

Room A #101 10:30-12:30**[Th-A1]** High Energy Density Electrode Materials**Session Chair:**

KwangSup Eom (GIST, Korea)

Th-A1-1 [Invited] 10:30-11:00**Layered Oxide Cathode Materials for High Energy Density Lithium-Ion Batteries**Xiqian Yu¹, Jue Liu², Enyuan Hu³, Jie-Nan Zhang¹, Hong Li¹, Xuejie Huang¹, and Xiao-Qing Yang³¹CAS, China, ²ORNL, USA, ³Brookhaven Nat'l Laboratory, USA**Th-A1-2 [Invited]** 11:00-11:30**Improved Performances of Sulfur-based Cathode Materials via In-Situ Electrochemical Treatments for the Next Generation Secondary Batteries**Uijin Chang, Hwonki Lee, and KwangSup Eom
GIST, Korea**Th-A1-3** 11:30-11:45**Understanding Potential Mechanism at 1st Charge in Li₂S Cathode Material for Rechargeable Li-S Batteries**Yongjo Jung and Byoungwoo Kang
POSTECH, Korea**Th-A1-4** 11:45-12:00**Adsorption Behavior of Lithium Polysulfides on Functionalized Surface of Ti₂C-based MXene**Eun Seob Sim and Yong-Chae Chung
Hanyang Univ., Korea**Th-A1-5** 12:00-12:15**High-Performance Black Phosphorus- Multiwall Carbon Nanotube Composite for High-Capacity, Durable Lithium-Ion Batteries**Safa Haghghat-Shishavan, Mahboobeh Nazarian-Samani, Masoud Nazarian-Samani, and Kwang-Bum Kim
Yonsei Univ., Korea**Room B #102** 10:30-12:30**[Th-B1]** Emerging Advanced Materials IV**Session Chairs:** Jasbir Singh Hundal (MRS Punjab Technical Univ., India), Daeyong Jeong (Inha Univ., Korea)**Th-B1-1 [Invited]** 10:30-11:00**Electronic Functionality of Superconducting Mixed Anion Layered Compounds (MALCs)**Yoichi KAMIHARA¹, Yujiro TOJO¹, Suguru IWASAKI¹, Ryosuke SAKAGAMI¹, Michitaro YAMAGUCHI¹, Shigeto HIRAI², and Manami NAKANISHI¹¹Keio Univ., Japan, ²Kitami Inst. of Tech., Japan**Th-B1-2 [Invited]** 11:00-11:30**Ferroelectric Response and Switching Behaviour of NaNO₂-PVA Composite Films Fabricated at Moderate Elevated Temperature**Lakhbir Singh^{1,2}, Tarun Garg³, Baljinder kaur^{1,2}, Navneet Dabra⁴, and Jasbir Singh Hundal¹¹MRS Punjab Tech. Univ., India, ²IKG Punjab Tech. Univ., India, ³Punjabi Univ., India, ⁴Mata Sahib Kaur Girls College, India**Th-B1-3** 11:30-11:45**Enhance Piezoelectric Properties by Growing of $0.8(\text{Na}_{0.5}\text{Bi}_{0.5})\text{TiO}_{3-0.2}\text{Sr}_{0.7}\text{Ca}_{0.3}\text{TiO}_3$ Single Crystal by Solid State Crystal Technique**Phan Gia Le¹, Jong Sook Lee¹, John Gerard Fisher¹, Hwang-Pil Kim², and Wook Jo²¹Chonnam Nat'l Univ., Korea, ²UNIST, Korea**Th-B1-4** 11:45-12:00**Transmission Characteristics for LCP Substrates with Various Seed Layers in High Frequency Bands**Tomoyuki Ishii^{1,2}, Mitsuhiro Watanabe¹, Joo-Hyong Noh¹, Hideo Honma¹, and Osamu Takai¹¹Kanto Gakuin Univ., Japan, ²Toppan Printing Co., Ltd., Japan