

## Novel Epitaxial Quantum Architectures | SRC\_CNEQA (SNU)

**Date & Time** Dec. 6 (Wed) 10:15~16:15

**Place** 8F, Halla Hall [\[On & Off Hybrid Session\]](#)

**Organized by** SRC-Center for Novel Epitaxial Quantum Architectures, Seoul National University

| Time(Korea Time)   | Presenter   | Title-Research field  |
|--|---|---|
| <b>Dec. 6 (Wed) 10:15~11:45,   Session 1   Chair: Jonghwan Kim (POSTECH, Korea)</b>  |   |   |
| 10:15-10:45  | Jeehwan Kim (Massachusetts Institute of Technology)             | Innovations for saving future of electronics: Wafer-free 3D integration a.k.a “monolithic 3D (M3D)”     |
| 10:45-11:15  | Kunook Chung (Ulsan National Institute of Science & Technology) | Strain engineering of light-emitting diodes and its optoelectronic device applications                  |
| 11:15-11:45  | Jinkyoung Yoo (Los Alamos National Laboratory)                  | Epitaxy and post-processing of semiconductors on two-dimensional materials                              |
| <b>Dec. 6 (Wed) 13:00~14:30,   Session 2   Chair: Bohm Jung Yang (Seoul National University)</b>                                 |   |   |
| 13:00-13:30  | Pu Yu (Peking University)                                       | A correlated polar ferromagnetic metal by design  |
| 13:30-14:00  | SungWoo Nam ( University of California, Irvine )                | Strain-exciton coupling in two-dimensional materials  |
| 14:00-14:30  | Jonghwan Kim (Pohang University of Science and Technology)      | Strong phonon-assisted luminescence processes of indirect excitons in semiconductor moiré superlattices |
| <b>Dec. 6 (Wed) 14:45~16:15,   Session 3   Chair: Kunook Chung (Ulsan National Institute of Science &amp; Technology, Korea)</b> |   |   |
| 14:45-15:15  | Young Joon Hong ( Sejong University)                            | Heterogeneous vertical integration of R/G/B micro-LEDs via remote and van der Waals epitaxy             |
| 15:15-15:45  | Jieun Lee (Seoul National University)                           | Generation and manipulation of quantum light sources in van der Waals materials                         |
| 15:45-16:15  | Bohm Jung Yang (Seoul National University)                      | Quantum valley Hall effect in twisted bilayer systems   |