

Korean International Semiconductor Conference & Exhibition on Manufacturing Technology 2025

## **KISM 2025 BUSAN**

Re:Innovation of Semiconductor Manufacturing for AI Ecosystem

## **Development of a Selective-area ALD Process for buried word line in DRAM**

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Jongho Lee received both his B.S. (2005) and Ph.D. (2012) in Materials Science and Engineering from Seoul National University, Korea, where his doctoral research focused on chalcogenide thin films for phase-change random-access memory. From 2013 to 2015 he served as a post-doctoral researcher in Dr. I-Wei Chen's group at the University of Pennsylvania, investigating nanometallic films for resistance-switching random-access memory (ReRAM). In 2016 he joined SK Hynix Inc., and developed chalcogenide thin-film processes for ReRAM, phase-change RAM (PCRAM), and selector-only memory (SOM). Since 2023, he has been part of the DRAM process group, contributing to low-resistivity metal deposition process developments for DRAM applications.