Ueda, K. Matsumoto and T. Ohzuku

32 Surface Modification of Silicon Thin Film Anodes for Lithium Secondary Batteries  
W. Chang, A. Arie and J. Lee

33 In Situ Observation of Morphology Change on Alloy Anode by Diffraction Enhanced X-ray Imaging  
Y. Kusachi and H. Yasuda

34 Synthesis of Si/Graphene Composite as an Anode Material for Lithium-Ion Battery  
S. Ju and S. Dou

35 A New High Capacity Graphite/Silicon Composite Material for Lithium-Ion Batteries  

36 Nanosized Tin/Graphite Composite as Anode Material for Li-Ion Batteries Synthesized by a Reverse Microemulsion Technique  
X. Wang, Z. Wen, Y. Liu and X. Liang

37 Main Causes of Irreversible Volume Change of Tin Anode with Cycling  
R. Kim, K. Kim, S. Lim, D. Nam and H. Kwon

38 Cycle Performances and Structural Properties of SiO-Li2O Based Anode Materials for Lithium Rechargeable Battery  
C. Doh, M. Oh, B. Jin, S. Moon and J. Kim

39 A Study on the Interior Microstructures of Working Sn-Based Particle Electrode of Lithium-Ion Batteries by In Situ X-ray Transmission Microscopy  
S. Chao, Y. Yen, N. Wu, Y. Song and H. Wu
40 Three-Dimensional Nanocarbon/Tin Oxide Composites as Anode Materials for Lithium-Ion Batteries  
C. Zhang, M. Quince, P. Zhang, Z. Chen and Z. Guo  

41 An Active-Inactive Intermetallic Phase of Ni-Cu-Sn as a Lithium Insertion Anode Material  
A. Stephan, T. Prem Kumar and S. Devi Kumari  

42 Lithium Alloying Potentials of Silicon as Anode of Lithium Secondary Batteries  
C. Doh, J. Kim, B. Jin and S. Moon  

43 Mesoporous Tin Oxide as Anode for Rechargeable Lithium-Ion Batteries  
K. Shiva and A. Bhattacharyya  

44 Silicon Nanowires as Anode Material in Lithium-Ion Batteries  

45 SiOx Material as High Capacity Anode for Li-Ion Batteries  
A. Guerfi, P. Charest, M. Dontigny and K. Zaghib  

46 Use of Water Soluble Binders for Nano-SnO2 and Nano-SnO2/Carbon Composite Anodes  
F. Courtel, E. Bertin, D. Saari, Y. Abu-Lebdeh and I. Davidson  

47 Low Cost Silicon Fibres For Lithium-Ion Batteries  
F. Liu, M. Lain, M. Loveridge, F. Coowar, B. Macklin and M. Green  

48 Electrochemical and Mössbauer Spectral Investigation of TiSnSb as New Negative Electrode Material for Li-Ion Batteries  
M. Sougrati, J. Fullenwarth, A. Debenedetti, B. Fraisse, J. Jumas and L. Monconduit  

49 High Capacity Nano-Silicon Based Negative Electrodes  
F. Lindgren, S. Urbonaite and K. Edström  

50 Electrochemical Behaviour of Sn and Sn-C Composite in LiBOB-Containing Electrolytes  
J. Hassoun, M. Wachtler, M. Wohlfahrt-Mehrens and B. Scrosati  

51 Carbothermal Synthesis of Sn-Based Composites as Negative Electrode for Lithium-Ion Batteries  
M. Mouyane, J. Ruiz, J. Jumas, J. Olivier-Fourcade, M. Artus, S. Cassaignon, J. Jolivet,  
G. Caillon, C. Jordy, K. Driesen and J. Scoyer  

52 Model Anodes and Ionic Liquids for Li-Ion Batteries  
F. Renner, A. Seemayer, A. Pareek and P. Bach  

53 Study on Composite Anode for LIB Prepared via Electrodepositing Method  
H. Zhao, J. Ba, C. Jiang and X. He  

54 Electrochemical Properties of Sputtered Si-M-C (M = Co, Fe) Alloys as Negative Electrodes  
E. Souza and J. Dahn  

55 Effects of Modified Copper Foam Structure Used as Substrate on the Electrochemical Performances of Sn Anode for Li-Ion Battery  
D. Nam, R. Kim, J. Kim and H. Kwon  

56 Electrochemical Characteristics of SnO2 Nanoparticle as a Negative Electrode Prepared by Liquid Phase Deposition Method  
K. Ui, S. Fukuya, Y. Kadoma, N. Kumagai, Y. Umekage, R. Kumaresan and M. Mizuhata  

57 Synthesis of Si-Based Composite Anode Materials from SiO and Their Electrochemical Properties  
Z. Lu, L. Zhang, H. Ren, L. Ren, Q. Peng and X. Liu
First Principles Studies of Surfaces and Interfaces in Si and Cu-Sn Anodes
M. Chan and J. Greeley

Novel 3-D Macroporous Cu/SnO2 Composite Anodes for Lithium-Ion Batteries
W. Xu, N. Canfield, J. Xiao, D. Wang, Z. Nie and J. Zhang

Alloys-polymer Composites as Negative Electrodes for Li-ion Batteries
J. Bridel, M. Morcrette, T. Azaïs, J. Tarascon and D. Larcher

One-Dimensional Magnéli Phases Ti_nO_{2n-1} as Anodes for Li-Ion Batteries
W. Han and X. Wang

Study of Si-Sn-Ni-Al-C Composites as Negative Electrodes for Li-Ion Batteries

Magnetic Studies of Lithium Cycling in SnCoC Anode
N. Chernova, R. Zhang and M. Whittingham

Towards Efficient Binders for Li-Ion Battery Si-Based Anodes
A. Magasinski, B. Zdyrko, I. Kovalenko, B. Hertzberg, R. Burtovy, T. Fuller, I. Luzinov and G. Yushin

Anode Properties of Ni-Coated Si Thick Film Electrodes Prepared by Gas-Deposition
H. Usui, M. Shibata, K. Nakai and H. Sakaguchi

Si Thin Platelets as High-Capacity Negative Electrode for Li-Ion Batteries

Electrodeposited Sn from Organic Electrolyte for Li-Ion Battery Anode
T. Momma, A. Toyoda, H. Nara and T. Osaka

Synthesis and Cycling Behavior of SnS as a Possible Anode Material for Lithium-Ion Batteries
A. Stephan, T. Prem Kumar, S. Devi Kumari, G. Kumar and K. Suk Nahm

Preparation and Characterization of Sn-Zn Composite Anode for Lithium-Ion Battery
S. Zhang, Y. Fang, Y. Xing, T. Jiang and M. Sun

Li-Ion Cells using Silicon Composites as Negative Electrode
S. Jouanneau, C. Pagano, Y. Reynier, L. Daniel, S. Patoux, W. Porcher and S. Martinet

Comparison between FeSn2 Nanoparticles and Microparticles as Anode Materials for Li-Ion Batteries
P. Lippens, M. Chamas, J. Jumas, K. Boukerma, R. Dedryvère, D. Gonbeau, S. Panero and B. Scrosati

Nanocomposite Silicon-Grafted Carbon Nanotubes Electrode Materials for Lithium-Ion Batteries
C. Martin, O. Crosnier, R. Retoux, D. Bélanger, D. Schleich, F. Christien and T. Brousse

Local Chemical and Structural Study of Si-C Nanocomposites Electrodes for Lithium Batteries
F. Wang, X. Yang, L. Wu, Y. Zhu and J. Graetz

Synthesis and Electrochemical Properties of SiO_x/C Composite Anode for Lithium-Ion Batteries
J. Wang, H. Zhao, J. Wang and C. Wang

Characteristics of Carbon-Coated Cu-Sn Alloy Powders Prepared by Spray Pyrolysis
J. Kim, S. Ju, H. Koo, Y. Ko, J. Yi and Y. Kang

Nanostructured SnSb/Carbon Nanotube Composites Synthesized by Reductive Precipitation for Lithium-Ion Batteries
M. Park, J. Kim and Y. Kang
Silver-Coated Three-Dimensional (3D) Macroporous Silicon for High-Capacity Lithium Storage
Y. Yu, L. Gu, C. Zhu and J. Maier

Electrodeposition as a Tool to Investigate the Irreversible Capacity Loss of Cu2Sb
J. Mosby, D. Johnson and A. Prieto

Intermetallic MSnx/MSnxOy Core-Shell Nanospheres as Electrodes for Li-Ion Batteries
X. Wang and W. Han

Investigation of Nanoscaled Silicon Composite for High-Energy Lithium Storage
A. Trifonova, T. Stankulov, B. Banov and A. Momchilov

Interfacial Behavior of the Sn0.72[BPO4]0.28 Electrode Material during the First Galvanostatic Discharge
D. Conte, L. Stievano, J. Olivier-Fourcade, J. Jumas and P. Willmann

Preparation of Nanoporous Copper through Chemical Dealloying and Its Application in Lithium-Ion Battery
S. Zhang, Y. Xing, W. Liu and J. Zheng

Improving Silicon-Based Composite Electrodes by Chemical Grafting
C. Ramirez-Castro, C. Martin, O. Crosnier, D. Bélanger, F. Christien, P. Nowakowski and T. Brousse

Electrochemical Properties of Si Film Electrode Using Ti-Ni Alloy Current Collector
B. Kim, G. Cho, J. Noh, S. Choi, Y. Jeon, H. Mun and T. Nam

First-Principle Calculation-Assisted Elucidation on the Nanoscale Phase Transition of Si during Li+ Insertion
Y. Kang, Y. Lee, S. Suh and Y. Kim

Highly Reversible Li Storage in Si-Based Nanowires with the Maximum Capacity

Functional Binders for High Capacity Si-Graphite Composite Negative Electrodes
S. Komaba, T. Ozeki, K. Shimomura, N. Yabuuchi, H. Yui, K. Sakamoto and H. Muramatsu

Interfacial Storage of Lithium in the Nanostructure of SnO2 Nanobaskets for Capacities Exceeding Theoretical Values
M. Smith, P. Johnson and D. Teeters

Experimental and Theoretical Characterization of Li-Sn Compounds
P. Lippens, F. Robert, J. Jumas, E. Bekaert and M. Ménétrier

Amorphous and Crystalline Si/C Based Nanocomposite Anodes for Lithium-Ion Batteries
M. Datta, P. Jampani and P. Kumta

Nanostructured Hybrid Silicon/Carbon Nanotube Heterostructures: Novel Reversible High-Capacity Lithium-Ion Anodes
R. Epur, W. Wang and P. Kumta

Vinylene Carbonate (VC) Additive for Sn Thin-Film Negative Electrode
S. Park, J. Ryu and S. Oh

Numerical Modeling of Nanostructured Silicon Battery Anodes
S. Golmon, K. Maute, M. Dunn and S. Lee

Enhancing the Thermal Stability of Natural Graphite by Co3O4 Coating in Lithium-Ion Battery
S. Yu, J. Zhu, Z. Chen and X. He
95 Adhesion of Single Wall Carbon Nanotubes to a Copper Substrate by Means of a Self-Assembly Monolayer as Lithium-Ion Battery Anodes  

96 On the Thermal Behavior of Lithium Intercalated Graphites  
O. Haik, S. Ganin, N. Pour, E. Zinigrad and D. Aurbach

97 Thermal Stability of Nongraphitizable Carbon Anode for Li-Ion Batteries  
M. Zhou, L. Zhao, S. Okada and J. Yamaki

98 A Mathematical Model of Edge Carbon Atoms in Graphite Particles for Lithium-Ion Batteries  
W. Zhang

99 Hierarchical Nanostructured Carbon as a Highly Efficient Anode Material in Li-Ion Battery  
B. Fang, M. Kim, S. Lim, J. Kim, M. Kim and J. Yu

100 Overcharge Effect on Carbon Electrode for Lithium-Ion Batteries  
W. Lu, C. López, A. Jansen and D. Dees

101 High Capacity EDLC Material Based on Activated Carbon Fiber Working in a Li-Ion Containing Electrolyte  
T. Takamura, Y. Sato and Y. Sato

102 Surface Modification and Characterization of Pitch-Based Carbons for Anode Materials of Lithium-Ion Batteries  
T. Lin and S. Wu

103 Graphene-Based Anode Materials for Li-Ion Batteries  
W. Liu, S. Kuo, C. Hsieh, Y. Chiu, C. Su and H. Wu

104 Disordered Carbon Negative Electrodes for Na-Ion Batteries  
A. Timmons

105 Enhancing the Performance of Biomass-Derived Carbons in Rechargeable Lithium Batteries  
A. Caballero, L. Hernan, J. Morales, M. Olivares and V. Gomez

106 Lithium Intercalation Potentials of Graphite Homologues as Anode of Lithium Secondary Batteries  
C. Doh, J. Kim, B. Jin and S. Moon

107 Synthesis of High Capacity/Rate-Capability Natural Graphites by Granulation for Lithium-Ion Batteries  
Y. Jo, M. Hwang, J. Kim and Y. Kim

108 New Type of SECM Microtip: Li Metal Tip for Researching the Li⁺ Ions Intercalation Behavior into the Graphite  
F. Xu and C. Jung

109 Electron Transfer and Alloying Process for New Sn-Based Composite Materials  
M. Mouyane, P. Lippens, M. Womes, J. Jumas and J. Olivier-Fourcade

110 Metal Doped Nanostructured Graphite Nanoplatelets as Anode for Lithium-Ion Battery  
A. Monga and L. Drzal

111 Surface and Bulk Kinetics of Lithium-Ions in Graphitic Anodes Using First Principles Calculations and Kinetic Monte Carlo  
A. Abdellahi, K. Persson, L. Yang and G. Ceder

112 Pair Distribution Function Analysis of In Situ and Ex Situ X-ray Data of Iron (Oxy)fluorides and Copper Fluorides  
R. Robert, X. Hua, B. Key, N. Pereira, G. Amatucci and C. Grey
113 High Energy Density Composite Anode/Graphene for Advanced Li-Ion Battery  
   L. Vatamanu and A. Nguyen

114 Na-Ion Batteries; II. Electrode Interface and Reaction Mechanisms of Carbon Negative Electrode  
   W. Murata, T. Ishikawa, N. Yabuuchi, T. Ozeki and S. Komaba

115 Synthesis of Hierarchically Ordered Porous-Carbon and Its Application as Anode for Lithium-Ion Batteries  
   J. Yi, J. Lei, W. Li, L. Zhou, M. Xu and L. Hao

116 Optimize the Hard Carbon Anode for Lithium-Ion Battery  
   C. Yang, C. Yang, Y. Pan, P. Zhang and J. Xie

117 Analysis of Negative Electrode for High Power Lithium-Ion Batteries by Raman Spectroscopy and HX-PES  
   H. Hori, M. Shikano, S. Koike, H. Sakaeb, Y. Saito, K. Tatsumi and E. Ikenaga

118 Sulphur-Graphene Composite for Practical Lithium Batteries  
   J. Wang, L. Lu, X. Xu and H. Liu

119 Microstructural Mapping of Electrodes for Li-ion Batteries  
   P. Shearing, B. Nigel and S. Harris

120 Cycle Life Improvement of Novel Composite Graphite Anode by SBR+CMC Binder for High Power Lithium-Ion Battery Application  
   J. Yen, J. Hong, H. Wu, C. Lee, C. Su and T. Wu

121 The Growth Mechanism of the Solid Electrolyte Interphase on Graphite Electrodes during Storage  
   J. Yan, Y. Lou, J. Zhang, X. Zhang and B. Xia

122 Thermal Stability of Solid Electrolyte Interphase (SEI) on Graphite Electrode  
   H. Park, J. Mun, J. Ryu and S. Oh

123 Ion Conduction and Lithium Battery Performance of Nonaqueous Lithium Salt Solution-Functionalized Oxide Inclusions Composite ("Soggy Sand") Electrolytes - I  
   S. Das and A. Bhattacharyya

124 Phosphorous Oxynitride Glasses: Properties, Structure and Their Potential Application as Solid Electrolytes  
   N. Mascaraque, F. Muñoz and A. Durán

125 Novel Nanostructured Gel Polymer Electrolytes with Close-Packed Poly(methyl methacrylate) Nanoparticle Arrays for High-Power Lithium-Ion Polymer Batteries  
   W. Park, J. Kim and S. Lee

126 Polyimide Gel Polymer Electrolyte-Nanoencapsulated LiCoO₂ for High-Voltage Li-Ion Batteries  
   J. Park, J. Kim, E. Shim, Y. Lee and S. Lee

127 Effect of SiO₂ Powder Size on Thermal Shrinkage and Electrochemical Performance of Closely Packed Nanoparticles-Coated Composite Separators for Lithium-Ion Batteries  
   H. Jeong, E. Choi and S. Lee

128 Novel Poly(vinylidene fluoride-hexafluoropropylene)/Poly(ethylene terephthalate) Composite Nonwoven Separators with Phase Inversion-Controlled Microporous Structures for Lithium-Ion Batteries  
   S. Lee, H. Jeong, E. Choi and J. Kim
<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>129</td>
<td>Ion Conduction and Lithium Battery Performance of Nonaqueous Lithium Salt Solution-&quot;Janus Soggy Sand&quot; Composite Electrolytes - 2</td>
<td>S. Das and A. Bhattacharyya</td>
</tr>
<tr>
<td>130</td>
<td>Non-Flammable Electrolytes for Lithium-Ion Batteries</td>
<td>S. Dalavi, M. Xu, B. Ravdel, L. Zhou and B. Lucht</td>
</tr>
<tr>
<td>131</td>
<td>Investigation of the Chemical Reaction Between Lithium Metal Anodes and N-propyl-N-methyl-pyrrolidinium bis(fluorosulfonylimid) Ionic Liquid Electrolytes</td>
<td>A. Basile, A. Bhatt, A. O'Mullane, A. Best, A. Hollenkamp and S. Bhargava</td>
</tr>
<tr>
<td>132</td>
<td>6 V-Class Anodic Stability of Organic Liquid Electrolyte with Boric Ester</td>
<td>A. Kishimoto, Y. Iriyama, Y. Tanaka and T. Fujinami</td>
</tr>
<tr>
<td>133</td>
<td>Electrolyte Additives and XPS Depth Profiling of SEI on Graphite and LiFePO4</td>
<td>K. Ciosek and K. Edström</td>
</tr>
<tr>
<td>135</td>
<td>Fundamental Study of Li Metal Negative Electrode in Ionic Liquid</td>
<td>K. Nishikawa, H. Naito, T. Nishida, T. Mori and Y. Fukunaka</td>
</tr>
<tr>
<td>137</td>
<td>Improvement the Heat Stability of Polyolefin Separator for Lithium-Ion Battery Application</td>
<td>L. Gao, Y. Dai, Y. Zhang and J. Xie</td>
</tr>
<tr>
<td>138</td>
<td>1-Propyl-3 Methylimidazolium Tetrafluoroborate Ionic Liquid Based Composite Ternary Electrolytes for Lithium Batteries</td>
<td>S. Ramdial and H. Missan</td>
</tr>
<tr>
<td>139</td>
<td>Lithium Plating-Stripping Reaction on Lithium Phosphorus Oxynitride Glass Electrolyte (LiPON) Film</td>
<td>Y. Iriyama and K. Okita</td>
</tr>
<tr>
<td>141</td>
<td>A Poly (3-decyl thiophene)-Modified Separator with Self-Actuating Overcharge Protection Mechanism for LiFePO4 -Based Lithium-Ion Battery</td>
<td>X. Ai, S. Li, H. Yang and Y. Cao</td>
</tr>
<tr>
<td>142</td>
<td>Revisiting LiClO4 as an Electrolyte for Rechargeable Li-Ion Batteries</td>
<td>R. Marom, O. Haik, I. Halalay and D. Aurbach</td>
</tr>
<tr>
<td>143</td>
<td>2-Chloro-4-phenylthiazole: A New Film-Forming Additive for Electrolytes in Lithium-Ion Batteries</td>
<td>C. Bayer, C. God, M. Schmuck, C. Stangl and S. Koller</td>
</tr>
<tr>
<td>144</td>
<td>Electrochemical Properties of Li1.4Al0.4Ti1.6(PO4)3 Synthesized by Co-Precipitation Method as All-Solid-State Electrolyte for Lithium Batteries</td>
<td>L. Huang, Z. Wen, Y. Liu, X. Wang, M. Wu and X. Wu</td>
</tr>
</tbody>
</table>
145 The Role of the Gamma Ray Irradiated Polyethylene Separator on the Electrochemical Properties for Li-Ion Batteries
K. Kim, Y. Kim and Y. Kim
146 Interfacial Properties of Ca₃(PO₄)₂-Incorporated Poly(ethylene oxide)-Based Nanocomposite Electrolytes Investigated by XPS and FTIR Studies
A. Stephan, T. Prem Kumar, R. Bongiovanni, J. Nair, A. Pollicino and N. Angulakshmi
147 Application of Ionic Liquid-Based and Fluorinated Solvent-Based Advanced Electrolytes to Rechargeable Li Batteries
M. Ishikawa and M. Yamagata
148 High Density Gel Polymer Electrolyte
B. Baek and C. Jung
149 Electrochemical Behavior of Lithium bis(trifluoromethylsulfonyl)imide (LiTFSI): Network Polymer Solid Electrolyte at Elevated Temperature
I. Ismail
150 Electrochemical Properties and Nonflammability of a Mixed Boric Ester as a Novel Electrolyte Solvent
Y. Tanaka, J. Kaneko, A. Kishimoto, M. Minoshima, Y. Iriyama and T. Fujinami
151 Chemical Vapour Deposition of a Solid-State Electrolyte for Microbattery Applications
152 Solid-State Electrolytes for Lithium-Ion Batteries
L. Spencer, V. Thangadurai and G. Goward
153 Preparation and Electrochemical Characterization of Polymer Electrolytes Based on Electrospun Polyacrylonitrile Nonwoven Membranes for Lithium Batteries
P. Raghavan, J. Manuel and J. Ahn
154 Disperse Electrolytes with Structured Silica Materials for Lithium-Ion Batteries
K. Sann, H. Buschmann, B. Luerßen, J. Janek, J. Roggenbuck, M. Fröba, A. Gentchev and H. Wiemhöfer
155 Ionic Liquids for Lithium-Ion Batteries Based on Deep Eutectic Mixtures
O. Geiculescu, C. Lu, S. Creager, D. Desmarteau, D. Frisch and I. Halalay
156 Nanoindentation Testing of Lithium-Ion Battery Separators
I. Halalay, M. Lukitsch, M. Balogh and C. Wong
157 Synthesis and Solid-State NMR Studies of the Ionic Conductivity in Blends of Lithium Salts with Cyclotriphosphazene- and Hexphenylbenzene-Model-Compounds
J. Thielen, W. Meyer and K. Landfester
158 3-D Microbattery Electrolyte by Self-Assembly of Oligomers
S. Tan, D. Brandell and T. Gustafsson
159 New Conductive Polymer Electrolytes Composed of a Double-Comb Poly(trimethylene oxide) with Oligo(trimethylene oxide) Side Chains
J. Lin, M. Litt and D. Schuele
160 "Elasticized" Plastic Crystalline Electrolytes for Rechargeable Lithium Batteries
M. Patel and A. Bhattacharyya
161 In Situ Temperature Dependant Studies of 0.7Li$_2$S-0.3P$_2$S$_5$
R. Prasada Rao, S. Adams, M. Reddy and B. Chowdari

162 Oxidation Mechanisms of Polyethylene Separator under High Electrochemical Potential
T. Takeuchi, M. Hasegawa, Y. Bito, H. Yoshizawa, H. Morimoto and S. Tobishima

163 Low Temperature Phase Behaviour and Crystal Structures of Electrolyte Solvents and Additives
P. Whitfield and I. Davidson

164 Cellulose Nanofiber Sheet as Separator Lithium-Ion Battery
J. Lee, S. Chun, S. Lee, G. Doh and C. Jung

165 Thermal Reaction Mechanism of Linear Carbonate/EC-Based Electrolyte for Li-Ion Batteries
L. Zhao, M. Zhou, S. Okada and J. Yamaki

166 Poly(vinylpyridine-co-styrene) Based In Situ Crosslinked Gel Polymer Electrolyte for Lithium-Ion Polymer Batteries
Y. Kang, S. Oh, D. Kim, M. Lee and C. Lee

167 The Effects of Solvent and Cation Ion on the Electrochemical Reduction Process of Oxygen in Nonaqueous Electrolytes
Y. Tian, W. Wu and Y. Yang

168 Theoretical Study on the Reduction of Ethylene Sulfite as an Electrolyte Additive for Lithium-Ion Battery
L. Xing, X. Meng, M. Xu, W. Li, T. Li and L. Zhou

169 The Effect of Nano-Al$_2$O$_3$ Addition on the Performance of PEO-P(VdF-HFP)-Based Gel Electrolyte for Lithium-Ion Batteries

170 Preparation and Characterization of P(MMA-VAc)-co-PEGDA Based Gel Polymer Electrolyte for Lithium-Ion Battery Use

171 Studies on Functionalized Nanostructures Based on Phosphonium Ionic Liquid
E. Cha, D. Jang, Y. Song, K. Park and J. Park

172 Studies on Chitin Dispersed Poly(ethylene oxide)-poly(methyl methacrylate) Blend Nanocomposite Electrolytes for Lithium Batteries
A. Stephan, T. Prem Kumar and N. Angulakshmi

173 Electrochemical and Mechanical Characterization of Composite Nanostructures of Glassy and Polymer Electrolytes
W. Tenhiaeff, E. Herbert, K. Hong, S. Deng, J. Mays, K. More and N. Dudney

174 Polymer Electrolyte Electrodeposition: A Novel Technique Investigated by EQCM and EIS
M. Lacey and J. Owen

175 Blooming of Wax Surfactants to the Surface of Polymer Electrolytes to Stabilize Passivation at the Lithium Electrode/Polymer Interface
D. Decker and D. Teeters

M. Patel and A. Bhattacharyya

177 The Effect of Electrolyte Additives upon the Performance of Li-Ion Batteries
M. Smart and R. Bugga
The Use of Fluorinated Electrolytes in Lithium-Ion Batteries for Improved Safety in Human-Rated Aerospace and Terrestrial Applications
  F. Krause, M. Smart and G. Prakash

Advances in Electrolytes for Lithium-Ion Batteries: A Mechanistic Understanding
  B. Lucht

3DOM Separator for Rechargeable Lithium Metal Batteries
  H. Munakata, M. Kotobuki, K. Sasajima, Y. Yamamoto and K. Kanamura

Properties of the Ionic Liquid Electrolytes Containing Glymes as Additives for Rechargeable Lithium Batteries
  Y. Katayama, M. Ishii, S. Miyashita, T. Miura and S. Komaba

Preparation and Characterization of Lithium ThioGermanate Thin Film Solid Electrolytes
  S. Martin and I. Seo

All-Solid-State Lithium Secondary Batteries Prepared by Softening Process of Li$_2$S-P$_2$S$_5$ Glass Electrolytes
  A. Hayashi, H. Kitaura, T. Ohtomo, S. Hama and M. Tatsumisago

Electrochemical and Chemical Properties of Bis(fluorosulfonyl)imide Anion Based Room Temperature Ionic Liquids for Applications in Lithium Metal Based Battery Technology
  A. Bhatt, A. Best, P. Kao and A. Hollenkamp

Li$^+$ Conductivity and Migration Pathway Studies of LiCl Doped 0.6Li$_2$S-0.4P$_2$S$_5$ Glassy Electrolyte for All-Solid-State Batteries
  R. Prasada Rao, S. Adams, M. Reddy and B. Chowdari

Studies on Structural, Thermal, and Electrical Properties of Poly(ethylene oxide): Succinonitrile-Based Polymer Electrolytes
  R. Gupta, L. Ghil and H. Rhee

An Experimental and Theoretical Study of the Mass Transport in the Kynar Flex Gel Electrolyte: LiPF$_6$-EC-PC-P(VdF-HFP)
  A. Nyman, M. Behm and G. Lindbergh

Electrochemical Properties of Gel Polymer Electrolytes Containing an Epoxy-Amine Resin and an Ionic Liquid
  D. Sotta, J. Bernard, V. Sauvant-Moynot and M. Armand

Lithium-Ion Solvation in Ionic Liquid Based Electrolytes
  K. Angenendt and P. Johansson

Performance of Nitrile Solvent-Based Li-Ion Electrolytes for High-Voltage Application
  B. Oh, D. Ofer, S. Sriramulu and B. Barnett

New Lithium Imidazolide Salts

The Mechanism of Decomposition of EC-Based Electrolytes on a Tin Electrode
  I. Lucas, E. Pollak, N. Norberg and R. Kostecki

Polymer Electrolytes for Lithium-Ion Batteries
  P. Zhang, M. Ding, L. Li and Y. Wu

Novel Electrolytes and Electrolyte Additives for Li-Battery Applications
  D. Abraham, G. Cheng and B. Lucht
195 Lithium Secondary Battery with Solid Inorganic Electrolyte: Materials, Technologies, Properties, and Apparatus for Thin Film Deposition
E. Shembel, A. Markevich, V. Redko, V. Tutyk, T. Pastushkin, I. Maksuta, A. Tron, A. Nosenko, N. Klyui, L. Neduzko and V. Khandetskyy

196 The Mechanism Study of TMSP Additive in the Lithium-Ion Battery
L. Kong, Z. Su, J. Gao and J. Sun

197 The Influence of Fluoroethylene Carbonate on the LiCoO2/Electrolyte Interface
L. Kong, Z. Su, J. Gao and J. Sun

198 Effects of Alkyl Phosphate Additives on the Electrode Performance of Lithium-Ion Batteries
N. Yoshimoto, M. Makihira, B. Lalia, M. Egashira and M. Morita

199 Immobilized Organic Molecules as an Active Material for Li-Ion Batteries
K. Pirnat, B. Genorio, R. Dominko and M. Gaberscek

200 The Characterize of SEI Investigation on Temperature Controlled Formation Process for Lithium-Ion Batteries
F. Wang, M. Yu, Y. Tsai, Y. Hsiao, C. Ling, Y. Wang and C. Wan

201 Cycling Performances of the Lithium-Ion Polymer Cells Assembled with Hybrid Composite Membranes Containing Core-Shell Structured Silica Particles
Y. Lee, Y. Lee, J. Kim and D. Kim

202 Insight into Electrolyte Structure, Transport and Reduction Pathways from Molecular Dynamics Simulations
O. Borodin, G. Smith, D. Bedrov, A. van Duin, W. Gorecki and M. Armand

203 In Situ FTIR Study of Gaseous Products which are Formed in Li/Graphite and Li/LiNi0.6Co0.15Al0.05O2 (NCA) Cells with Ionic Liquid-Based Electrolyte Solutions
E. Markevich, R. Sharabi, V. Borgel, H. Gottlieb, G. Salitra, D. Aurbach, G. Semrau and M. Schmidt

204 Interfacial Properties of LiFePO4-PEO(LiTFSI) Composite Cathode for Dry Polymer Li-Ion Batteries

205 Study on the Cycling Performance and Thermal Stability of Lithium-Ion Polymer Cells Assembled with Gel Polymer Electrolyte Containing Ionic Liquid
J. Choi, Y. Yoon, J. Kim, E. Shim and D. Kim

206 Effect of Organic Additives on the High-Voltage Cycling Performance and Thermal Stability of the Lithium-Ion Cells
Y. Lee, K. Lee, Y. Sun and D. Kim

207 In Situ and Ex Situ 7Li Solid-State NMR Studies on Lithium Symmetrical Cells with Ionic Liquid Electrolytes
A. Best, B. Key, R. Bhattacharyya, C. Grey and A. Hollenkamp

208 Additives for Ionic Liquid Electrolytes: Improved Performance at Lower Cost
P. Bayley, B. Clare, A. Best, L. Lyons, D. MacFarlane and M. Forsyth

209 Synthesis and Performance of Gel Polymer Li-Ion Batteries
C. Yao, C. Sang, H. Sun, Z. Luo and Z. Deng

210 TEM Analysis of Thin Film Electrode/Grass Ceramic Solid-Electrolyte Interfaces
211 Electrochemical Properties of Glyme-Li Salt Molten Complexes
   K. Yoshida, T. Tamura, N. Tachikawa, K. Dokko and M. Watanabe
212 Mass Transport Property and Limiting Current Density in Ionic Liquid Electrolyte for Lithium
   Ion Battery
   J. Park, K. Yoshida, N. Tachikawa, K. Dokko and M. Watanabe
213 Formation of the Thio-LISICON Structures from Mechanical-Milled Amorphous Li$_2$S-P$_2$S$_5$
   System
   J. Kim, Y. Yoon, J. Lee and D. Shin
214 Lithium/Water Battery Using Lithium-Ion Conducting Glass Ceramics
   T. Katoh, Y. Inda, K. Nakajima, M. Baba and R. Ye
215 Solubilization Properties of LiF and Other SEI Lithium Salts in Alkylcarbonate Solvents
   J. Jones, M. Anouti, M. Caillon-Caravanier, P. Willmann and D. Lemordant
216 Enhancing the Safety of the Lithium-Ion Batteries by Bromodifluoromethyl Diethyl Phosphonate
   H. Li, S. Yu, Z. Chen and G. Liang
217 Mechanical Testing of Lithium Polymer Batteries: Viscoelastic Behavior of the Polymer
   Separator
   C. Peabody and C. Arnold
218 An Internal Short Preventing Technique of Spontaneous Polymerized Membrane with Branched
   Maleimide Structure in Lithium-Ion Battery
   F. Wang, C. Yang and J. Pan
219 Lithium Salt for Enhanced Ionic Conductivity in Organic Ionic Plastic Crystal
   Y. Shekibi, T. Ruether, J. Huang and A. Hollenkamp
220 The Substituent Positions Effects of Novel SEI Formation of Maleimide Based Additives and Its
   Rate Enhancement in Lithium-Ion Battery
   F. Wang, M. Yu, Y. Wang and C. Wan
221 A Multi-Scale Approach for the Stress Analysis of Polymeric Separators in a Lithium-Ion Battery
   X. Xiao, W. Wu and X. Huang
222 A Modified SEI Layer on LiCoO$_2$ Electrodes with Thin-Film Inorganic Solid Electrolyte
   (LiPON)
   J. Song, S. Jacke, D. Becker, R. Hausbrand and W. Jaegermann
223 Investigation of a New SEI Film Forming Agent for Lithium-Ion Battery Electrolytes
   J. Li and M. Payne
224 Intercalation of PF$_6^-$ Anion into Graphitic Carbon with Nano Pore for Dual Carbon Cell with
   High Capacity
   T. Ishihara, Y. Yokoyama and S. Ida
225 New Lithium Salts Based on Charge Separation à la Zwitterions
   E. Jönsson, M. Armand and P. Johansson
226 A Study of Lithium Transport in Aluminum Membranes
   E. Pollak, I. Lucas and R. Kostecki
227 Investigation of Effect of Ethylene Carbonate Content on Electrochemical Performance of
   Lithium-Ion Cells
   B. Oh, J. Rempel, D. Ofer, S. Sriramulu and B. Barnett
228 Vinyl Ethylene Sulfite as a New Film-Forming Additive for Lithium-Ion Batteries
   W. Yao, Z. Zhang and Y. Yang
229 DFT Calculation Study on the Interaction between Organic Solvents and Lithium Hexafluorophosphate
   L. Xing, M. Li, W. Li, M. Xu and L. Zhou

230 Reduction of Interfacial Resistance between LiMn$_2$O$_4$ and Thio-LISICON

231 Diethyl n-hexynyl Phosphonate (DEHEX): A Novel Flame Retardant Additive for Lithium-Ion Battery Electrolyte
   X. Su, J. Gao, Y. Yang and P. Zhao

232 Estimation of Power Output of Li Batteries Using Room Temperature Ionic Liquids (RTILs) Electrolytes
   H. Sakaee, H. Matsumoto and K. Tatsumi

233 Observation of Electrodeposited Lithium by Optical Microscope in Room Temperature Ionic Liquid-Based Electrolyte
   H. Sano, H. Sakaee and H. Matsumoto

234 Electrochemical Properties of Titanium Oxphosphate Li$_{0.5}$Ni$_{0.25}$TiOPO$_4$/C as a New Negative Electrode Material for Li-Ion Batteries
   K. Maher, I. Saadoun, M. Mansori, K. Edström and T. Gustafsson

235 Spherical Nanocrystalline Li$_4$Ti$_3$O$_12$/C Anode Material for Li-Ion Batteries
   J. Gao, X. He, C. Jiang and J. Li

236 Structural Evolution of Manganese Oxides as Anode Materials for Li-Ion Batteries

237 The Electrochemical Behavior of Low-Temperature Synthesized FeSn$_2$ Nanoparticles as Anode Materials for Li-Ion Batteries
   U. Nwokeke, R. Alcántara, J. Tirado, R. Stoyanova and E. Zhecheva

238 A New Form of Manganese Carbonate for the Negative Electrode of Li-Ion Batteries
   M. Aragón, B. León, C. Pérez-Vicente and J. Tirado

239 Porous Copper Current Collectors for Advanced Anode Architectures
   L. Trahey, J. Vaughey, H. Kung and M. Thackeray

240 Electrochemical Characteristics of O-LiMnO$_2$ Lithium Secondary Battery using Carbon as Anode Material
   X. Zhao, S. Lim, E. Jin, N. Kim, K. Park, H. Gu and B. Park

241 Preparation and Charge/Discharge Properties of CoO Thin-Film Used as Anode of Li-ion Batteries
   J. Do and R. Dai

242 Electrochemical Properties of Carbon-Coated Lithium Vanadium Oxide Anode for Lithium-Ion Battery
   S. Lee, H. Kim, K. Chung and T. Seong

243 Electrochemical Properties of W- and Mo-Doped Lithium Vanadium Oxide Anode for Lithium-Ion Battery
   H. Kim, J. Jung, B. Cho and B. Na

244 High Capacity and High Rate Capability of Nanostructured CuFeO$_2$ Anode Materials for Lithium-Ion Batteries
   L. Lu, J. Wang, S. Chou, X. Zhu and H. Liu
245 Synthesis of Co$_3$O$_4$/Carbon Nanofibers and Their Electrochemical Properties
   P. Zhang, Z. Guo, Z. Chen and H. Liu

246 Preparation and Characterization of Li$_4$Ti$_5$O$_{12}$/C Composite Anode Material
   J. Li, J. Xie, Y. Zhang and X. He

247 Phase Transition at Li$_4$Ti$_5$O$_{12}$ Surface: In Situ Surface Characterization Using Epitaxial Thin-film Electrode and Surface Diffraction Technique

248 All-Solid-State Lithium Secondary Batteries with High Capacity Using Black Phosphorus Negative Electrode
   M. Nagao, A. Hayashi and M. Tatsumisago

249 Thermodynamic and Kinetic Properties of MnO Anode for Lithium-Ion Batteries
   K. Zhong, X. Yu, H. Li, X. Huang and L. Chen

250 Modification of Li Metal with Li$_3$N Coating as Anode for Rechargeable Lithium Batteries

251 Degradation Mechanisms of Charged-Lithium Vanadate, Li$_{1.2+y}$VO$_2$ as Anode Materials in Lithium Batteries
   J. Song, H. Park, Y. Jeong, J. Kim and Y. Kim

252 Co$_3$O$_4$ as Anode Material for Thin Film µBatteries by Remote Plasma Atomic Layer Deposition
   M. Donders, H. Knoops, R. van de Sanden, E. Kessels and P. Notten

253 AMn$_2$O$_4$ (A = Co, Ni, Cu and Zn) as Anode Material for Li-Ion Batteries
   F. Courtel, H. Duncan, K. Yanez, M. Nasirpour, Y. Abu-Lebdeh and I. Davidson

254 Physical and Electrochemical Properties of Cobalt and Nickel Oxide Nanowires as Anode Material for Lithium-Ion Batteries
   S. Sim, Y. Choi, H. Ahn, T. Nam, K. Kim and K. Cho

255 Improvement of Electrochemical Properties of AlF$_3$-Coated LiCoO$_2$ and Li[Ni$_{1/3}$Co$_{1/3}$Mn$_{1/3}$]O$_2$ Composite Cathode Materials for Lithium-Ion Batteries at High Voltage
   K. Lee, S. Myung and Y. Sun

256 Nanocrystalline TiO$_2$ as Intercalation Electrodes for Li Batteries
   K. Chiu, K. Lin, H. Lin and C. Lin

257 Transition Metal-Polymer Coordinates as Anode Material for Li-Ion Battery

258 Facile Synthesis of Hierarchically Porous Li$_4$Ti$_5$O$_{12}$ Microspheres for High Power Lithium-Ion Batteries
   L. Shen, C. Yuan, H. Luo, X. Zhang and K. Xu

259 LiCoO$_2$ as Anode Protection Layer for Thin-Film Lithium-Ion Battery
   Y. Sabi, T. Furuya, H. Morioka, Y. Senda, R. Ito and T. Senoo

260 Development of Prussian Blue Analogues as MOF Electrodes for Li-Ion Battery
   Y. Mizuno, M. Okubo, K. Oh-ishi, T. Kudo and I. Honma

261 Reversible Lithium Storage and Effect of Additives in the Na$_2$Li$_2$Ti$_6$O$_{14}$ as Anode for Lithium-Ion Batteries
262 Synthesis of Novel Hierarchically Porous Carbon by Infiltration on Anisotropic Silica Monoliths and Application as Anodic Material in Lithium-Ion Batteries

263 Electrochemical Properties of N-Doped TiO2 as Anode Material for Lithium-Ion Batteries
K. Tang and J. Maier

264 Physico-Chemical Properties of Nanostructured C-TiO2 for Lithium-Ion Batteries
A. Serventi, M. Trudeau, R. Veillette, K. Zaghib and D. Antonelli

265 TiO2 Rutile as an Alternative Anode Material for Lithium-Ion Batteries
M. Pfanzelt, P. Kubiak, M. Fleischhammer and M. Wohlfahrt-Mehrens

266 A New Anode Material Made of β-Ga2O3 Nanowires: Synthesis and Electrochemical Properties
L. Chang, C. Li, J. Yeh and H. Shih

267 Electrochemical Properties of Nickel Sulfide Electrode Fabricated by Rapid Solidification
S. Choi, G. Cho, J. Noh, B. Kim, Y. Jeon, Y. Im and T. Nam

268 Nanostructure Effect on the Electrochemical Property of Li4Ti5O12 as an Anode Electrode for High-Rate Lithium-Ion Batteries
K. Hsiao, S. Liao and J. Chen

269 Synthesis and Electrochemical Properties of a Porous Titania Fabricated from Exfoliated Nanosheets
N. Kijima, M. Kuwabara, J. Akimoto, T. Kumagai, K. Igarashi and T. Shimizu

270 Preparation and Characterization of Hierarchically Mesoporous Titania as Anode for Lithium-Ion Batteries
J. Yi, J. Lei, W. Li, L. Zhou, M. Xu and L. Hao

271 Influence of Conductive Agents on Li4Ti5O12 Anode for Industrial Battery
Y. Zhang, Y. Dai, R. Guo, K. Wang, Y. Pan and J. Xie

272 Soft Chemical Synthesis and Electrochemical Li Insertion Properties of H2Ti3O7 and H2Ti6O13

273 Mn3O16Cl3 as Anode Material for Rechargeable Li-Ion Batteries
X. Wang and R. Nesper

274 Improved TiO2(B) Electrochemical Performance by Chemical Exfoliation
R. Marchand, O. Crosnier and T. Brousse

275 Synthesis of Li4+xTi5-xO12-δ/C by Spray-Drying Method and its Electrochemical Properties
Y. Kadoma, N. Suzuki, D. Yoshikawa, K. Ui and N. Kumagai

276 Lithium-Ion Battery with Conversion Electrode: From Lab Curiosity to First Development
E. Vidal, S. Lascaud, B. Yrieix, C. Fournier, J. Bousquet, J. Idrac, S. Grugeon, S. Laruelle and J. Tarascon

277 X-ray Imaging Study of Lithium Insertion into Copper Based Oxysulfides
R. Robert, D. Zeng and C. Grey

278 Amorphous Carbon Coated Dual Phase Li4Ti5O12-TiO2 Nanocomposite as Anode Material for Li-Ion Battery
M. Rahman, J. Wang, S. Chou, D. Wexler and H. Liu

279 Lithium Deposition in the Anode of an Automotive Li-Ion Battery: Experiments and Modeling
O. Kwon, W. Fang and C. Wang
<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>280</td>
<td>A Comparative Electrochemical Study of Li&lt;sub&gt;2&lt;/sub&gt;Ti&lt;sub&gt;6&lt;/sub&gt;O&lt;sub&gt;13&lt;/sub&gt; and Na&lt;sub&gt;2&lt;/sub&gt;Ti&lt;sub&gt;6&lt;/sub&gt;O&lt;sub&gt;13&lt;/sub&gt;</td>
<td>J. Pérez-Flores, A. Kuhn and F. García-Alvarado</td>
</tr>
<tr>
<td>281</td>
<td>Modifying the Initial Polarization of MnO Thin Film Anode by Introducing Si</td>
<td>X. Yu, Y. He, H. Li and X. Huang</td>
</tr>
<tr>
<td>282</td>
<td>Electrochemical Characteristics of Cu-Doping Li&lt;sub&gt;4&lt;/sub&gt;Ti&lt;sub&gt;5&lt;/sub&gt;O&lt;sub&gt;12&lt;/sub&gt; as Anode for Lithium-Ion Batteries</td>
<td>J. Wang, H. Zhao, J. Wang and Q. Yang</td>
</tr>
<tr>
<td>283</td>
<td>Preparation and Simultaneous Doping of LTO Nanoparticles for Li-Ion Battery Applications</td>
<td>A. Lähde, T. Karhunen, U. Tapper and J. Jokiniemi</td>
</tr>
<tr>
<td>284</td>
<td>Electrochemical Performance of Nanocomposite Fe&lt;sub&gt;2&lt;/sub&gt;O&lt;sub&gt;3&lt;/sub&gt; and CuO Negative Electrodes for Li-Ion Batteries</td>
<td>M. Valvo, E. Garcia-Tamayo, U. Lafont and E. Kelder</td>
</tr>
<tr>
<td>285</td>
<td>Use of Strontium Titanate (SrTiO&lt;sub&gt;3&lt;/sub&gt;) as an Anode Material for Lithium-Ion Batteries</td>
<td>D. Johnson and A. Prieto</td>
</tr>
<tr>
<td>286</td>
<td>Effect of the Particle Size on the Phase Behavior of Li-Intercalated TiO&lt;sub&gt;2&lt;/sub&gt; Rutile</td>
<td>M. Koudriachova</td>
</tr>
<tr>
<td>287</td>
<td>Optimization of Lithium Titanate Nanofiber for High Rate Performance</td>
<td>M. Dusek, J. Macak, J. Trckova and J. Pytel</td>
</tr>
<tr>
<td>288</td>
<td>First-Principles Investigation of the Electrochemical Properties of Li-Titanates</td>
<td>A. Van der Ven, J. Bhattacharya, A. Dalton and Y. Wang</td>
</tr>
<tr>
<td>290</td>
<td>High-Rate Performance by Means of Particle and Morphology Stabilizers</td>
<td>B. Erjavec, R. Dominko, P. Umek, A. Pintar and M. Gaberscek</td>
</tr>
<tr>
<td>291</td>
<td>Suppression of ZnO Electrode Swelling by Supporting on Carbon Matrix</td>
<td>O. Chae, S. Park, J. Ryu and S. Oh</td>
</tr>
<tr>
<td>292</td>
<td>Additional Li&lt;sup&gt;+&lt;/sup&gt; Storage Sites in Ball-Milled MoO&lt;sub&gt;2&lt;/sub&gt; Electrodes for Lithium-Ion Batteries</td>
<td>J. Ku, J. Ryu and S. Oh</td>
</tr>
<tr>
<td>293</td>
<td>Fracture Effects of Long-Length Titanate Nanotubes Prepared by Hydrothermal Method</td>
<td>J. Kim, Y. Yoon, M. Eom and D. Shin</td>
</tr>
<tr>
<td>294</td>
<td>Physical and Electrochemical Properties of Synthesized Carbon Nanotubes (CNTs) on Metal Substrate by Thermal Chemical Vapor Deposition</td>
<td>Y. Gwon, K. Cho, Y. Choi, K. Kim, T. Nam and H. Ahn</td>
</tr>
<tr>
<td>295</td>
<td>Improved Lithium Storage Performance of Surface-Treated TiO&lt;sub&gt;2&lt;/sub&gt; Anatase Particles</td>
<td>J. Shin, J. Joo, D. Samuelis and J. Maier</td>
</tr>
<tr>
<td>296</td>
<td>High Lithium Storage in Micron Sized Mesoporous Spheres of Anatase Titania-Carbon Nanoparticles</td>
<td>S. Das, S. Darmakolla and A. Bhattacharyya</td>
</tr>
<tr>
<td>297</td>
<td>Lithium Storage in Hollow Spherical ZnFe&lt;sub&gt;2&lt;/sub&gt;O&lt;sub&gt;4&lt;/sub&gt; for Lithium-Ion Batteries</td>
<td>X. Guo, X. Lu, X. Fang, Y. Mao, Z. Wang and L. Chen</td>
</tr>
<tr>
<td>298</td>
<td>Enhanced Electrochemical Performance of an Fe&lt;sub&gt;3&lt;/sub&gt;O&lt;sub&gt;4&lt;/sub&gt;-FeO-Fe/C Composite Anode for Li-Ion Batteries</td>
<td>X. Zhao and D. Xia</td>
</tr>
</tbody>
</table>
299 Carbon Doping and Binder Effect on the Lithium Storage Properties of Metal Oxides (Fe$_2$O$_3$, NiO, and SnO$_2$)

300 Investigation of the Conversion/Reconversion Reaction Mechanisms of C-FeO$_x$F$_{2-x}$ (0 ≤ x ≤ 1) Nanocomposite Electrodes during Charge-Discharge Cycling Studied by In Situ X-ray Absorption Spectroscopy
K. Nam, X. Wang, N. Pereira, G. Amatucci and X. Yang

301 Visualizing Li Insertion into and Plating on MCMB at the Micro Level
S. Harris, J. Wilson, J. Cronin and S. Barnett

302 Ionic Liquid Electrolytes of Spiroammonium and Azepanium Imide Salts for Lithium Batteries
L. Nicodemou, E. Austin, Y. Abu-Lebdeh and I. Davidson

303 Electrochemical Properties of Li$_4$Ti$_5$O$_{12}$/C Composites Prepared by Starch-Assisted Sol Method
L. Wang, G. Liang, X. Ou and Z. Zhang

304 A High Performance Silicon/Carbon Composite Anode for Dry-Polymer Lithium Secondary Batteries
Q. Si, K. Hanai, N. Imanishi, A. Hirano, Y. Takeda and O. Yamamoto

305 3D Ordered Mesoporous Anatase as Anode for Lithium-Ion Batteries
Y. Ren, L. Hardwick and P. Bruce

306 Carbon Cones as an Anode Material in Lithium-Ion Batteries
M. Onsrud and F. Vullum

307 Thermal Reaction of LiPF$_6$ with Addition of LiFOB: Electrolyte Thermal Stabilization and Generation of LiPF$_4$(C$_2$O$_4$)
M. Xu, L. Zhou, L. Xing and W. Li

308 Nanostructured High-Power and High-Capacity Anode Materials for Lithium-Ion Batteries
X. Lou

309 Novel Ionic Liquid-Polymer Conductive Polymer for Fire-Wall Type Lithium-Ion Battery
H. Okui, F. Yamai and T. Sada

310 Organosilicon Electrolytes for Safer Lithium-Ion Batteries
M. Usrey, X. Chen, R. Hamers, A. Peña-Hueso, M. Pollina, R. West and M. Zager

311 Effect of Metal Oxide to the Electrochemical Characteristics of Lithium Iron Phosphate

312 A Morpholinium Type Room Temperature Ionic Liquid for Use as a Lithium Metal Battery Electrolyte: Lithium Cycling and an FT-IR Study of the Solid Electrolyte Interphase
G. Lane, P. Bayley, A. Best, D. MacFarlane, A. Hollenkamp and M. Forsyth

Cathode Materials 1

313 An Approach to the Second-Generation 12 V Lead-Free Batteries Consisting of LTO and LiNiMO: Challenge to the Charge-End Voltage of 5.4 V vs. Li for the LiNiMO-Positive Electrode
T. Ohzuku, T. Sekiya and K. Ariyoshi

314 High Capacity, High Rate Lithium-Excess Layered Oxide Cathodes
A. Manthiram and J. Liu
315 Surface Modification of Li-Excess Mn-Based Cathode Materials  
D. Yu, K. Yanagida, H. Nakamura and S. Fujitani

316 Designing Anode and Cathode Materials to Counter the Performance Limitations of Li-Ion Batteries  
M. Thackeray, M. Balasubramanian, R. Benedek, C. Johnson, S. Kang, V. Pol, S. Pol, L. Trahey and J. Vaughey

317 Influence of Ti Substitution in LiNi0.5Mn1.5O4 on Electrochemical Performance and Evaluation of LiNi0.5Mn1.5-xTixO4 (x = 0.05, 0.1) as a Cathode Material  
S. Niketic, P. Whitfield and I. Davidson

Cathode Materials 2

318 Comparative Studies between Surface and Bulk Structural Changes during Heating and Cycling for Layer-Structured and Olivine-Structured Cathode Materials  
K. Nam, X. Yang, X. Wang, Y. Zhou, H. Lee, L. Wu, Y. Zhu, H. Li, X. Huang and L. Chen

319 Comparison of Li[Li1/3Ni1/3Mn5/9]O2, LiNi0.5Mn1.5O4 and LiNi2/3Mn1/3O2 as High Voltage Positive Electrode Materials  
F. Zhou, X. Zhao and J. Dahn

320 Numerical Simulation of Phase Transition Induced Stresses in Lithium Manganese Dioxide Particles  
J. Park, W. Lu and A. Sastry

321 Influence of Partial Substitution on the Electrochemical Performance of LiMnPO4  
M. Memm, P. Axmann and M. Wohlfahrt-Mehrens

Cathode Materials 3

322 Design of LiFePO4-Based Batteries to Have High Power and Enhanced Energy for EV Applications  
C. Kim, H. Seo and M. Cho

323 Phase Changes during Electrochemical Cycling of Olivines  
Y. Chiang, Y. Kao, M. Tang, N. Meethong, J. Bai and W. Carter

324 Electrochemical Features of Nanosized LiFePO4 Particles Related to Their Intrinsic Properties  
C. Julien, A. Mauger, F. Gendron and K. Zaghib

325 High-Power Lithium-Ion Secondary Battery Using Olivine-Type Lithium Iron Phosphate as the Cathode Material  
G. Li

Cathode Materials 4

326 Materials and Design Considerations for Safe High Performance Lithium Batteries  

327 Unusual Kinetics and Nanosize Effects on the First Order Phase Transformation in LiFePO4  
G. Ceder and R. Mailk
Double Carbon Coating of LiFePO₄ as High Rate Electrode for Rechargeable Lithium Batteries
Y. Sun, S. Oh, S. Myung, K. Amine and B. Scrosati

Search for Better Li-Based Materials via Low Temperature Inorganic Synthesis

The Effects of Cation Doping on the Cycling Performance of LiFePO₄-Based Materials
S. Wu and M. Chen

Evidence of Electrolyte Depletion during Fast Discharge of LiFePO₄ Composite Electrodes
P. Johns, A. Madsen and J. Owen

An In Situ Raman Look into an Extreme Fast Reactor: One-Step Microwave-Assisted Synthesis of Doped LiFePO₄
P. Novák, A. Hintennach, I. Bilecka and M. Niederberger

Cathode Materials Poster Session

Solvent-Assisted Solid-State Synthesis of LiFePO₄-C Composite Cathode for the Lithium-Ion Battery with Greatly Enhanced Rate Performance and Cycling Stability
M. Rahman, J. Wang, D. Wexler and H. Liu

Improved Electrochemical Performance of 5 V LiCoPO₄ Cathode Material by Addition of Vanadium
F. Wang, J. Yang, Y. Nuli and J. Wang

High Rate Performance of Carboxymethylcellulose-Based LiFePO₄ Electrodes
A. Balducci, N. Böckenfeld, R. Kühnel, S. Passerini and M. Winter

Effect of Synthesis Methodology and the Type of Carbon Involved in Producing Nanocrystalline LiFePO₄/C Cathode with Better Lithium Intercalation Behavior
K. Nallathamby, B. Ganguli and B. Dharmarajan

Nature of Cation Mixing and Tailoring Cation Doping in High Voltage Olivine-Structured Material, LiCoPO₄
Y. Kang, Y. Kim, R. Yin, D. Han, H. Kwon and M. Oh

Aqueous Processed Large Format Li-Ion Batteries using LiFePO₄ Electrode
M. Mamari, P. Mickelson and J. Muthu

Improved Electrochemical Performance of Nanosized LiFePO₄/C Synthesized by a Sonochemistry-Assisted Co-Precipitation Method
C. Cao and Y. Liu

In Situ Analysis of Degradation Mechanism in a Commercial LiFePO₄ Cell
M. Dubarry and B. Liaw

New Tools for a Rationale Optimization of C-LiFePO₄ Composite Electrodes
B. Lestriez, K. Seid, C. Fongy, W. Porcher, J. Badot, O. Dubrunfaut, A. Gaillot, S. Jouanneau, S. Levasseur and D. Guyomard

LiMnP0₄/C Composite Cathodes for Lithium-Ion Batteries Prepared by a Combination of Spray Pyrolysis with Wet Ballmilling
Z. Bakenov and I. Taniguchi

Synthesis and Characterization of 3D Carbon-Foams - LiFePO₄ Composites
L. Dimesso, C. Spanheimer, S. Jacke, J. Song and W. Jaegermann
344 Thermodynamic and Kinetic Stability of Nanocrystalline Li$_x$FePO$_4$
   H. Tan, J. Cardema and B. Fultz
345 Rapid One-Pot Synthesis of LiMPO$_4$ (M = Fe, Mn) Nanosize Electrodes By Supercritical Ethanol Process
   D. Rangappa, K. Sone, Y. Zhou, T. Kudo and I. Honma
346 Study on Multi-Components Olivine Cathode: Combined First Principles Calculations and Experiments
   K. Kang, D. Seo, H. Gwon, Y. Park, S. Kim and J. Hong
347 On the Observation of the Structural Dynamics of the LiFePO$_4$/FePO$_4$ Cathode Material
   R. Eriksson, T. Gustafsson and K. Edström
348 Structural Stability of Carbothermally Synthesized LiFePO$_4$ to Heating in Air
   N. Kosova, E. Devyatkina, S. Petrov and V. Kaichev
349 Electrochemical Performance of Aerosol-Made, In Situ Carbon-Coated LiFePO$_4$ Nanoparticles
   A. Hintennach, O. Waser, S. Pratsinis and P. Novák
350 Full Single-Phase Behavior at 298K of Li$_x$Fe$_2$PO$_4$-Based Electrodes
351 In Situ XAFS Study of LiMn$_{0.6}$Fe$_{0.4}$PO$_4$ Cathode Material for Lithium Rechargeable Battery
   T. Nedoseykina, M. Kim and Y. Lee
352 Impedance-Based State-of-Charge Diagnostics of LiFePO$_4$ Single Cells
   W. Bessler, C. Hellwig, S. Soergel, N. Wagner and A. Friedrich
353 In Situ X-ray Diffraction and $^{57}$Fe Mössbauer Spectroscopy Study of LiFe$_{0.75}$Mn$_{0.25}$PO$_4$
   Electrochemical Behavior
   A. Perea, L. Aldon, M. Sougrati, B. Fraisse, J. Jumas, J. Breger and C. Tessier
354 LiMnP0$_4$ Nanoplates via Solid-State Reaction in Molten Hydrocarbon for Li-Ion Cathode
   D. Choi, W. Wang, J. Xiao, D. Wang, I. Bae, Z. Nie, V. Viswanathan, Y. Lee, J. Zhang, 
   G. Graff, J. Liu and Z. Yang
355 Melt-Cast LiMPO$_4$: Synthesis and Electrochemical Characterization
356 "Soft" and "Green" Chemistry Approach to Conducting Coating of LiFePO$_4$
   D. Lepage, S. Schougaard, C. Michot, G. Liang and M. Gauthier
357 C-LiFePO$_4$ Solid-State Synthesis Optimization at Low Temperatures
   G. Liang, J. Dufour, N. Ravet, C. Michot, M. Gauthier and D. McNeil
358 In Situ HRSTEM Observation of the Synthesis of Nanostructured LiFePO
   M. Trudeau, D. Laul, R. Veillette, A. Serventi and K. Zaghib
359 Performance and Morphology of LiFePO$_4$ Material Synthesized by Different Process
360 Up-Scalable Synthesis, Structure and Electrochemical Properties of Porous Microspheres of LiFePO$_4$/C Nanocomposites
   F. Yu, J. Zhang, Y. Yang and G. Song
361 A Simple, Cheap Carbothermal Reduction Method to Synthesize LiFePO$_4$/C with High Rate Performance
   G. Fey, K. Huang and H. Kao
<table>
<thead>
<tr>
<th>362</th>
<th>Molten Salt Synthesis of High Tap Density LiFePO_4/C Cathode Materials for Li-Ion Batteries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>G. Fey, Y. Lin and H. Kao</td>
</tr>
<tr>
<td>363</td>
<td>Synthesis and Electrochemical Performance of Nano-LiFePO_4/C Composite Using a Complex</td>
</tr>
<tr>
<td></td>
<td>Carbon Source</td>
</tr>
<tr>
<td></td>
<td>G. Liang, X. Zhi, L. Wang, X. Ou, X. Jie and L. Gao</td>
</tr>
<tr>
<td>364</td>
<td>Characterization and Electrochemical Properties of Ca^{2+}-Doped LiFePO_4/C Cathode</td>
</tr>
<tr>
<td></td>
<td>Materials for Lithium-Ion Batteries</td>
</tr>
<tr>
<td></td>
<td>G. Fey, C. Yan, Y. Lin, K. Huang, P. Wu and Y. Sun</td>
</tr>
<tr>
<td>365</td>
<td>LiMn_yFe_{1-y}PO_4 Hydrothermal for Li-Ion Batteries</td>
</tr>
<tr>
<td></td>
<td>M. Mathieu, J. Labrecque, A. Guerfi, C. Julien, A. Mauger and K. Zaghib</td>
</tr>
<tr>
<td>366</td>
<td>Synthesis and Electrochemical Properties of Glassy Carbon Coated LiFe_{1-x}Mn_xPO_4</td>
</tr>
<tr>
<td></td>
<td>Using Polyurethane</td>
</tr>
<tr>
<td></td>
<td>B. Jin, H. Kim, C. Doh, S. Moon, K. Jin, J. Jeong, W. Kim, S. Kim, S. Park, J. Kim and</td>
</tr>
<tr>
<td></td>
<td>H. Park</td>
</tr>
<tr>
<td>367</td>
<td>A Gel-Precursor Synthesis of LiFePO_4/C-Fe_2P Composite Cathodes with Enhanced</td>
</tr>
<tr>
<td></td>
<td>Electrochemical Performance</td>
</tr>
<tr>
<td></td>
<td>H. Liu and J. Xie</td>
</tr>
<tr>
<td>368</td>
<td>The Synthesis and Electrochemical Properties of LFP-Coated LiCoPO_4 Cathode Materials</td>
</tr>
<tr>
<td></td>
<td>I. Jang, H. Lim, K. Karthikeyan, S. Kim, W. Kim and Y. Lee</td>
</tr>
<tr>
<td>369</td>
<td>Storage Stability of LiFePO_4/C Composite in Humid-Hot Environment</td>
</tr>
<tr>
<td></td>
<td>X. Guo, H. Zhan, D. Yang and Y. Zhou</td>
</tr>
<tr>
<td>370</td>
<td>Electrochemical Stability of LiFePO_4 Synthesized via Hydrothermal Method</td>
</tr>
<tr>
<td></td>
<td>T. Kitagawa, M. Saitou, K. Zaghib and A. Guerfi</td>
</tr>
<tr>
<td>371</td>
<td>Synthesis and Characterization of LiFePO_4/C Composite Using Acenaphthene as Carbon</td>
</tr>
<tr>
<td></td>
<td>Source</td>
</tr>
<tr>
<td></td>
<td>G. Fey, G. Wang and H. Kao</td>
</tr>
<tr>
<td>372</td>
<td>Investigation of LiNiPO_4 as a Cathode Material for Lithium-Ion Battery</td>
</tr>
<tr>
<td></td>
<td>D. Wang, J. Xiao, W. Xu and J. Zhang</td>
</tr>
<tr>
<td>373</td>
<td>High-Throughput Synthesis and Screening of Doped-LiFePO_4</td>
</tr>
<tr>
<td></td>
<td>D. Pasero, J. Soulie and B. Hayden</td>
</tr>
<tr>
<td>374</td>
<td>Structure and Electrochemistry of Submicronic LiFePO_4 Synthesized Hydrothermal Route</td>
</tr>
<tr>
<td></td>
<td>K. Zaghib, F. Brochu, A. Guerfi, M. Kopec, A. Mauger, F. Gendron and C. Julien</td>
</tr>
<tr>
<td>375</td>
<td>Degradation of Electrochemical Properties upon Aging of LFP and LNMCO Cathode Materials</td>
</tr>
<tr>
<td></td>
<td>for Li-Ion Batteries</td>
</tr>
<tr>
<td></td>
<td>M. Kopec, N. Tran, G. Nuspl, C. Stinner, A. Mauger, F. Gendron and C. Julien</td>
</tr>
<tr>
<td>376</td>
<td>LiMnP04 and LiMn_{0.8}Fe_{0.2}PO_4 as Advanced Cathode Materials for Rechargeable</td>
</tr>
<tr>
<td></td>
<td>Lithium-Ion Batteries</td>
</tr>
<tr>
<td></td>
<td>S. Martha, O. Haik, E. Zinigrad, J. Grinblat, T. Drezen, J. Miners, I. Exnar, B.</td>
</tr>
<tr>
<td></td>
<td>Markovsky and D. Aurbach</td>
</tr>
<tr>
<td>377</td>
<td>Electrochemical Properties of LiM_xFe_{1-x}PO_4 Cathode Materials for Lithium Polymer</td>
</tr>
<tr>
<td></td>
<td>Batteries</td>
</tr>
<tr>
<td></td>
<td>E. Jin, X. Zhao, K. Park, H. Gu and B. Park</td>
</tr>
<tr>
<td>378</td>
<td>Comparative Study of Carbon Additives for Li-Ion Battery Cathodes and In Situ Carbon in</td>
</tr>
<tr>
<td></td>
<td>LiFePO_4/C Composites</td>
</tr>
<tr>
<td></td>
<td>V. Palomares, A. Iturrronobeitia, A. Goñi, I. Gil de Muro, I. de Meatza, M. Bengoechea,</td>
</tr>
<tr>
<td></td>
<td>I. Cantero and T. Rojo</td>
</tr>
</tbody>
</table>
379 Grain Size and Morphology of LiFePO4 Prepared by Hydrothermal Route
   X. Ou, G. Liang and L. Wang

380 In Situ Carbon-Coated LiFePO4 Nanoparticles for Li-Ion Batteries
   O. Waser, A. Hintennach, R. Büchel, P. Novák and S. Pratsinis

381 Temperature Dependent Studies of LiMn0.5Fe0.5PO4/C as a High Power Cathode Material for Lithium-Ion Batteries
   Y. Chen, C. Hsu, J. Chen, Z. Lin, J. Yeh and H. Shih

382 Synthesis and Electrochemical Performance of LiFe0.4Mn0.6-yNi yPO4/C Cathode Material by Co-precipitation Method
   K. Du, L. Zhang, Y. Cao, G. Hu and Z. Peng

383 Effects of Fe3P on the Cycling Performance of LiFePO4/C Composite Cathode Materials
   J. Shiu and S. Wu

384 Characterization of Olivine LiMn0.5Fe1-xPO4 (x = 0, 0.6, 1) Local Structure with Study of Ex Situ Solid-State 7Li NMR
   S. Park and Y. Lee

385 Core-Shell LiFePO4/Carbon Nanocables Synthesized by Hydrothermal Route for Li-Ion Batteries
   J. Yang, X. Li, J. Wang, R. Li and A. Sun

386 Preparation and Characterization of α-Li3V2(PO4)3/LiFePO4 Composite Cathode Materials
   M. Chen, S. Wu and J. Lin

387 Improved Electrochemical Behavior of the LiFePO4 Electrode with the Functionalized Poly(vinylidifluoride) in the Lithium-Ion Rechargeable Batteries: Theoretical and Experimental Analysis

388 Nano-MnPO4 as Precursor to Prepare Nano-LiMnPO4
   L. Wang, X. He, W. Sun, J. Ren and W. Pu

389 Study of High-V Phosphates Based on LiMnP04 as Positive Electrode Material for Li-ion Batteries
   J. Breger, F. Mesguich, F. Castaing and C. Tessier

390 Novel Synthesis Process of LiFePO4/C Composite Positive Active Material for Li-ion Cells
   Y. Yasunaga, T. Tabuchi, T. Inamasu, T. Nukuda and R. Okuyama

391 Enhanced Electrochemical Performances of Carbon Coated Mesoporous LiFe xMn1-xPO4
   B. Zhang, X. Wang, Z. Liu, H. Li and X. Huang

392 Synthesis of Porous LiFePO4/C Composites Using LiFePO4 Self-Template Prepared by Hydrothermal Process
   D. Han, W. Ryu, W. Kim, S. Lim and H. Kwon

393 Open-Circuit Voltage and Li+ Ionic Diffusion Studies on LiFePO4 Olivine Cathode
   T. Nakamura, H. Matsui, Y. Yamada, Y. Kobayashi and M. Tabuchi

394 Preparation of LiFePO4/C Composite Particles with High Rate Capability
   T. Nakamura, Y. Shima, Y. Yamada, H. Miyauchi, S. Hashimoto and K. Abe

395 Synthesis of Triaxial LiFePO4 Nanowire through the Electrospinning Method
396 Preparation of LiCo$_x$Mn$_{1-x}$PO$_4$/C Composites by a Combination of Spray Pyrolysis with Wet Ball-Milling
  T. Doan and I. Taniguchi

397 Improvement of Cathode Properties of C-Free LiFePO$_4$ by Nitrogen Doping
  Y. Tsukioka, Y. Fukuda, H. Tanaka, M. Chisaka and Y. Sakurai

398 Effects of Synthetic Condition of Electrochemical Performance of LiMnPO$_4$/C Synthesized by Co-Precipitation Method
  C. Kim, J. Shin, S. Choi, S. Kim and W. Kim

399 Nano-LiMnP$_4$ Cathode Material Prepared by Combination Hydrothermal-Wet Mill Processes
  A. Guerfi, J. Labrecque, P. Charest, W. Zhu, M. Dontigny and K. Zaghib

400 Synthesis and Characterization of LiFePO$_4$ with Well Organized Microstructures
  L. Liu and X. Huang

401 Nanosized Iron Phosphates Application in Preparation of Electrochemically Active Material LiFePO$_4$
  G. Huang and W. Mo

402 First Experimental Evidence of the Electronic Structure of LiFePO$_4$ and FePO$_4$
  L. Castro, R. Dedryvere, M. El Khalifi, P. Lippens, J. Breger, C. Tessier and D. Gonbeau

403 Design of Aqueous Processed Thick LiFePO$_4$ Composite Electrodes for High Energy Lithium Batteries
  B. Lestriez, W. Porcher, S. Jouanneau and D. Guyomard

404 Preparation and Electrochemical Properties of Magnesium Doped LiFePO$_4$ Cathode Material for Lithium Batteries

405 Particle Size Distribution and Electrochemical Properties of Nanocrystalline LiMPO$_4$(M = Fe, Mn and Ni)
  E. Zhecheva, V. Koleva, R. Stoyanova, M. Mladenov and P. Zlatilova

406 Mössbauer Characterization of LiFePO$_4$: Theoretical Aspects
  P. Lippens and M. El Khalifi

407 In Situ HRTEM Investigations of the Behavior of Nanostructure LiFePO$_4$ during Thermal Treatment
  R. Veillette, M. Trudeau, K. Zaghib, D. Laul and A. Serventi

408 Ordered, Highly Porous, Olivine-Based Cathode Materials for Lithium-Ion Battery
  C. Yim, Y. Abu-Lebdeh, E. Baranova and I. Davidson

409 Characterization of LiFePO$_4$ Synthesized via Reduction and Lithiation of Precipitated Amorphous FePO$_4$
  K. Galoustov and D. MacNeil

410 Characterization of Air Exposed LiFePO$_4$ Nanopowders for Li-Ion Batteries
  M. Cuisinier, J. Martin, N. Dupré, A. Yamada, R. Kanno and G. Dominique

411 Evolution of the LiFePO$_4$/Electrolyte Interface along the Electrochemical Cycling
  J. Martin, M. Cuisinier, N. Dupré, A. Yamada, R. Kanno and D. Guyomard

412 Relative Thermal Stabilities of Olivine Cathodes Investigated Using First Principles Phase Diagrams
  S. Ong, A. Jain, G. Hautier, B. Kang and G. Ceder
413 Advanced Li-Ion Cathode for Automotive: Lithium Manganese Phosphate
414 $^{67}$Li and $^{31}$P Solid-State NMR Studies of Olivine LiFePO$_4$
   L. Davis, I. Heinmaa, B. Ellis, L. Nazar and G. Goward
415 Validation of LiFePO$_4$/FePO$_4$ DFT Quantum Chemical Calculations
   C. Kuss, G. Liang and S. Schougaard
416 A Novel "Green Chemistry" Approach for LiFePO$_4$ Conductive Coatings
   D. Lepage, C. Michot, G. Liang, M. Gauthier and S. Schougaard
417 Enhanced Electrochemical Performance of C/LiMn$_{1-x}$Fe$_x$PO$_4$ Cathode Materials for Lithium-Ion Batteries
   S. Oh, H. Kim, B. Scrosati and Y. Sun
418 Facile Synthesis of Carbon-Contained Nanostructured LiFePO$_4$ for the Fast Charge and Discharge Rate
   J. Kim, G. Lee and H. Kim
419 Properties of Nanosized LiFePO$_4$/C Powders Prepared by Spray Pyrolysis
   H. Koo, J. Kim, J. Yi, Y. Ko and Y. Kang
420 Study of LiFePO$_4$ Synthesized using a Molten Method with Varying Stoichiometries
   B. Dahéron and D. MacNeil
421 High Performance Lithium-Ion Phosphate Cathode Material
   Y. Sakaguchi, K. Abe, Y. Hamanaka, S. Hashimoto, H. Miyauchi and Z. Kamio
422 LiFePO$_4$/C Nanoparticled Composites: Influence of the Thermal Treatment on Size, Morphology and Properties
   C. Parada, C. García-Girón, L. Fuentes and E. Gonzalo
423 Study of Synthesizing LiFePO$_4$ at High Temperature
   A. Wu, X. Zhang, S. Lu and S. Kan
424 Synthesis of LiFePO$_4$/C Nanoparticles by a New Efficient Route
   G. Hu, Y. Cao, Z. Peng, K. Du and Q. Jiang
425 Liquid-Phase Synthesis of Nanosized LiMnP0$_4$/Carbon Fiber Composites in Nonaqueous Solution and Their Electrochemical Properties
   S. Yatomi, T. Doi, K. Chihara, S. Okada and J. Yamaki
426 Chemical Diffusion of Lithium Ion in LiFePO$_4$, LiFePO$_4$/C, and Cr Doped LiFePO$_4$/C
   C. Park, S. Park, H. Shin, W. Cho and H. Jang
427 Overpotential-Dependent Phase Transformation Pathways in Lithium-Ion Phosphate Battery Electrodes
428 Kinetic Competition between Multiple Phase Transition Pathways in Nanoscale Olivines
   M. Tang, Y. Kao, N. Meethong, J. Belak, W. Carter and Y. Chiang
429 Combined Theory and Experiment for High Energy Density Fluoride and Oxy-Fluoride Cathode Materials
   R. Doe, G. Hautier and G. Ceder
430 Electrochemical Performances of Organic Radical Polymer Cathode Material in Different Electrolytes
   Y. Dai, Y. Zhang, L. Gao and J. Xie
A $^{57}$Fe Mössbauer Spectroscopy Study of Cobalt Ferrite Conversion Electrodes for Li-Ion Batteries
C. Vidal-Abarca, P. Lavela and J. Tirado

Synthesis of Doped Lithium Manganese Oxyfluoride Spinels for Lithium-Ion Batteries
J. Binder, S. Glatthaar, M. Schön, M. Schroeder and H. Geßwein

Electrochemical Characteristics of Sulfur Composite Cathode Materials
J. Zhao, L. Wang, J. Ren, W. Pu, J. Li, J. Gao and X. He

Low Temperature Synthesis of Nanostructured Iron-Based Fluoride Cathodes by Ionic Liquid for Lithium Batteries
C. Li, L. Gu, S. Tsukimoto, P. van Aken and J. Maier

The Electrochemical Insertion Properties of the Low Cost, Li-Ion Active Material, Li$_2$FeS$_2$
J. Barker and E. Kendrick

Novel Synthesis and Electrochemistry of Silver Hollandite (Ag$_x$Mn$_8$O$_{16}$)
S. Zhu, A. Marschilok, E. Takeuchi and K. Takeuchi

Polymorphism in Li$_2$FeSiO$_4$: A Powder Diffraction Study
A. Armstrong, C. Sirisopanaporn, R. Dominko, A. Boulineau, C. Masquelier and P. Bruce

Electrochemical Characteristics of Different Li$_2$FeSiO$_4$ Polymorphs
R. Dominko, C. Sirisopanaporn, M. Gaberscek, D. Hanzel and C. Masquelier

Effect of Milling Process on Local Structure and Lithium-Ion Dynamics in Lithium Tantate and Lithium Niobate
K. Nakamura, A. Ueki, Y. Michihito and T. Moriga

Defects, Lithium Mobility and Trivalent Dopants in the Li$_2$MnSiO$_4$ Cathode Material
N. Kuganathan and S. Islam

An Integrated Atomic Force Microscopy Technique for Morphology Mechanical and Electrical Property Measurements of Lithium-Ion Composite Cathode LiMn$_{1/3}$Ni$_{1/3}$Co$_{1/3}$O$_2$

Polyanion Substitution into Silicate-Based Cathode Materials
A. Liivat and J. Thomas

Sub-fluorinated Carbon Fluoride Cathode Materials for Primary Lithium Batteries (Review)
R. Yazami

In Situ Raman Spectroelectrochemistry on Highly Polarized Cathode Materials for Lithium-Ion Batteries
T. Itoh and A. Kasuya

Local Structure Using PDF Method and XAFS, Average Crystal Structure and Cathode Performance Depend on Composition of zLi$_2$MnO$_3$.Li(Mn,Ni,Co)O$_2$ as a Cathode Active Material for Li-Ion Battery
Y. Idemoto, K. Ueki and N. Kitamura

A Highly Ordered Nanostructured Polypyrrole-Sulfur Cathode for Lithium-Sulfur Batteries
X. Liang, Y. Liu, Z. Wen, L. Huang, X. Wang and M. Wu

Synthesis of Mesoporous FePO$_4$ Cathode Material for Its Application in Rechargeable Lithium-Ion Batteries
B. Mandal, S. Ghosh and I. Basumallick

Changes in Electronic Structure of Li$_2$-xCuO$_2$
Y. Arachi, Y. Nakata, K. Hinoshita and T. Setsu
Comparative Study of Li Codoping between: Mn (CdSe,CdTe) and Fe (CdSe,CdTe)
Z. Nabi and R. Ahuja

Synthesis and Application of Nanosized FePO₄·2H₂O with High Activity
G. Liang, J. Cui, X. Zhi and L. Wang

Electrochemical Performance of Carbon-Coated Lithium Manganese Silicate (Li₂MnSiO₄) for Asymmetric Hybrid Supercapacitors
K. Karthikeyan, I. Jang, H. Lim, A. Jo, C. Son and Y. Lee

Preparation and Electrochemical Characterization of Lithium Vanadium Phosphate Using Solid-State Method
H. Lim, I. Jang, K. Karthikeyan, J. Lee, H. Yang and Y. Lee

Al³⁺ Doped V₂O₅ Nanoparticles as a Cathode Material for Rechargeable Lithium Batteries
S. Zhan, C. Wang, G. Chen and Y. Wei

Carbon Coated Li₃V₂(PO₄)₃ Cathode Material Prepared by a PVA Assisted Sol-Gel Method
T. Jiang, C. Wang, G. Chen and Y. Wei

Redox Behaviors of Ni and Cr with Different Counter Cations in Spinel Cathodes for Li-Ion Batteries
D. Liu, J. Han, M. Dontigny, P. Charest, A. Guerfi, K. Zaghib and J. Goodenough

Lithium Intercalation in LiFe₂F₆ and LiMgFeF₆ Disordered Trirutile-Type Phases
P. Liao, R. Dunlap and J. Dahn

Novel Composite Cathodes for Metal-Air Batteries

High-Power Electrodeposited Copper Sulfide Thin-Film Cathodes for 3D-Microbatteries
H. Mazor, D. Golodnitsky and E. Peled

Morphology Effects on Silver Vanadium Phosphorous Oxide SVPO (Ag₂VO₂PO₄) Electrochemistry in a Lithium Cell
Y. Kim, C. Lee, A. Marschilok, K. Takeuchi and E. Takeuchi

Pathways for Fast Lithium Migration in LiFeSO₄F
S. Adams and R. Prasada Rao

Preparation of FeS₂-Li₂S Composite Positive Electrode Materials and Their Electrochemical Properties

Characterization of All-Solid-State Li/LiPON/TiOS Microbatteries Produced at the Pilot Scale

Carbon-Phosphorous Composite Electrodes for Li-Ion Batteries: Performance and Mechanism
C. Marino, A. Debenedetti, Y. Lei, F. Favier and L. Monconduit

Investigation of the Oxidative Stability of Electrolyte Systems on 5 V Cathode Materials by In Situ Mass Spectrometry
465  Mapping Correlations in Li-Ion Battery Cathode Properties: Results from Thousands of Density Functional Theory Calculations  
466  A Novel Carbophosphate Compound as Cathode Material for Lithium-Ion Batteries  
H. Chen, G. Hautier, A. Jain, C. Moore, B. Kang, R. Doe and G. Ceder  
467  Polyol-Made Nanoplatelets as Starting Materials for Li+ Batterie Cathodes  
T. Azib, S. Ammar, K. Zaghid and A. Mauger  
468  XANES Study on Positive Electrodes of Degraded Lithium-Ion Battery  
469  Characterization of Na-Based Electrodes for Electrochemical Cells  
F. Brochu, K. Zagib, A. Mauger, F. Gendron and C. Julien  
470  Synthesis and Characterization of Li2MnSiO4 for Lithium-Ion Batteries  
H. Nakano, H. Oka, Y. Makimura, H. Kondo, T. Inoue and Y. Ukyo  
471  Enhanced Electrochemical Performance of La2/3-xLi3xTiO3 (LLT) Coated Li[Ni0.4Co0.3Mn0.3]O2  
H. Song and Y. Park  
472  A Novel Synthesis Route and Post-Synthetic Treatments in the Preparation of Ni3Mn4Co1.2x(OH)2  
I. Rodrigues, J. Wontcheu and D. MacNeil  
473  Microwave-Assisted Synthesis of e- and a-MnO2 as Cathode Materials for Lithium-Ion Batteries  
474  Effects of Differect Carbon Sources on the Morphology and Electrochemical Properties of Li2FeSiO4 Cathode Material for Lithium-Ion Batteries  
Y. Wang, J. Park, B. Sun and G. Wang  
475  Advanced Thin-Film V2O5 Cathode for 3D-Microbattery Applications  
K. Freedman, T. Ripenbein, D. Golodnitsky and E. Peled  
476  Synthesis of Nano FePO4 in Novel Rotating Packed Bed Reactor  
W. Pu, Y. Wu, J. Ren and X. He  
477  Synthesis and Electrochemical Characterization of Cathode Materials for Advanced Lithium Batteries  
J. Kang and H. Kim  
478  Study of the Impact of Metal Dissolution from Cathode on Battery Performance by Three-Electrode Coin Cells  
Z. Lu, L. Jensen, L. Krause, J. Jiang and J. Gardner  
479  The Effects of Shell Composition in Core-Shell Structure Cathode Materials on Electrochemical Properties and Structural Stability  
B. Lee, K. Amine and Y. Sun  
480  Structure and Electrochemical Properties of LiMBO3 (M = Fe, Mn) by First Principles Calculations  
Y. Koyama, I. Tanaka, N. Iwane, S. Nishimura and A. Yamada  
481  Chemical lithiation of MF3 Perovskites as Cathode Materials in Rechargeable Battery  
I. Gocheva, K. Chihara, I. Tanaka, S. Okada and J. Yamaki
482 Preparation of Nano-Sized Polyaniline by Ultrasonication Method and Its Electrochemical Properties as a Cathode Material in Lithium Batteries
J. Manuel, A. Jou Hyeon, J. Kim and P. Jacobsson

483 Improvement of the Battery Performance of Li$_2$MnSiO$_4$ by Aliovalent (Al$^{3+}$) Doping
H. Duncan, D. Aboud, C. Maiocco, Y. Abu-Lebdeh and I. Davidson

484 Solid-State NMR Study of Carbon Bismuth Fluorides/Oxyfluorides Nanocomposites as Positive Electrode Materials in Li-Ion Batteries
L. Du, C. Grey, A. Gmitter, N. Pereira and G. Amatucci

485 Metal Oxide Nanoparticle Synthesis Using Polymer Precursor Method for Lithium-Ion Battery Cathode Materials
H. Deshazer, F. La Mantia, C. Wessells, R. Huggins and Y. Cui

486 Combustion Synthesis and Electrochemical Characterization of Composite Layered Cathode Materials
V. Augustyn, B. Dunn and P. Liu

487 The New Type Cathode Materials Produced by Effect of Silica Core and a Point in Time of Lithium Intercalation for Lithium Secondary Battery
S. Ryu, S. Hwang, S. Yun and K. Ryu

488 Lithium-Ion Capacitors: Development and Characterization
S. Sivakkumar, V. Ruiz and A. Pandolfo

489 Hybrid Density Functional Calculations of Lithium Intercalation Potentials of Transition Metal Compounds
V. Chevrier, S. Ong, R. Armiento and G. Ceder

490 Cathode Solid Electrolyte Interphase Generation in Lithium-Ion Batteries with Electrolyte Additives
T. Markmaitree, L. Yang and B. Lucht

491 Electrochemical Behavior and Interfacial Phenomena of Positive Electrodes for Advanced Lithium-Ion Batteries: Brief Review

492 Electrochemical Quartz Crystal Microbalance and In Situ AFM Study of Lithium Intercalation into TiS$_2$ Composite Electrodes
R. Elazari, G. Salitra, M. Levi and D. Aurbach

493 Study of Conversion Reaction Mechanism for Carbon Copper Fluorides Nanocomposites as Cathode Materials in Li-Ion Batteries
X. Hua and C. Grey

494 Synthesis of High Surface Vanadium Oxide and Its Application as a Large Capacity Cathode Material for Lithium Batteries
H. Li, H. Liu, E. Hosono and H. Zhou

495 Characteristics of Li$_3$V$_2$(PO$_4$)$_3$/C Powders Prepared by Ultrasonic Spray Pyrolysis
Y. Ko, H. Koo, J. Kim, J. Yi and Y. Kang

496 Selenium Nanorod-Polypyrrole Nanocomposite: A New Cathode Material for Lithium-Ion Battery
D. Kundu and R. Nesper
The First Observation of Exceeding One Lithium Extraction on Li$_2$FeSiO$_4$/C Composite
D. Lv, X. Huang, W. Wen, Y. Li and Y. Yang

Synthesis, Electrochemical Performance and In Situ XAS Study of Li$_2$Fe$_{0.5}$Mn$_{0.5}$SiO$_4$ Cathode Material for Li-Ion Batteries
D. Lv, Z. Jiang, W. Wen, Y. Li, J. Bai and Y. Yang

Factors Affecting Crystal Structures and Electrochemical Activity on FeF$_3$ as Positive Electrode for Li-Ion Batteries
N. Yabuuchi, M. Sugano, H. Muramatsu, K. Sakamoto and S. Komaba

Polymorphism and Structural Defect in Lithium Transition Metal Silicate Li$_2$FeSiO$_4$ and Li$_2$MnSiO$_4$
S. Nishimura, S. Hayase, R. Kanno, N. Nakayama and A. Yamada

Synthesis, Structure and Electrochemical Properties of Lithium Iron Oxide for Lithium Battery Cathode Material
M. Hirayama, H. Tomita, H. Ido and R. Kanno

A New Lithium-Organic Coordination Polymer: A Promising Candidate of Cathode for Lithium-Ion Battery
R. Zeng, Y. Qiu, W. Li, J. Yi, L. Yang, D. Lu, Q. Huang, M. Xu and L. Zhou

Electrochemical Behaviors of V$_2$O$_5$ in Aqueous Li$_2$SO$_4$, Na$_2$SO$_4$ and K$_2$SO$_4$ Electrolyte Solutions
Q. Qu, L. Li, W. Guo, Y. Shi, S. Tian and Y. Wu

The Effects of Carbon Precursor, Sintering Temperature and Synthesis Method on Electrochemistry of Li$_3$V$_2$(PO$_4$)$_3$/C Composite Materials
H. Ren, L. Zhang, Q. Peng, Z. Lu and X. Liu

Synthesis and Characteristics of LiMnPO$_4$(OH) for Lithium Battery Cathodes
Y. Yang, M. Hirayama and R. Kanno

Lithium NMR Studies of Li$_2$FeSiO$_4$ as Cathode Materials for Lithium-Ions Batteries
F. Pourpoint, R. Armstrong, P. Bruce and C. Grey

Polyimides: Promising Energy-Storage Materials
Z. Song, H. Zhan, Y. Zhou and D. Yang

Sputtered Crystalline V$_2$O$_5$ Thin Films for All-Solid-State Lithium Microbatteries
C. Navone, R. Baddour-Hadjean, J. Pereira-Ramos and R. Salot

In Situ Raman Microspectrometry Investigation of Electrochemical Lithium Intercalation into Sputtered Crystalline V$_2$O$_5$ Thin Films
R. Baddour-Hadjean, J. Periera-Ramos and C. Navone

Heterosite FePO$_4$: Defect Chemistry and Transport Properties
C. Zhu, K. Weichert and J. Maier

Structural Models and Formation Mechanism of Graphite Fluorides from Density Functional Theory Calculations
S. Han, T. Yu, B. Merinov, R. Yazami and W. Goddard

MoS$_2$-Based Nanocomposite as Electrode Materials for Li-Ion Batteries
J. Xiao, D. Choi, L. Cosimbescu, P. Koech and J. Lemmon

Lithium-Excess, Aluminum-Substituted Positive Electrode Materials for Li-Ion Batteries
A. Rowe and J. Dahn
Polyacetylene and Polythiophene Derivatives Bearing Stable Radicals for Electrode Applications in Li-Ion Batteries
S. Bahceci, M. Aydin, B. Esat, C. Kilic and M. Kose

Tuning the Discharge Potential of Fluorinated Carbons in Primary Lithium Batteries
M. Dubois, W. Zhang, K. Guérin, H. Kharbache, F. Masin, R. Yazami and A. Hamwi

Study on the Effect of an Electrolyte Additive on the Electrochemical Characteristics of Silicon Thin Film Electrode
G. Han, M. Ryou, J. Lee, D. Lee, J. Song and J. Park

A Computer Modeling Study of Lithium Phosphate and Thiophosphate Electrolyte Materials
N. Holzwarth, N. Lepley and Y. Du

Surface Species on Ag Modified Carbon Fluoride (CFx) Rechargeable Battery Electrodes Measured by XPS
A. Hightower, I. Darolles and R. Yazami

3D Model and Experiments for Predicting Ionic and Electronic Resistances in Porous Electrodes
D. Stephenson, D. Wheeler, E. Gorzkowski and D. Rowenhorst

Three-Dimensional Analysis of Li-Ion Battery Positive Electrode Structure and Degradation Using Focused Ion Beam - Scanning Electron Microscopy
J. Wilson, J. Cronin, S. Harris and S. Barnett

Formation, Recovery and Characterization of FePO4 Synthesized with the Use of Apoferritin
L. Devigne and D. MacNeil

Nanostructured Electrolytic Transition Metal Sulfides as Electrodes for Lithium and Lithium-Ion Power Sources
E. Shembel, R. Apostolova and O. Kolomoyets

Nano-LiMn2O4 Cathode Material with High-Rate Capability for Lithium-Ion Batteries
Y. Chen, K. Xie, P. Yi and C. Zheng

Nitrate-Melt-Decomposition Synthesized Li1-xCo0.2Ni0.8O2 as Cathode Material for Lithium-Ion Batteries
A. Prakash, M. Sathiya, K. Ramesha and A. Shukla

Synthesis and Electrochemical Performance of High Voltage (4.9 V) Cycling LiNi0.5Co0.2Mn0.3O2 Cathode Materials for Lithium Rechargeable Batteries
N. Chandrasekaran, T. Ramasamy, S. Arumugam and G. Sukumaran

Microwave Synthesis of Novel High Voltage (4.6 V) High Capacity LiCu0.5Co1-xO2+xO2 Cathode Material for Lithium Rechargeable Cells
N. Chandrasekaran, T. Ramasamy, S. Arumugam and G. Sukumaran

Local Cationic Distribution in Layered LiMnxNi1-xCo2O4 with x = 0.1, 0.2 and 0.3 Oxides Monitored by EPR Spectroscopy
M. Yahya, A. Almaggoussi, I. Saadoune and J. Elhaskouri

Mn-Mg Co-Substitution for Co in LiCoO2 and NMC
W. Luo and J. Dahn

The Optimum Composition of LiNi0.5Mn0.5Co1-xO2
Z. Li, N. Chernova, M. Roppolo, S. Upreti and M. Whittingham
530 Comparison of LiNi$_{2/3}$Mn$_{1/3}$O$_2$, LiNi$_{1/3}$Mn$_{1/3}$Co$_{1/3}$O$_2$, LiNi$_{0.3}$Mn$_{0.3}$Co$_{0.2}$O$_2$ and LiNi$_{0.4}$Mn$_{0.4}$Co$_{0.16}$O$_2$ as Positive Electrode Materials for Lithium-Ion Batteries
F. Zhou, X. Zhao, X. Xia and J. Dahn

531 Effect of Mg Doping to LiNiO$_2$-Based Material on Cyclability at an Elevated Temperature
S. Muto, Y. Kojima, K. Tatsumi, H. Kondo, K. Horibuchi and Y. Takeuchi

532 Utilization of Iron as an Activator of Li$_2$MnO$_3$-Based Positive Electrode Material

533 An Investigation of Structural Changes and Electrochemical Cycling Stability in Li[Li$_{1/3}$Ni$_{1/3}$Mn$_{1/3}$]O$_2$
C. Fell, B. Xu, M. Chi and S. Meng

534 Fast Li-Ion Insertion in Nanosized LiMn$_2$O$_4$ for High Power Li Battery
M. Okubo, T. Kudo and I. Honma

535 Structural Evolution of Layered Li$_{1/2}$Ni$_{0.2}$Mn$_{0.8}$O$_2$ upon Electrochemical Cycling in a Li Rechargeable Battery
J. Hong, D. Seo, S. Kim, H. Gwon, Y. Park and K. Kang

536 High Rate Capability and Cycling Stability of Nano-LiMn$_2$O$_4$ Synthesized via a Novel Gel-Combustion Method
J. Mao, K. Dai, W. Luo and Y. Zhai

537 Synthesis of Multi-Component Olivine by a Novel Mixed Transition Metal Oxalate Coprecipitation Method and Electrochemical Characterization
Y. Park, J. Kim, H. Gwon, D. Seo, S. Kim, J. Hong and K. Kang

538 Synthesis of LiNi$_{0.8}$Co$_{0.2}$O$_2$ Nanopowders for Lithium-Ion Battery Applications
Y. Hamedi Jouybari and S. Asgari

539 Local Chemical Bonding States of Li in the LiNi$_{0.8}$Co$_{0.15}$Al$_{0.05}$O$_2$ by Li K ELNES of STEM-EELS and Their First Principles Calculations
K. Tatsumi, Y. Kojima, S. Muto, H. Kondo, T. Ohsuna and Y. Takeuchi

540 Electrochemical Characteristics of LiCoO$_2$ Single Particle at High Temperatures
H. Munakata, M. Kotobuki, B. Takemura, Y. Morita and K. Kanamura

541 Vanadium-Substituted Porous Manganese Oxides with Li-Ion Intercalation Properties
M. Gulbinska and S. Suib

542 In Situ XAS Study of Li-Rich Layered Cathode Material Li[Ni$_{0.17}$Li$_{0.2}$Co$_{0.07}$Mn$_{0.56}$]O$_2$

543 Development of High Power Lithium-Ion Batteries: Layer Li[NiCoMn]O$_2$ and Spinel LiMn$_2$O$_4$
S. Myung, Y. Sun and H. Yashiro

544 Synthesis and Characterization of Ru Doped Spinel LiNi$_{0.5}$Mn$_{1.5}$O$_4$ with Improved High-Rate Performance
H. Wang, L. Lu and M. Lai

545 Electrochemical Properties of Spinel LiCr$_{0.1}$Ni$_{0.4}$Mn$_{1.5}$O$_4$
G. Liu

546 Electrochemical and Thermal Studies of LiCoO$_2$ Coated with Metal Oxide
N. Liu, L. Xu, M. Wu, L. Li, R. Xu and F. Zhao
547 Effect of Temperature on the Li\textsuperscript{+} Diffusion Dynamic Characteristics of LiMn\textsubscript{2}O\textsubscript{4} for Lithium-Ion Batteries  
   P. Yang, Y. Chao, C. Qian, W. Lu, S. Feng and Q. Bing

548 Simulation of Lithium-Manganese-Oxide Spinel Surfaces and Surface Coatings  
   R. Benedek and M. Thackeray

549 Electrochemical Behaviour of LiAl\textsubscript{x}Cr\textsubscript{y}Mn\textsubscript{2-}\textsubscript{x-y}O\textsubscript{4} Cathode Materials for Lithium Rechargeable Batteries  
   R. Raman, S. Sundara Moorthy, N. Chandrasekaran, T. Ramasamy, S. Arumugam and G. Sukumaran

550 LiCo\textsubscript{1-x}B\textsubscript{x}O\textsubscript{2} as Cathode Materials for Rechargeable Lithium Batteries  
   A. Mauger, C. Julien and F. Gendron

551 Structural and Electrochemical Properties of LiNi\textsubscript{1/3}Mn\textsubscript{1/3}Co\textsubscript{1/3}O\textsubscript{2} Cathode Material upon Aging in Humid Atmosphere  
   X. Zhang, F. Gendron, A. Mauger, Q. Lu and C. Julien

552 Enhanced Electrochemical Behavior of xLi\textsubscript{2}MnO\textsubscript{3-}(1-x)LiMO\textsubscript{2} (M = Mn, Ni, Co) Electrodes  
   S. Kang, C. Lopez-Rivera, M. Thackeray, D. Shin and C. Wolverton

553 Characterization of Electrochemical Property and Surface Morphology of ZrO\textsubscript{2} Coated LiCoO\textsubscript{2} Thin Film  
   H. Lee and Y. Park

554 High Rate Micron-Sized Ordered LiNi\textsubscript{0.5}Mn\textsubscript{1.5}O\textsubscript{4}  
   X. Ma, B. Kang and G. Ceder

555 Investigation of the Origin of High-Capacity in Li\textsubscript{1/2}Mn\textsubscript{0.4}Fe\textsubscript{0.6}O\textsubscript{2} Positive Electrode Materials Using STEM-EELS  
   J. Kikkawa, T. Akita, M. Tabuchi, K. Tatsumi and M. Kohyama

556 Local Chemical Changes in LiNi\textsubscript{0.8}Co\textsubscript{0.2}Al\textsubscript{0.05}O\textsubscript{2} Studied by STEM-EELS  
   Y. Kojima, S. Muto, K. Tatsumi, H. Kondo, K. Horibuchi and Y. Takeuchi

557 Synthesis and Electrochemical Performance of LiCoO\textsubscript{2}/LiCo\textsubscript{0.99}Ti\textsubscript{0.01}O\textsubscript{2} Composite as Cathode Material for Lithium-Ion Battery  

558 Electrochemical and Morphological Effects of High Voltage and High Temperature on Mg-Substituted Li(Ni,Co,Al)O\textsubscript{2}  
   T. Sasaki, A. Hintennach, Y. Takeuchi, Y. Ukyo and P. Novák

559 Crystal Structure Changes during Overcharge of Mg Substituted Li(Ni,Co,Al)O\textsubscript{2} by In Situ Synchrotron X-ray Diffraction  
   T. Sasaki, J. Colin, V. Godbole, Y. Takeuchi, Y. Ukyo and P. Novák

560 One-Step Mechanochemical Synthesis of LiNi\textsubscript{1-x}Co\textsubscript{x}O\textsubscript{2}: The Structure and Properties  
   N. Kosova, E. Devyatkin and A. Slobodyuk

561 Study of the Local Structure of LiNi\textsubscript{3}Mn\textsubscript{2}O\textsubscript{4} Cathode Materials  
   K. Ben-Kamel, G. Ben-Amor, N. Amdouni, A. Mauger and C. Julien

562 Synthesis and Electrochemical Properties of LiCr\textsubscript{0.2}Ni\textsubscript{0.4}Mn\textsubscript{1.4}O\textsubscript{4} Spinel as 5V Cathode Material  
   S. Tan, S. Malmgren and S. Tan
Crystal and Electronic Structure Change Determined by Various Method for Delithiation Process of Li$_x$(Ni$_{1/3}$Mn$_{1/3}$)O$_2$-Based Cathode Material
O. Sekizawa, N. Kitamura, T. Hasegawa and Y. Idemoto

Thermal Behavior of Nickel-Based Layered Cathode Materials Studied by X-ray Diffraction and Absorption Techniques
D. Jang, J. Yoon, J. Kim, W. Yoon, K. Nam and X. Yang

Structural Behavior of Mixed LiMn$_2$O$_4$-LiNi$_{1/3}$Co$_{1/3}$Mn$_{1/3}$O$_2$ Cathode in Li-ion Cells During Electrochemical Cycling
S. Cho, A. Choi, S. Lee, W. Yoon, K. Nam, S. Choi and X. Yang

Preparation and Electrochemical Performance of LiNi$_{0.5}$Mn$_{0.45-x}$Co$_x$Mg$_{0.05}$O$_2$ Cathode Materials
J. Li, Y. Zhang, J. Xie and X. He

The Electrochemical Properties of LiNi$_{0.4}$Co$_{0.6}$Mn$_{0.5}$O$_2$ Thin Film Electrode
I. Kim, M. Jeon, D. Park, T. Nam, K. Kim, J. Ahn and H. Ahn

Pioneer Advantages of RF Magnetron Sputtering Technique in the Synthesization of Binder Free LiCoO$_2$ Thin Film Cathodes
O. Hussain, P. Jeevan Kumar and K. Jayanth Babu

All-Solid-State Thin Film Battery using LiCoO$_2$/LiPON/LiAl
S. Jacke, J. Song, G. Cherkashinin, L. Dimesso and W. Jaegermann

All-Solid-State Lithium Secondary Batteries using LiCoO$_2$ Particles with PLD Coatings of Li$_2$S-PS$_3$ Solid Electrolytes
A. Sakuda, A. Hayashi, T. Ohtomo, S. Hama and M. Tatsumisago

Electrochemical and Structural Investigation on Li(Ni$_{0.375}$Mn$_{0.375}$Co$_{0.25}$)O$_2$-Li(Li$_{1/3}$Mn$_{2/3}$)O$_2$ Composite Cathode Material for Lithium Rechargeable Batteries
S. Sivaprakash and S. B. Majumder

Effect of Tetravalent Cation on 5V Redox Mechanism in LiNi$_{0.5}$M$_{1.5}$O$_4$ Spinels
P. Strobel, M. Le and F. Alloin

Thermodynamics Study of Layered Cathode Materials at High Electrode Potentials
Y. Baba, S. Tsuruta, K. Yanagida, H. Nakamura, S. Fujitani and R. Yazami

High-Capacity Cathode Materials with Integrated 'Layered-Spinel' Structures for Li-Ion Batteries
S. Kang, K. Gallagher, S. Pol, M. Balasubramanian, M. Thackeray, C. Carlton and Y. Shao-Horn

Synthesis and Deposition of Nanostructured Lithium Nickel Manganese Film as Material for 3D Microbatteries
E. Garcia-Tamayo, E. Kelder, A. Anastasopol, U. Lafont and H. Walpot

Surface Reactivity of a Positive Electrode for Lithium-Ion Batteries: LiCoO$_2$
N. Andreu, H. Martinez, R. Dedryvere, I. Baraille and D. Gonbeau

Stabilization of Nickelate Cathode Material for Enabling High-Energy, High-Capacity Lithium-Ion Batteries

Thermal and Structural Stability of Delithiated LiNi$_{0.7}$Co$_{0.3}$O$_2$ and LiNi$_{0.65}$Co$_{0.25}$Mn$_{0.10}$O$_2$ Materials
M. Dahbi, M. Wikberg, I. Saadoune, T. Gustafsson, P. Svedlindh and K. Edström
<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>579</td>
<td>A Surrogate Framework for Assessing the Effects of LiMn₂O₄ Cathode Properties and Cycling Rate on Cell Performance</td>
<td>W. Du, A. Gupta, X. Zhang, A. Sastry and W. Shyy</td>
</tr>
<tr>
<td>580</td>
<td>Enhancement in Capacity and Cyclability for Spinel LiMn₂O₄ by FePO₄ Coating</td>
<td>Z. Yang, S. Li, S. Xia and Y. Huang</td>
</tr>
<tr>
<td>582</td>
<td>O₄-Type LiCoO₂: I. Synthesis and Electrochemical Characterizations</td>
<td>S. Komaba, N. Yabuuchi and Y. Kawamoto</td>
</tr>
<tr>
<td>583</td>
<td>Na-Ion Batteries; III: Na(Ni₀.₅Mn₀.₅)O₂ and NaCrO₂ for Positive Electrodes</td>
<td>S. Komaba, T. Nakayama, C. Takei, N. Yabuuchi, A. Ogata and T. Shimizu</td>
</tr>
<tr>
<td>584</td>
<td>ZnO-Coated LiNi₀.₅Mn₁.₅O₄ Cathode Materials for Li-Ion Battery</td>
<td>W. Zhang, M. Yue and T. Wang</td>
</tr>
<tr>
<td>585</td>
<td>Structural Characterization of Manganese-Rich 0.3Li₂MnO₃·0.7Li[MnₓNiᵧCo₂]O₂ by Solid-State Li MAS NMR</td>
<td>H. Song, B. Sin and Y. Lee</td>
</tr>
<tr>
<td>586</td>
<td>Thermal Stability of LiNiₓMn₁₋ₓC₀ₓO₂ (x = 0.6, 0.8)</td>
<td>H. Konishi, T. Yuasa, M. Yoshikawa and T. Hirano</td>
</tr>
<tr>
<td>587</td>
<td>Agglomeration of LiNi₁/₃Co₁/₃Mn₁/₃O₂ Particulates Induced by Lithium Carbonate and Its Impact on Lithium-Ion Battery High Power Properties</td>
<td>J. Lee, J. Kim, H. Kim, S. Wee, D. Yi and U. Paik</td>
</tr>
<tr>
<td>588</td>
<td>Fabrication of LiCoO₂/Helical Nanocarbon Composites and Their Effect on Lithium Cell Performance</td>
<td>T. Hirai, T. Yoshida, Y. Uno and T. Tsujikawa</td>
</tr>
<tr>
<td>589</td>
<td>In Situ X-ray Absorption Study of 0.3Li₂MnO₃·0.7Li[MnₓNiᵧCo₂]O₂ Cathode Material for Lithium Rechargeable Battery</td>
<td>T. Nedoseykina, M. Kim and Y. Lee</td>
</tr>
<tr>
<td>590</td>
<td>Synthesis and Electrochemical Properties of LiMn₂O₄ Thin Film Cathodes for Li-Ion Micro Battery Applications</td>
<td>K. Jayanth Babu, P. Jeevan Kumar, O. Hussain and C. Julien</td>
</tr>
<tr>
<td>591</td>
<td>High-Capacity Positive-Electrode Material Based on Lithium Nickel Oxide for Lithium-Ion Batteries</td>
<td>S. Kono, M. Kishimi, M. Yamada, K. Matsumoto and T. Ohzuku</td>
</tr>
<tr>
<td>593</td>
<td>Electrochemical and Magnetic Studies of Cr³⁺ or Co³⁺ Substituted Li-Mn-Ni Spinel Oxides</td>
<td>N. Kawai, T. Nakamura, Y. Yamada and M. Tabuchi</td>
</tr>
<tr>
<td>594</td>
<td>Nanostructured LiMn₂O₄ Electrode Materials with Excellent Cyclic Performance and Rate-Capability</td>
<td>W. Ryu, D. Han, W. Kim and H. Kwon</td>
</tr>
</tbody>
</table>
595 Effect of Supersonic-Wave Treatment on Property, Crystal Structure and Cycle Performance of LiMn$_{1.5}$Ni$_{0.5}$O$_4$ as a Cathode Material for 5V Class Li-Ion Battery
   N. Kitamura, Y. Korechika and Y. Idemoto

596 Coating of LiSiO$_4$-Li$_3$PO$_4$ Solid Electrolyte Films on LiCoO$_2$ Particles by Pulsed Laser Deposition
   Y. Sakurai, A. Sakuda, A. Hayashi and M. Tatsumisago

597 Single Crystalline LiMn$_2$O$_4$ Nanowires for Large Capacity Positive Electrode

598 Microwave-Assisted Preparation of Nanostructured, Alumina-Coated Lithium Manganese Oxide Dispersed on Carbon Nanotubes
   K. Ozoemena, T. Ramulifho, B. Agboola, H. Luo, L. Leroux and M. Mathe

599 A Study on the ZrO$_2$ Coating Effect on the Electrochemical Performance of LiNi$_{0.5}$Mn$_{1.5}$O$_4$
   W. Im, B. Cho, H. Kim, H. Choi, H. Jung and K. Chung

600 A Structural Study on Li(Ni$_{0.5}$Mn$_{0.3}$Co$_{0.2}$)O$_2$ during Charging/Discharging Using Synchrotron Based In Situ X-ray Diffraction Technique
   S. Kim, W. Yoon and K. Chung

601 Protection of LiNi$_{0.5}$Mn$_{1.5}$O$_4$ Electrode from High Temperature Capacity Fading with Allyl Triazine Derivatives
   K. Kim and Y. Cho

602 Studies on the Electrochemical Properties of Li$_2$MnO$_3$-(1-X)LiNi$_x$Co$_3$Mn$_x$O$_2$
   J. Shin, Y. Park, C. Kim, S. Kim and W. Kim

603 Sono-Chemical Synthesis of Nanostructured Lithium Manganese Oxide on Fluorine Doped SWCNT Template: A Novel and Smart Electrode Material for Li-Ion Battery
   B. Agboola, H. Luo, K. Ozoemena, L. Le Roux and M. Mathe

604 Novel xLiFeO$_2$-(1-x)Li$_2$MoO$_3$ Solid Solution Oxides for Lithium-Ion Batteries
   K. Park and D. Im

605 Synthesis, Structure and Electrochemical Properties for Ruthenium-Substituted Lithium Manganese Oxide
   D. Mori, M. Shikano, H. Sakaebi, K. Tatsumi, H. Kojitani and Y. Inaguma

606 Improved Electrochemical Properties of Cation- and Anion-Substituted 5 V Spinel Cathodes for Lithium Ion Cells
   W. Choi and J. Park

607 Structural and Electrochemical Li-Insertion Properties of Calcium Ferrite-Type Lithium Manganese Oxide

608 Blends of LiMn$_2$O$_4$ Spinel and LiNi$_{0.8}$Co$_{0.15}$Al$_{0.05}$O$_2$ for Advanced Lithium-Ion Batteries
   H. Tran, C. Täubert, P. Axmann and M. Wohlfahrt-Mehrens

609 In Situ X-ray Absorption and Diffraction Studies of Li$_{1+x}$[Ni$_{0.5}$Mn$_{0.5}$]$_{1-x}$O$_2$ Electrodes during Charge/Discharge Cycling
   K. Nam, W. Yoon, S. Kang and X. Yang

610 Studies of Structural Changes for Cr and F Substituted Spinal Cathode Materials Using In Situ X-Ray Diffraction
   X. Wang, K. Nam, Y. Zhou, W. Lu, A. Jansen, D. Dees and X. Yang
611 Crystal Structures and Electrochemistry of Li2MnO2-LiCoO2-LiCrO2 Solid-Solution as Positive Electrode Material for Li-Ion Batteries

612 Nanosized LiMnjCu Powders Prepared by Flame Spray Pyrolysis from the Aqueous Solution
   J. Yi, J. Kim, H. Koo, Y. Ko and Y. Kang

613 Carbon Effects of Li[Co0.1Ni0.15Li0.2Mn0.65]O2 Cathode Materials Treated with Coating or Nanocomposite
   J. Ju and K. Ryu

614 Effect of Manganese and Cobalt Content on the Electrochemical and Thermal Properties of Layered Li[Ni0.52Co0.16+xMn0.32-x]O2 Cathode Materials
   H. Kim and Y. Sun

615 Safety Study, Structure Analysis and Electrochemical Properties of Different LiCoO2 Materials Charged to High Voltage
   J. Xiang, L. Tang, X. Zhang, F. Wu, Z. Deng and Q. Zhong

616 Al/F Surface Modified Single Crystalline Spinel LiMn2O4 Nanowires/Nanorods as Cathode Material for Li-Ion Battery
   H. Luo, B. Agboola, K. Ozoemena, L. Le Roux and M. Mathe

617 Surface Modified Li(Ni, Co, Mn)O2 Cathode by Li3PO4 Coating
   H. Song and Y. Park

618 O4-Type LiCoO2; II.: Structural Characterization and Reaction Mechanism
   N. Yabuuchi, Y. Kawamoto, M. Yonemura, T. Ishigaki, A. Hoshikawa, T. Kamiyama and S. Komaba

619 Electrochemical Reactivity of Graphite and Li2MnO3-Based High Energy Electrode Materials in Ionic Liquid
   N. Yabuuchi, Y. Shinbe, K. Yoshii, Y. Katayama, T. Miura and S. Komaba

620 Synthesis and Electrochemical Property of LiCoO2 Thin Films Composed of Nanosize Compounds by Nanosheet Restacking Method
   Z. Quan, N. Sonoyama and K. Iwase

621 Studies of Interfacial Kinetics in Lithium-Ion Batteries
   Y. Chao, P. Yang, C. Qian, S. Feng, W. Lu and Q. Bing

622 Characterization of LiCoO2 Positive Electrode/Li7La3Zr2O12 Solid Electrolyte Interface

623 Oxygen-Release Study of the Lithium-Rich Oxide Li[Li1/3Ni1/3Mn3/5]O2
   A. van Bommel and J. Dahn

624 Electrochemical and Thermal Characteristics of Surface Modified LiNi0.8Co0.15Al0.05O2 as a Cathode Material for High Power Lithium Batteries
   J. Kim, J. Kim, S. Yu, M. Jang, S. Yoon and Y. Kim

625 Generation of Realistic Particle Structures and Simulations of Internal Stress: A Numerical/AFM Study of LiMn2O4 Particles
   J. Seo, M. Chung, M. Park, S. Han, X. Zhang and A. Sastry

626 Improved Electrochemical Properties of AlF3 Coated Li1.1Al0.05Mn1.85O4 Spinel Type Cathode Materials for Lithium-Ion Batteries
   K. Lee, S. Myung and Y. Sun
627 Study of LiCoO$_2$ and Li$_{1.08}$Mn$_{1.92}$O$_4$ Composite Cathodes by In Situ $^7$Li NMR and Ex Situ $^6$Li MAS NMR Spectroscopies
   L. Zhou, B. Key, R. Bhattacharyya and C. Grey

628 Development of Porous Microstructure of LiNi$_{0.5}$Mn$_{1.5}$O$_4$ Cathode Material for Novel Lithium-Ion Battery to Improve Extended Cycling and Rate Ability of HEV
   C. Lin, J. Duh, J. Chen and C. Hsu

629 Synthesis and Electrochemistry of Layered Li$_{1.2}$(Ni$_{0.4}$Mn$_{0.4}$)$_{1-x-y}$(Co$_{0.4}$Mn$_{0.4}$)$_x$(Ni$_{0.2}$Mn$_{0.6}$)$_y$O$_2$
   (0<=$x+y<=$1) Cathode Materials for Li Rechargeable Battery
   L. Zhang, Q. Peng, Z. Lu, L. Ren, H. Ren and X. Liu

630 Electrochemical Behavior of LiMn$_{2}$O$_4$ in Aqueous Electrolyte
   G. Wang, L. Liu, S. Tian, Y. Shi and Y. Wu

631 Microscopy and Spectroscopy of Lithium-Bearing Mn-Based Layered Oxides
   D. Abraham, J. Bareno, S. Kang, S. Pol, M. Balasubramanian, J. Wen, C. Lei and I. Petrov

632 Coating Effects on Li[Li$_{1.9}$Ni$_{1.3}$Mn$_{5.9}$]O$_2$ Cathodes for Rechargeable Lithium-Ion Batteries
   K. Rosina, M. Jiang, A. Best and C. Grey

633 Effect of Surface Modification of LiCoO$_2$ Thin-Film Electrode on Electrochemical Reaction Rate
   T. Nakatsutsumi, Y. Orikasa, T. Okumura, T. Fukutsuka, K. Amezawa and Y. Uchimoto

634 High Pressure Synthesis and Electrochemical Properties of CaFe$_2$O$_4$-Type LiMn$_2$O$_4$

635 Synthesis, Structure and Electrochemical Properties of Ca-Substituted Li$_{0.44}$MnO$_2$

636 Modification of Solid-State Electrolyte/Cathode Interfaces for Thin Film Batteries
   K. Chiu and B. Chen

637 A Detailed Two-Dimensional Electrochemical and Thermal Model for LiFePO$_4$-Based Cells
   C. Hellwig and W. Bessler

638 Surface Analysis of Positive Electrode for Lithium-Ion Batteries by FT-IR
   Y. Saito, M. Shikano and H. Kobayashi

639 Synthesis and Structural Properties of Alkali Fluorophosphate and Fluorosulphate Positive Electrode Materials
   B. Ellis, T. Ramesh, R. Tripathi, H. Park and L. Nazar

Electrolytes 1

640 Is the Scaling-Up of Conventional Li-Ion Technology Viable?
   M. Armand, S. Grugeon, S. Laruelle, G. Gachot, P. Ribièrè, N. Recham and J. Tarascon

641 Dry Block Copolymer Electrolytes for Lithium Batteries
   N. Balsara

642 Solid Polymer Electrolyte Based on Oligomeric PEO Cross-Linked with Electron Beam

643 Advanced Electrolyte Additives to Improve Life and Safety of Lithium Batteries
   K. Amine, Y. Qin, Z. Chen and Y. Sun
644 The Effect of Electrolytes on Cycle Performance of Lithium/Sulfur Battery

Electrolytes 2

645 Solubilization and Transport Properties of SEI Components during the Battery Life Related to Aging
   D. Lemordant, J. Jones, M. Anouti, M. Caillon-Caravanier and P. Willmann

646 Room Temperature Lithium Polymer Batteries Based on Ionic Liquids
   G. Appetecchi, G. Kim, M. Montanino, M. Carewska, F. Alessandrini and S. Passerini

647 The Advantages of LGC Li-Ion Polymer Batteries for Automotive Applications
   M. Kim

648 Advanced Li-Ion Batteries for EV Applications: A Challenge in R&D of Electrolyte Solutions
   D. Aurbach

Lithium Ion Batteries 1

649 Li-Ion Battery/Cell Manufacturing Cost Comparisons
   R. Brodd

650 Borates as High-Capacity Cathodes
   N. Iwane, Y. Harada, S. Nishimura, Y. Koyama, I. Tanaka and A. Yamada

651 Materials for Improving the Specific Energy and Safety of Lithium-Ion Cells
   W. West, M. Smart, J. Soler and R. Bugga

652 Evolution of the Electrode / Electrolyte Interface Along Electrochemical Cycling of
   LiMn_{1/2}Ni_{1/2}O_2
   N. Dupré, J. Martin, P. Soudan, A. Yamada, R. Kanno and D. Guyomard

653 Study on 400Ah Cylindrical LiFePO_4/Li_4Ti_5O_12 Lithium-Ion Battery
   Z. Tang, L. Sun and X. Li

Lithium Ion Batteries 2

654 Opportunities and Challenges of Lithium Manganese Iron Phosphates as Positive Electrode
   Materials for Lithium-Ion Batteries
   N. Tran, G. Nuspl, C. Vogler and N. Schall

655 Development of High Energy Density and High Reliability Li-Ion Batteries
   S. Watanabe, M. Kinoshita and K. Nakura

656 Studies of Large Batteries for Defense Applications
   K. Nechev, R. Staniewicz and B. Deveney

657 Degradation of Lithium-Ion Cells Using LiNi_{0.8}Co_{0.15}Al_{0.05}O_2 Positive Electrode for BEV and
   PHEV Applications
   K. Tatsumi, M. Shikano, Y. Saito, S. Koike, D. Mori, H. Hori, H. Kageyama, H. Sakaeb and
   H. Kobayashi
Large-Format Lithium-Ion Batteries for Electric Power Storage
T. Horiba, S. Itoh, H. Haruna, E. Seki and K. Köhno

Lithium Ion Batteries 3

Opportunities in Energy Storage due to the Paradigm Shift Fueled by the Mobile and Clean Tech Revolutions
C. Lampe-Onnerud

Comprehensive Improvements in Li-Ion Batteries for Demanding Applications
M. Gulbinska, G. Moore, S. Santee, B. Lucht and F. Puglia

Investigation of Aging Mechanisms of High Power Li-Ion Cells used for Hybrid Electric Vehicles (HEVs)
S. Bourlot, P. Blanchard and S. Robert

Charge Storage Properties of Nano-LiMn₂O₄
T. Patey, M. Nakayama and P. Novák

New Materials, New Processes

Metal Fluorides for Positive Electrode Materials of Li-Ion Cells
J. Yamaki, I. Gocheva, T. Doi and S. Okada

Atomic-Scale Insights into Li(Fe,Mn)PO₄ and Li₂(Fe,Mn)SiO₄: Defects, Li Migration and Surfaces
M. Islam, G. Gardiner and N. Kuganathan

Study on Electrochemically Deposited Mg Metal
M. Matsui

New Type of Cathode Materials for Lithium-Ion Batteries Based on Pyrophosphate Compounds
H. Zhou, S. Upreti, N. Chernova and M. Whittingham

Inexpensive Synthesis of Li₂FeSiO₄ for Upscaled Lib Cathodes
S. Tan, K. Kam, J. Thomas and T. Gustafsson

An Aqueous Li-Air Battery Based on a Novel Reservoir Concept
K. Suto, S. Nakanishi, H. Iba and K. Nishio

Li₂MTiO₄ (M = Fe, Ni, Mn, V) Titanates with a Rock Salt Structure as Potential Cathode Materials
M. Kuezma, R. Dominko, M. Bele, M. Pivko, C. Vidal-Abraca Garrido, I. Arcon and M. Gaberscek

Material Resources for Lithium-Ion Batteries of Different Chemistry
G. Blomgren

Li-Batteries, New Systems, Safety, Modelling, and Aging Poster Session

Characteristic Changes of Large-Capacity Industrial Li-Ion Cells from Field Trial Tests
T. Matsushima and T. Tsujikawa
672 HQ Solid State Li-Gas (Air, SO2) Batteries for Transportation and Energy Storage
J. Trottier, M. Cea, A. Guerfi, M. Dontigny and K. Zaghib

673 An Integrated Battery-Antenna Enabling Wireless Motion Detection on Human Body

674 Robust Metal-Organic Framework Prussian Blue Analogue for Reversible Li-Ion Storage
M. Okubo, T. Kudo and I. Honma

675 Management System for Large-Capacity Stationary Lithium-Ion Batteries
T. Tsujikawa, K. Yabuta, T. Matsushita, T. Matsushima, M. Arakawa and T. Kofuse

676 The First-Generation 12 V Lead-Free Batteries; Single-Cell Examinations on 2.5 V LTO/LAMO Cells
K. Ariyoshi, M. Imazaki, N. Tsukamoto, L. Wang and T. Ohzuku

677 Lithium-Ion Secondary Batteries for Electric Power Storage
H. Haruna, S. Itoh, T. Horiba, T. Hirasawa, E. Seki and K. Kohno

678 Development of 10 Ah-Class Li-Ion Cell for Plug-In Hybrid Electric Vehicle Application
T. Kojima, N. Tsukimori, M. Oguma, H. Sasaki, T. Horiba and M. Yoshikawa

679 3-Electrode Measurements of Industrially Manufactured Lithium-Ion Batteries
C. Stangl, C. Bayer, B. Fuchsbichler, C. God and S. Koller

680 Electrochemical Behaviors of Iron-Based Electrode Materials in Li2SO4 Aqueous Electrolyte
S. Park, S. Okada and J. Yamaki

681 New Design of Li-Ion Battery for PV Application
D. Mourzagh, H. Rouault, B. Ameostoy and P. Jost

682 Calendar-Life Prediction of LiFePO4/Graphite Power Battery
F. Wang, C. Xiao, K. Chen, B. Yu, J. Dong and J. Wang

683 The Use of Low Pressure Chemical Vapor Deposition for 3D Integrated Thin-Film Microbatteries
J. Oudenhoven, T. van Dongen, M. Mulder, R. Niessen, M. de Croon, K. Kumar, I. Pop and P. Notten

684 Modeling the 3D-Microbattery by Finite Element Methodology
V. Zadin, H. Kasemägi, A. Aabloo and D. Brandell

685 Towards Nano-Structured Electrodes for Li-ion 3D Micro-Batteries
G. Oltean, L. Nyholm and K. Edström

686 Electro catalyst Design Concepts for Li/Oxygen Cells: A Study of Li3FeO4
L. Trahey, C. Johnson, M. Balasubramanian, S. Kang, J. Vaughey, S. Pol and M. Thackeray

687 Cover and Barrier Layers for Thin-Film Rechargeable Lithium Battery
S. Hayashi, H. Ono, T. Matsuo, S. Sato, Y. Sabi and S. Onodera

688 Lithium Lanthanum Titanate Thin Films Grown by Atomic Layer Deposition for All-Solid-State Lithium-Ion Battery Applications
T. Aaltonen, M. Alnes, O. Nilsen and H. Fjellvåg

689 Controlled Synthesis of MnOx Nanowires as Catalysts for Li/O2 Batteries
Y. Li, X. Li, J. Wang, J. Liu, R. Li and A. Sun

690 On the Surface Chemical Aspects of Very High Energy Density, Rechargeable Li-Sulfur Batteries
D. Aurbach, R. Elazari, E. Pollak, G. Salitra, C. Scordilis Kelley and J. Affinito
Bioinspired, Kinetically Controlled Synthesis of High-Performance Anode and Cathode Materials for Lithium Batteries
H. Zhang and D. Morse

Olivine/Ionic Liquid-Polymer/Li0 High Energy Batteries
P. Charest, A. Guerfi, M. Dontigny, M. Peticlerc, A. Vijh and K. Zaghib

The Influence of Catalysts on Discharge and Charge Voltages of Rechargeable Li-Oxygen Batteries
Y. Lu, H. Gasteiger, M. Parent, V. Chiloyan and Y. Shao-Horn

Preparation of Porous Li2O and Transition Metal Oxides Composite Thin Films for Lithium-Ion Batteries Application
P. Zhang, Z. Guo and H. Liu

In Situ Observation Using Electron Holography of Electric Potential Resulting from Li-ions
K. Yamamoto, Y. Iriyama, T. Asaka, T. Hirayama and Z. Ogumi

Design of Large-Format Lithium-Ion Cells
M. Räsänen

A New Nanostructured Li2S/Silicon Rechargeable Battery with High Specific Energy
A. Jackson, Y. Yang, M. McDowell, J. Cha, S. Hong and Y. Cui

Electrochemical Performance of All-Solid-State Lithium Secondary Batteries with Nanosized NiS Active Material Synthesized in High-Boiling Solvent
K. Aso, H. Kitaura, A. Hayashi and M. Tatsumisago

Large Format Cells and Batteries for HEV and EV Applications

The Design and Building of an Improved Battery Tester/Former, that Transfers Laboratory Measurements to the Electric Vehicle Production Line
P. Lupotto, M. Imeri and M. Fioravanti

Full Cell Design and Performance for Stationary Li-Ion Battery System

Hybrid Electrochemical Energy Storage and Conversion Device with Li4Ti5O12/Carbon Composite Electrode
X. Liu, K. Yang, L. Wang and L. Wang

Technological Complex of Nondestructive Methods of Testing for an Application by Manufacture of Batteries and Other Power Sources
V. Redko, E. Shembel, T. Pastushkin and O. Redko

Study of Li-Air Batteries Operating in Ambient Conditions
J. Xiao, W. Xu, D. Wang, G. Graff and J. Zhang

Design and Current Problems of Li/Air and Li/Water Batteries
Y. Kim and J. Goodenough

An Investigation of the Mechanism of Electrochemical Reduction of Sulfur in Lithium-Sulfur Cells
V. Kolosnitsyn, E. Kuzmina and E. Karaseva

A New Development of PVDF Binder Oriented to Small Particle Sizes Materials
J. Abusleme, T. Baert, A. Bertasa and R. Pieri

The Mechanism of Electrochemical Reduction of Lithium Polysulfides in Lithium-Sulfur Cells
V. Kolosnitsyn, E. Kuzmina and E. Karaseva
Lithium Intercalation into Cluster Ion Complexes
N. Sonoyama, Z. Quan, S. Goto, S. Uematsu, T. Kume and Y. Suganuma

Transparent Electrode for Lithium Batteries

Depth-Resolved X-ray Absorption Spectroscopy for all Solid-State Lithium-Ion Battery
T. Okumura, T. Nakatsutsumi, D. Kikutani, T. Fukutsuka, Y. Uchimoto, Y. Iriyama, T. Uruga,
H. Tanida, Y. Terada, M. Takagaki, H. Toyokawa and K. Amezawa

Fabrication of Lithium Microbatteries by Femtosecond Laser Machining
S. Mitra and J. Conner

Interfacial Lithium and Hydrogen Storage in Ru-Li$_2$O Nanocomposites Prepared by
Electrochemical Lithiation
L. Fu, M. Kandavel, M. Hirscher, D. Samuelis and J. Maier

Lab X-ray Diffraction of Lithium Battery Materials. Cutting Edge Instrumentation: Help or
Hinderance?
P. Whitfield and I. Davidson

Rechargeable Lithium/Sulfur Batteries Based on Nitrogen-Doped Mesoporous Carbon and Ionic
Liquid Electrolytes
X. Sun, X. Wang, R. Mayes and S. Dai

Microcapsule Additives for Enhanced Performance of Lithium-Ion Batteries
S. Odom, A. Esser-Kahn, M. Baginska, B. Blaiszik, A. Abouimrane, K. Amine, N. Sottos,
S. White and J. Moore

Trigger-Loaded Microcapsules Containing Additives for Enhanced Performance of Lithium-Ion
Batteries
A. Esser-Kahn, S. Odom, S. Kang, A. Abouimrane, M. Baginska, B. Blaiszik, K. Amine,
N. Sottos, S. White and J. Moore

The Electrochemical Properties of Metal Oxide by ESD(Electrostatic Spray Deposition) for
Lithium and Sodium Battery

Alkali Manganese Oxide Nanowires as Catalysts for Lithium-Air Batteries
E. Pomerantseva, S. Oh, G. Botton, F. Nan and L. Nazar

All Solid-State Lithium-Sulfur Battery Using Mesosized Electrode Structure and Thio-LISICON
M. Nagao, N. Kamaya, Y. Imade, K. Homma, Y. Yamakawa, R. Watanabe, T. Yokoi,
T. Tatsumi and R. Kanno

Electrochemical Performances of Flexible Electrodes for Organic Radical Battery
Y. Zhang, L. Gao, Y. Dai and J. Xie

Ultrahigh Energy Density Lithium Microbatteries
Y. Wang, C. Erdömez, W. Lai and Y. Chiang

Mechanical Actuation Using Solid State Electrochemistry

A Low-Cost, Facile Synthetic Approach for the Fabrication of Three-Dimensional Lithium-Ion
Rechargeable Batteries
J. Mosby, T. Arthur, D. Johnson and A. Prieto

In-situ Neutron Diffraction Studies of Li Batteries
N. Sharma, V. Peterson, M. Avdeev and A. Studer
Technical Aspects of High Precision Measurements of Coulombic Efficiency
A. Smith, J. Burns, S. Trussler and J. Dahn

Water-Stable Lithium Electrode Based on Ionic Liquid/Polymer Blend and Lithium Conducting Glass Ceramics
T. Zhang, N. Imanishi, A. Hirano, Y. Takeda and O. Yamamoto

Exploration of Sodium Metal Fluorosulphate Electrodes and Their Derivatives: Low Temperature Synthesis and Characterization

High Throughput Synthesis and Screening for Discovery of Improved Electrode Materials for Lithium-Ion Batteries
S. Kaye, B. Li and M. Bailey

Combined In Situ FTIR and Raman Microscopy of Electrode Materials: A New Tool for Battery Scientists
H. Schneider, A. Hintennach, P. Maire and P. Novák

Recent Results on Aqueous Electrolyte Cells
C. Wessells, R. Huggins and Y. Cui

Fabrication of All-Solid-State Rechargeable Lithium-Ion Battery Using Mille-Feuille Structure of Li0.35La0.55TiO3
M. Kotobuki, H. Munakata, A. Kaeriyama and K. Kanamura

Atomic Layer Deposition of Thin Films for Lithium-Ion Batteries
T. Aalto, M. Alnes, O. Nilsen and H. Fjellvåg

Preparation of Electrochemically Active Li2S-C Composites Using Spark-Plasma-Sintering Process
T. Takeuchi, H. Sakaebi, H. Kageyama, H. Senoh, T. Sakai and K. Tatsumi

Numerical Experiments on Internal Short Circuit: Implications on Lithium Ion Cell and Pack Safety
Z. Zhang, S. Santhanagopalan and P. Ramadass

The Performance of Different Carbon Materials as Electrodes for the Lithium-Sulfur-Battery
S. Diegelmann, S. Haffer, M. Tiemann and J. Janek

Low Temperature Charging Performance and Mechanism of Different Anode Binder in Lithium-Ion Battery

High Density Sintered Electrode Architecture to Improve the Energy Density of Rechargeable Lithium Batteries
C. Bae, C. Erdonmez, W. Lai, A. Ramachandran, J. Halloran and Y. Chiang

HQ Li4Ti5O12/LiFePO4 Power Battery for Fast Charge Applications
M. Donitigny, J. Dubé, A. Guerfi, D. Wu and K. Zaghib

Triggering Internal Short Circuits in Lithium-Ion Batteries
C. Orendorff and E. Roth

Multi-Scale Modelling of the 3D-Microbattery: From MD to FEA
D. Brandell and J. Thomas

The Improvement of Shelf Life by Predischarging in Flexible Lithium Battery
S. Lim, E. Jin, X. Zhao, K. Park, N. Kim, H. Gu and B. Park
The Need for a Well Defined Evaluation Protocol for Microscale Lithium Batteries  
V. Pop, R. Elfrink, C. De Alwis, R. van Schaijk and R. Vullers

Li-Ion Cells Internal Short Circuit Testing  
H. Maleki, H. Wang, W. Zhang and E. Lara-Curzio

An All-Iron Low Cost and Environmentally Compatible Lithium-Ion Battery  
F. Croce, J. Hassoun, I. Hong and B. Scrosati

Automating the Battery Test Process  
R. Skinner, L. Mahoney and J. Reeves

SLMP and LMCF: A Solution to the Lithium-Ion Battery Challenges of the Future  
Y. Li, B. Fitch, M. Yakovleva and Y. Gao

Backup-Use Lithium-Ion Battery Secured by Flame-Retardant Technology  
K. Hayashi, M. Terada, M. Hiratani, T. Hirasesawa, T. Tsujikawa and M. Arakawa

The Study of Gas Swelling in the LiMn$_2$O$_4$/Li$_x$Ti$_5$O$_{12}$ Cell  
Y. Xiong, S. Xu, L. Jing, P. Du and J. Gao

Post-Mortem Analysis of Li-Ion Batteries Cycled under PHEV Duty  
A. Best, P. Kao, A. Hollenkamp, R. Newnham and D. Karner

A Study on the Thermal Behavior of a Lithium-Ion Battery During Charging  
U. Kim, S. Ryu, C. Shin, T. Han and S. Park

A Study on the Thermal Behavior of a Lithium-Ion Battery Pack  
J. Yi, U. Kim, C. Shin, Y. Hong and C. Kim

Capacity Fade Study of Li-Ion Battery under the Dynamic Driving Cycles  

Development of Life Evaluation Tests for High-Power Lithium-Ion Secondary Batteries: Proposal of Accelerated Evaluation Methods  
S. Seki, Y. Mita, K. Takei, T. Ikeya, H. Miyashiro and N. Terada

Cycle Performance of Na/Ni$_2$S$_2$ Cell at Room Temperature  

Conversion Reaction: Morphogenesis of Swelling Phenomena and Cellular Automata  
L. Aldon

Experimental Determination of Critical Transport Parameters for Overcharge Protection Molecules  
N. Trinh, G. Liang and S. Schougaard

Effects of State of Charge on High Temperature Storage Characteristics of Lithium Secondary Batteries  
Y. Lee, Y. Lee, J. Ko and C. Park

Study of Desorption Gases from Lithium-Ion Battery and the Components at Abuse Temperature  
S. Koike, M. Shikano, H. Sakaebé and K. Tatsumi

Study on Gas Evolution of Lithium-Ion Battery during Charging and Discharging  
X. Ren and Z. Deng

Fracture Mechanics of Lithium Battery Materials  
W. Woodford, W. Carter and Y. Chiang

Electrode/Electrolyte Interfaces in High Voltage Spinel LiMn$_{1.6}$Ni$_{0.4}$O$_4$/Li$_x$Ti$_5$O$_{12}$ System  
R. Dedryvère, D. Foix, D. Gonbeau, S. Franger, L. Daniel and S. Patoux
Novel Pulse Charging Method for Life Extension at Subzero Temperatures
O. Kwon and C. Wang

Advanced Battery Technology for Wide Temperature Operation and Quallion Matrix Battery for ESS
H. Tsukamoto, M. Nagata, R. Tamaki, M. Tomcsi and H. Duong

A Safer and More Long-Lived Large-Capacity Lithium-Ion Cell
T. Tsujikawa, K. Yabuta, T. Matsushita, M. Arakawa and K. Hayashi

Identification of Reaction Mechanisms in Lithium-Ion Batteries by Deconvolution of Electrochemical Impedance Spectra
M. Ender, J. Illig, J. Schmidt, T. Chrobak, D. Klotz and E. Ivers-Tiffée

Spectroscopic Evidence of the Mechanisms Involved in the Nonaqueous Li/O₂ Battery
V. Giordani, L. Laffont, H. Vezin, D. Larcher, J. Tarascon and P. Bruce

Safety Performance of Polymer Lithium-Sulfur Cells
D. Ainsworth, S. Lilley, V. Kolosnitsyn and G. Ivanov

Characterization of the Electrode/Electrolyte Interface Using Model Epitaxial Electrodes
R. Kanno, M. Hirayama, K. Tamura and H. Ido

Safety Technology for Li-Ion Batteries

Biochemical Additives for Safety Improvement in Lithium-Ion Batteries
M. Lee, H. Tsai, I. Lee, T. Lee, J. Yeh and H. Shih

Interface Effects in Lithium Storage and Ion Conductivity: Recent Results
D. Samuelis, J. Shin, L. Fu, C. Li and J. Maier

Thermal Behavior Characterization of Lithium Batteries Used in HEVs and EVs Using Electric Circuit Model Representation
C. Sen, Y. Usama, J. Kettlewell and N. Kar

Thermoresponsive Microcapsules for Autonomic Lithium-Ion Battery Shutdown

Na-Ion Batteries; I.: Dependence of Their Performance on Electrolyte Solutions
S. Komaba, T. Ishikawa, W. Murata, N. Yabuuchi and T. Ozeki

Thermal Lithium-Ion Battery

Increase Understanding of Cycling and Synthesis of Li Batteries Using In Situ Experiments Inside an SEM
M. Lagacé, P. Hovington, M. Dontigny, L. Rodrigue, P. Noël, C. Baril, A. Guerfi and K. Zaghib

Validating Thermal Models of Lithium-Ion Battery System for Battery Risk Assessment
B. Jung, J. Chung, B. Youn, J. Park and R. Orantez

Analysis of Failure Mechanisms of Li-Ion Cells
C. Siret, P. Biensan, R. Staniewicz, L. McCoy and M. Isaacson

A Generalized Hasselman's Elastic and Surface Energy Criterion for Crack Propagation in Insertion Battery Electrodes
Y. Cheng and M. Verbrugge
A First-Principles Study of Oxygen Reduction Reaction by Lithium on Various Catalytic Materials
Y. Xu and W. Shelton

Method and Devices for Nondestructive Non-Contact Detection of Hidden Faults in the Welds of Batteries and Ultracapacitors
V. Redko, E. Shembel, V. Khandetskyy, R. Crawford, D. Sivtsov, T. Pastushkin and O. Redko

Assessing Thermal Stability of Commercial Lithium-Ion Cells
Q. Horn, K. White and S. Singh

Prolonged Cycling and Storage Affect on Solid Electrolyte Interface Evolution
B. Yebka, J. Carlson, J. Holung, G. Estes, K. Seethaler and T. Wong

ALD and MLD Surface Coatings for Performance and Safety Enhancement of Li-Ion Batteries
L. Riley, I. Scott, A. Cavanagh, Y. Jung, S. George, A. Dillon and S. Lee

Lithium Iron Sulfide and Its Rate Characteristics
E. Kendrick and J. Barker

Stability of Organic Radical Battery with PTMA Composite Cathode and Li⁺ Pre-Doped Graphite Anode

Rate Capability of Rechargeable Li-Air Batteries Using β-MnO2/Pd Composite Air Electrode
A. Thapa and T. Ishihara

Perspective of Use in High Power Application and Safety Aspects for Li-Ion Batteries with Li₄Ti₅O₁₂ / Blended Cathode
D. Shieh, D. Belov, Y. Yeh, C. Hung, L. Liu, C. Lo and S. Lin

The Safety Evaluation Test of Lithium-Ion Batteries in Vehicles; Investigation of Overcharge Test Method
M. Takahashi, K. Komatsu and K. Maeda

Electrode and Separator Surface Modification for Safety and Performance Improvements of Li-Ion
D. Shieh and D. Belov

Federal Support for Batteries
R. Brodd

High Capacity Li-Air Batteries
J. Zhang, D. Wang, W. Xu, J. Xiao, R. Williford and G. Graff

Improving the Life of LiFePO₄/Graphite Cells Through Active Lithium Replenishment
J. Wang, S. Soukiazian and P. Liu

Electrochemical Properties of Carbon Materials and Perovskite-Type Oxide Electrocatalysts for Air Electrodes of Lithium-Air Batteries
M. Hayashi, H. Minowa, M. Takahashi, T. Shodai and K. Saito

The Role of Carbon in the Cathode of a Li-O₂ Battery
R. Younesi, S. Urbonaite and K. Edström

Synthesis of Cathode and Electrolyte Materials for Solid-State Lithium-Ion Batteries
J. Choi, F. Tietz, S. Uhlenbruck, H. Buchkremer and D. Stöver

All Solid-State Rechargeable Li/LiFePO₄ Polymer Battery for Electric Vehicle Application
L. Damen, J. Hassoun, M. Mastragostino and B. Scrosati
817 Mesoporous Transition Metal Oxides for Reversible Lithium Storage in Lithium-Ion Batteries
G. Wang, H. Liu and B. Sun

818 Lithium Ionen Mobile Battery Field Failures, Root Causes and Production Quality Worldwide
H. Praas

819 Reaction Mechanism on Nonaqueous Lithium-Oxygen Battery
F. Mizuno, S. Nakanishi and H. Iba

820 Fabrication and Electrochemical Studies on Cathode of All-Solid Lithium-Ion Battery Using Glass-Ceramics
K. Ogasa and Y. Inda

821 XPS Study of the LiFePO₄/Graphite System

822 Electrochemical Performance of High Capacity xLi₂MnO₃+(1-x)LiMO₂ (M = Ni, Co, Mn) Cathodes in Lithium-Ion Cells with Graphite- and Ti-Oxide Anodes
S. Kang, V. Pol, I. Belharouak and M. Thackeray

823 New Mesoporous and Nanocrystalline Metal Oxides as Cathodic Catalysts for the Lithium-O₂ Cell
S. Oh, E. Pomerantseva, R. Black and L. Nazar

824 Pulse Power Measurements and Implications for HEV/PHEV Cell Design
J. Rempel, D. Ofer, B. Barnett and S. Sriramulu

825 Optimization of Process Parameters for the Carbothermal Reduction Synthesis of LiFePO₄/C by Uniform Design
C. Jiang, F. Tang, M. Li, X. Lv, F. Wang and Y. Wen

826 Electrochemical Features of LiNiₓMnₙCo₁₋ₓ-yO₂ in Connection with Their Structural Properties

827 Advanced Battery Manufacturing
R. Goossens

828 Developments in the Sulfur Electrode for Li-S Batteries
X. Ji, S. Evers, E. Prouzet, R. Black and L. Nazar

829 Rechargeable Lithium Batteries for the 300-Mile Electric Vehicles and Beyond
K. Abraham

830 Fundamental Mechanism of the Lithium-Air Battery

831 Lithium-Air, Lithium-Water and Lithium-Sulfur Batteries Based on Protected Lithium Electrodes (PLEs)
S. Visco, E. Nimon and L. De Jonghe

832 Electrocatalytic Activity Studies of Select Metal Surfaces and Implications in Li-Air Batteries
Y. Lu, H. Gasteiger and Y. Shao-Horn

New Systems and Modelling
Parameter Analysis of a Practical Lithium-Air EV Battery
E. Peled

Sulphur Lithium Ion Power: A Novel, High Performance Polymer Tin/Sulphur Lithium-Ion Battery
J. Hassoun and B. Scrosati

Identifying and Accommodating Cell Variations for Commercial Li-ion Battery Pack Modeling
M. Dubarry and B. Liaw

Advanced Thermal Modeling of Batteries
R. Spotnitz, G. Yeduvaka, S. Hartridge, R. Johns, D. Schad and W. Smith

Safety and Life Cycle

A Lumped Thermo-Electrochemical Analysis of Multi-Layered Thermal Batteries
D. Kim, H. Jung and S. Um

New Framework for Lithium-Ion Battery Safety
R. Stringfellow, D. Ofer, S. Sriramulu and B. Barnett

Thermal Management of Large Format Lithium Iron Phosphate Battery Pack for Electric Vehicle
S. Al-Hallaj, H. Wu, R. Selman, R. Sabbah and G. Albright

Alkyl Phosphate: A Flame Retarding Additive for Ionic Liquid-Based Electrolytes for Lithium-Ion Batteries
B. Lalia, N. Yoshimoto, M. Egashira and M. Morita

Inactive Materials Safety Issues in Lithium-Ion Batteries
C. Orendorff, G. Nagasubramanian, T. Lambert and E. Roth

Li-Ion Safety, Mechanisms and Industry Standards
Z. Zhang, S. Santhanagopalan and P. Ramadass