

List of Publication as of Jan. 30. 2014

3+ Papers are under preparation now and will be submitted by end of March. 2014

- Most Recent

1. Yong-Ning Zhou, **Sung-Jin Cho**, Kyung-Wan Nam, and Xiao-Qing Yang

"Structure evolution and kinetics study of Layered $\text{LiNi}_x\text{Mn}_y\text{Co}_z\text{O}_2$ ($x+y+z=1$) Cathode materials during charge using Synchrotron X-ray techniques" The ECS Spring 2014, Orlando, FL, USA (Submitted to JECS)

2. JW Kim, Steve George, Se-Hee Lee* & **Sung-Jin Cho*** and other coworker (*Correspondence to)

"Unraveling the Improved Power Performance of ALD Coated $\text{Li}[\text{Ni}_{1/3}\text{Mn}_{1/3}\text{Co}_{1/3}]\text{O}_2$ Cathodes." , *Journal of Power Source*, Vol. 254, May 15, 2014, pp 190-197.

3. S.-M. Bak, K.-W. Nam, E. Hu, X Yu, K.-Y. Chung, **Sung-Jin Cho***, X.-Q. Yang* (*Correspondence to)

Time resolved XRD (TR-XRD) study for the thermal stability of charged $\text{Li}_x\text{Ni}_{1-2y}\text{Co}_y\text{Mn}_y\text{O}_2$ ($y=0.33, 0.3$ 0.2, and 0.1) cathode. (Submitted to **AFM(Advanced Functional Materials)** in Jan, 2013)

4. **Sung-Jin Cho**, and Frederic Bonhomme

"System and Methods for a Cathode Active Material for a Lithium Ion Battery Cell".

(US PATENT Application Number: US 61/656,401) May. 2013.

5. **Sung-Jin Cho**, Frederic Bonhomme, and Others

"Cathode Active Material For Overcharge Protection in Secondary Lithium Batteries".

(US PATENT Application Number: US 13/664,210) Oct. 2012.

6. S.-M. Bak, K.-W. Nam, E. Hu, X Yu, K.-Y. Chung, **Sung-Jin Cho**, X.-Q. Yang

Insight into Thermal Instability of Charged Cathode Materials for Lithium-Ion Batteries: Combined in situ Synchrotron X-ray and Mass Spectroscopy Study., The ECS Fall 2012, Hawaii, USA

7. **Sung-Jin Cho**, Frederic Bonhomme, Huiming Wu, Khalil Amine

The effect of surface modification of $\text{Li}[\text{Ni}_{0.8}\text{Co}_{0.15}\text{Al}_{0.05}]\text{O}_2$ by AlF_3 on electrochemical performance in large-format Li-ion battery., The IMLB 2012, Jeju, Korea.

8. **Sung-Jin Cho**, Frederic Bonhomme, Sun-Ho Kang, Michael M. Thackeray

Study of surface stabilization of $\text{Li}[\text{Ni}_{0.8}\text{Co}_{0.15}\text{Al}_{0.05}]\text{O}_2$ in mildly acidic solution., The IMLB 2012, Jeju, Korea.

9. Kyung-Wan Nam, **Sung-Jin Cho**, Frederic Bonhomme, Enyuan Hu, Xiqian Yu, Seongmin Bak, Xiao-Qing

Yang, Structural Investigation of Layered $\text{LiNi}_x\text{Mn}_y\text{Co}_z\text{O}_2$ ($x+y+z=1$) Cathode Materials during charge/discharge using Synchrotron X-ray techniques., The IMLB 2012, Jeju, Korea.

10. **Sung-Jin Cho** and Philippe Branchard (Johnson Controls – Saft)
Johnson Controls – Saft Batteries for Electric and Hybrid Vehicles, Current Status & Future Development.
ABAA-3, Seoul, Korea (Sep. 8 to Sep. 10, 2010)

11. **Sung-Jin Cho** and Co-workers

“High-capacity, long-cycle stability of lithium ion battery anode using interface-controlled binder free MWCNT grown on copper.” *ACS Nano*, 2010, 4 (6), pp 3440–3446.

- Past

1. **Sung Jin Cho**, Won Jung Chung, Je-Beck Ju

“A study on the Diffusion coefficient measurement and electrochemical behavior of electrode fabricated by lithium iron oxide”, The Korea Institute of Chemical Engineers, Cho Sun Univ., Oct. 1998, 2109-2112 pages.

2. **Sung Jin Cho**, Seung-Won Lee, Je-Beck Ju, Tae-Won Sohn

“Charge/Discharge properties of $\text{LiFeXMn}_2\text{-XO}_4$ Synthesized with Citric acid”, The Korea Institute of Chemical Engineers, Kyung-Nam Univ., Oct. 1999, 2113-2116 pages.

3. **Sung Jin Cho**, Seung-Won Lee, Je-Beck Ju, Tae-Won Sohn

“The electrochemical properties for the amount of the doped metal element(Fe) of active material $\text{LiMXMn}_2\text{-XO}_4$ as positive electrode for lithium secondary battery”, The Korera Electrochemical Society, Han Yang Univ., Oct. 1999, 50 page.

4. **Sung Jin Cho**, Seung-Won Lee, Je-Beck Ju, Tae-Won Sohn

“A Study on the Electrochemical characteristics of a $\text{LiFeyMn}_2\text{-yO}_4$ fabricated by sol-gel method”, The Korea Electrochemical Society, Korea Electrotechnology Institute Research, May. 2000. 107 page.

5. **Sung Jin Cho**, Je-Beck Ju, Tae-Won Sohn

“ Change of electrochemical characteristics due to the Fe doping in lithium manganese oxide electrode”.
Journal of the Korea Electrochemical Society (2004), 7(3), 131-137.

6. **Sung Jin Cho**, Yong-Suk Chung, Je-Beck Ju, Tae-Won Sohn

“Preparation and Properties of Cathode ($\text{La}_{1-x}\text{Sr}_x\text{MnO}_3$ powder by GNP(Glycine-Nitrate Process) and Pechini Process”, Journal of the Korera Electrochemical Society (1999), 3(2), 117-120.

7. Yong-Suk Chung, **Sung Jin Cho**, Je-Beck Ju, Tae-Won Sohn

“Catalytic activity of Pt and Au catalyst supported on $\text{ZnO/Al}_2\text{O}_3$ in toluene oxidation”,
Journal of The Applied Chemistry, Sep. 1999, 225-228 pages.

8. Min-Soo Kim, **Sung Jin Cho**, Yong-Suk Chung, Je-Beck Ju, Tae-Won Sohn

“Catalytic performance of Pt-Au alloy catalyst in oxidation of methanol and toluene”,
Journal of The Applied Chemistry, Sep. 1999, 229-232 pages 5

9. **Sung Jin Cho**, Yong-Suk Chung, Je-Beck Ju, Tae-Won Sohn

“A study on preparation of nano sized gold catalyst supported on carbon black for fuel cell”,
Journal of The Applied Chemistry, May. 2001, 177-180 pages

10. **Sung Jin Cho**, Je-Beck Ju, Tae-Won Sohn

“Characteristics Study on Electrochemical Oxidation of Phenol Using SnO₂/Ti mesh Catalytic Electrode”,
Journal of The Applied Chemistry, May. 1998, 332-335 pages.

11. **Sung Jin Cho**, Tae-Won Sohn

“Numerical analysis on the Electrochemical Characteristics on the Interface of Electrolyte and Tungsten Oxide Film with regard to the Intercalation of Cations”, HongIk Univ Publication., Dec. 1998, 455-464 pages.

Patent (USA)

1. **Sung Jin Cho** and co-workers workers (Florida International Univ., Univ. of North Texas & Hanyang Univ.) “High efficiency lithium ion battery anode using interface-controlled binder-free carbon nanotubes grown on metal/alloy substrates. (US PATENT Application Number: US 61/222,481) July. 2009.

2. **Sung Jin Cho** and co-workers

“A free available chlorine determination by use continuous flow system with micro array three electrodes”, Patent Number 2000-40712, 2000 year.

3. **Sung Jin Cho** and co-workers

“Determination of Organic compound by metal ion coating based on carbon composite electrode and its preparation method”, Patent Number 2002-0019707, 2002 year.

4. **Sung Jin Cho** and co-workers

“An electrochemical sensor having cleaning function which means of a use stripping voltammeter and a cleaning method as the same”, Patent Number 2002-0041551, 2002 year.

International Conference

1. **Sung Jin Cho**, Seung-Won Lee, Je-Beck Ju, Tae-Won Sohn

“A study on the electrochemical characteristics of active material LiFe_{0.5}Mn_{1.5}O₄ as positive electrode for 4V lithium secondary battery”, The Materials Processing for Nanostructure Device 2001, Kansai Seminar House in Kyoto Univ. of Japan, Sep. 2001.

2. **Sung-Jin Cho**, Richard Hirthe, Martin Seitz

“In Situ Monitoring Technique for a Transesterification Reaction of Vegetable Oils Using Electrical Impedance Spectroscopy” The American Oils Chemists Society, 99th Annual Meeting Abstract, Seattle, WA, USA May. 2008.