



# Energy Storage Research Laboratory

## Professor

## 김종순 교수 (Prof. Jongsoon Kim)

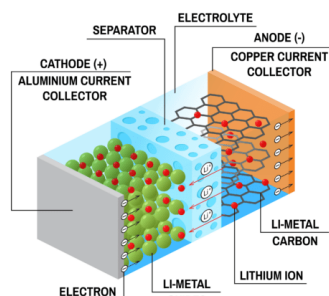


- '21-Present | Associated Professor, Department of Energy Science, Sungkyunkwan University
- '17-'21 | Assistant Professor, Department of Nanotechnology & Advanced Materials Engineering Sejong University
- '14-'17 | Senior Researcher at Korea Atomic Energy Research Institute
- '11-'14 | Department of Materials Science and Engineering (Ph.D.) Seoul National University,
- '01-'11 | Department of Materials Science and Engineering (B.S.&M.S.) Korea Advanced Institute of Science and Technology

## Research Interests

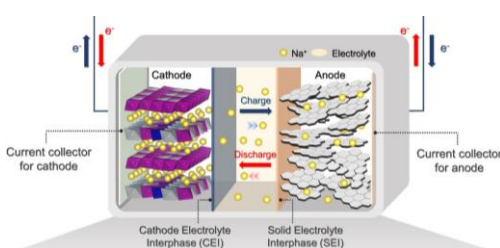
## Synergy of First-Principle Calculations and Experiments

### Li-Ion Batteries (LIBs)



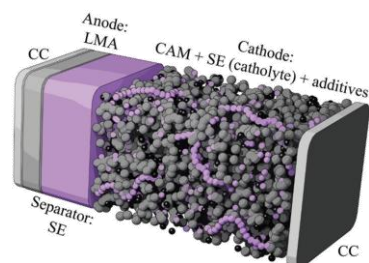
National Fire Sprinkler Association

### Na-Ion Batteries (SIBs)



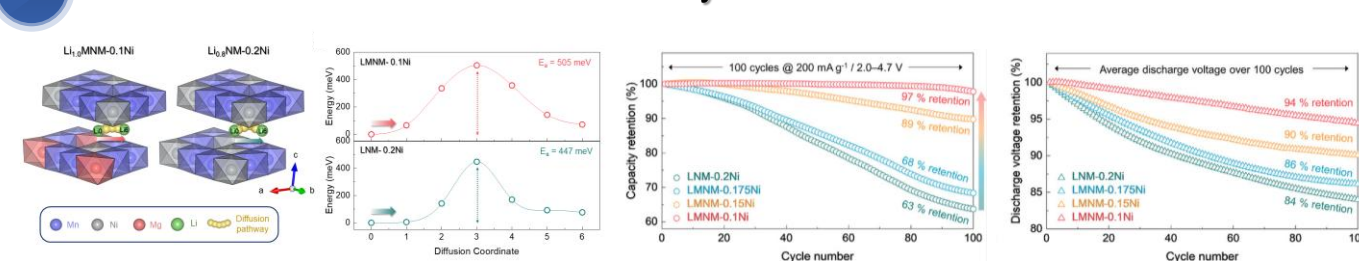
Adv. Energy Mater., 2026, Accepted

### All-Solid-State Batteries (ASSB)

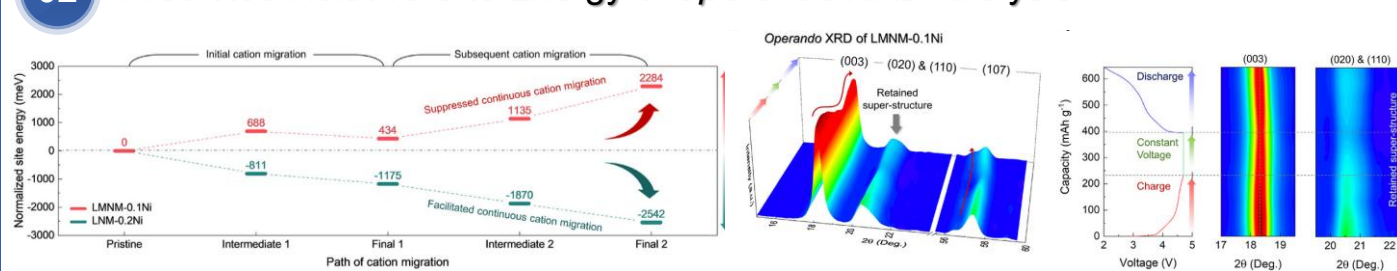


Adv. Energy Mater. 2023, 13, 2301886

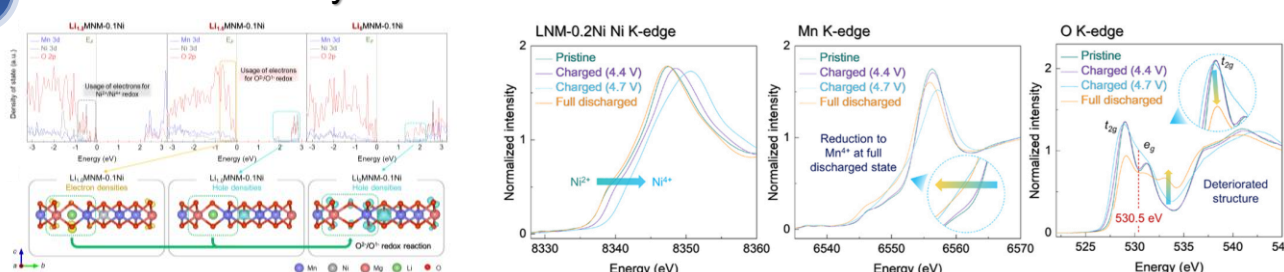
### 01 Predicted Alkali-ion Diffusion Pathway & Electrochemical Performance



### 02 Predicted Relative Site Energy & Operando XRD Analysis



### 03 Calculated Density of States & Redox Reaction Mechanism



## Lab. Information

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📍 N Center #86679

🌐 <https://www.energyscilab.com>



Planetary ball mill



Potentiostat



Glove box



X-ray diffractometer



Electric furnace



Dry room

