

Oral Presentation

## [MEET1]Novel Materials, Fundamental Components and Process Technologies

Chair: Jin Jang (KyungHee University)

Co-Chair: Chien-chung Lin (National Chiao Tung University)

Thu. Nov 28, 2019 9:00 AM - 10:30 AM Conference Hall (1F)

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9:30 AM - 9:50 AM

### [MEET1-2]Electron Beam Lithography of PMMA Film Using Direct Growth CNT Cold Cathode Emitter

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Keywords:carbon nanotube (CNT), electron beam(e-beam) lithography, VACNTs

We have developed on electron beam (e-beam) lithography system with novel electron source using vertically aligned carbon nanotubes (VACNTs). After the beam was exposed, the PMMA film on ITO glass was developed in MIBK: IPA developer (MIBK: IPA=1:3). As a result, we observed lithography pattern less than 100 um without electric and magnetic lens. This cold cathode emitter is differentiated from the previous electron source for e-beam lithography.