

# Lee, Ling 李寧

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○ **Current position:**

Advanced engineer, Li-ion battery division, Giga Solar Materials Corp.

○ **Educations:** PhD in Electrophysics, National Chiao Tung University

○ **Research**

## Expertise

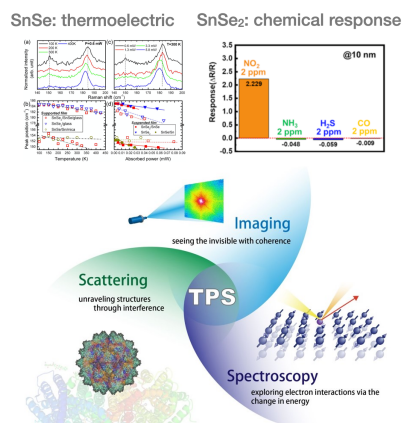
- Operando characterizations on functional devices: memristors, sensors, and lithium ion batteries
- 2D materials and semiconductors: syntheses, physical characteristics, and functional devices



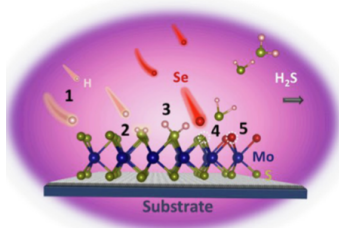
## Interested areas

### A. Phase-controlled nano-materials

- Synthesis of phase-controlled metal, oxide, and transition metal dichalcogenide (TMD), including thin film and nano structures
- Cutting-edge research using synchrotron radiation techniques: crystallinity, stoichiometry, band structure in nanoscale, .....etc
- Functional devices: chemical sensors and gas sensor
- Acoustic mismatched heterostructure



### B. Asymmetric transition metal dichalcogenide



- CVD and plasma-activated growth of asymmetric TMD nanosheet
- Competition and corporation of electrochemical reaction: HER, NRR, ...etc
- Robust SEI layer on anode or metal, and interface to liquid- and solid- state electrolyte