

**Room H #108** 16:00-18:00**[Mo-H3]** 3D Device Printing III**Session Chairs:**

Sunho Jeong (KRICT, Korea),  
Song Yun Cho (KRICT, Korea)

**Mo-H3-1 [Invited]** 16:00-16:30**High-Resolution 3D Printing for Wearable Electronics**

Jang-Ung Park  
*UNIST, Korea*

**Mo-H3-2 [Invited]** 16:30-17:00**Scratch to Sensitize; Scratch Induced Sensitivity Enhancement in Thin-Film Types of Sensors**

Geonhee Lee<sup>1,2</sup>, Min Choi<sup>1,3</sup>, Soo Sang Chae<sup>1</sup>, Duwon Jeong<sup>1</sup>, Yunho Kim<sup>1</sup>, Hyunju Chang<sup>1</sup>, and Jeong-O Lee<sup>4</sup>  
<sup>1</sup>KRICT, Korea, <sup>2</sup>Sungkyunkwan Univ., Korea, <sup>3</sup>UNIST, Korea, <sup>4</sup>KRICT, Korea

**Mo-H3-3 [Invited]** 17:00-17:30**Customized Nanomaterials for Advanced Applications Viz White Light and Thermoelectric**

Priyesh More  
*DIAT, India*

**Room J #205** 16:00-18:00**[Mo-J3]** Perovskite Solar Cells**Session Chairs:**

Yun Seog Lee (Seoul Nat'l Univ., Korea),  
Stela Canulescu (Technical Univ. of Denmark, Denmark)

**Mo-J3-1 [Invited]** 16:00-16:30**Domain Walls in Organic-Inorganic Halide Perovskite Materials**

Jae Sung Yun, Dohyung Kim, Martin Green, Shujuan Huang, Jan Seidel, and Anita Ho-Baillie  
*Univ. of New South Wales, Australia*

**Mo-J3-2 [Invited]** 16:30-17:00**Discovery of Bismuth-based Alternatives to Lead-Halide Perovskite Solar Cells**

Robert Hoyer  
*Univ. of Cambridge, UK*

**Mo-J3-3 [Invited]** 17:00-17:30**Overcoming The Short-Circuit Behavior in Sn-based Halide Perovskite Solar Cells**

Tze-Bin Song  
*Northwestern Univ., USA*

**Mo-J3-4** 17:30-17:45**Atomic Scale Investigation of Degradation Process on MA(CH<sub>3</sub>NH<sub>3</sub>)PbBr<sub>3</sub> Single Crystal with Ambient Pressure Atomic Force Microscopy (AP-AFM)**

Joong Il Jake Choi<sup>1,2</sup>, Zafer Hawash<sup>3</sup>, Hyunhwa Lee<sup>2</sup>, Luis K. Ono<sup>3</sup>, Yabing Qi<sup>3</sup>, and Jeong Young Park<sup>1,2</sup>  
<sup>1</sup>IBS, Korea, <sup>2</sup>KAIST, Korea, <sup>3</sup>OIST, Japan

**Mo-J3-5** 17:45-18:00**Plasmon-Active Silver Window Electrodes for High Performance Organic Photovoltaics**

Jaemin Lee, Steven Huband, and Ross A. Hatton  
*Univ. of Warwick, UK*