



# 7<sup>th</sup> IEEE Electron Devices Technology and Manufacturing (EDTM) Conference 2023

March 7 – 10, 2023 / COEX Seoul, Korea

17C. Advanced BEOL Materials and Technologies	
Session Date:	March 8(Wed.), 2023
Session Time:	15:15-16:35
Session Room:	Room C (#307 a)
Session Chair	Prof. Kiyong Lee (Hongik University)

**[17C-1] [Invited] 15:15-15:40**

## On the Dopant, Mobility and Defect States in W Doped Amorphous In<sub>2</sub>O<sub>3</sub> for BEOL Transistors

Yaoqiao Hu<sup>1</sup>, Khandker Akif Aabrar<sup>2</sup>, Andrea Palmieri<sup>3</sup>, Matthew Bergschneider<sup>1</sup>, Milan Pešić<sup>3</sup>, Chadwin D. Young<sup>1</sup>, Suman Datta<sup>2</sup> and Kyeongjae Cho<sup>1</sup>

<sup>1</sup>The University of Texas at Dallas, <sup>2</sup>Georgia Institute of Technology, <sup>3</sup>Applied Materials

**[17C-2] [Invited] 15:40-16:05**

## Emerging III-Nitride Ferroelectrics and Their Applications in Memory Devices

D. Jariwala

University of Pennsylvania

**[17C-3] 16:05-16:20**

## Ru Stress Assessment by Membrane Wrinkling for Interconnect Applications

Valeria Founta<sup>1,2</sup>, Jean-Philippe Soulié<sup>1</sup>, Ingrid De Wolf<sup>1,2</sup>, Joris Van de Vondel<sup>2</sup>, Johan Swerts<sup>1</sup>, Zsolt Tőkei<sup>1</sup> and Christoph Adelman<sup>1</sup>

<sup>1</sup>Imec, <sup>2</sup>Catholic University of Leuven

**[17C-4] 16:20-16:35**

## Scaling Properties of Ru, Rh and Ir for a Future Generation Interconnect

Keun Wook Shin<sup>1</sup>, Min-Sik Kim<sup>1,2</sup>, Hyeon-Jin Shin<sup>1</sup> and Ki-Bum Kim<sup>2</sup>

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