



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

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### 7G. RF Device Modeling and Simulation

Session Date:	March 8(Wed.), 2023
Session Time:	10:55-12:05
Session Room:	Room G (#318)
Session Chair:	Prof. Hyeong Chul Shin (Seoul National University)

#### [7G-1] [Keynote]

10:55-11:20

#### High-Frequency Characterization and Modeling of Low and High Voltage FinFETs for RF SoCs

Yogesh S. Chauhan<sup>1</sup>, Anirban Kar<sup>1</sup>, Shivendra S. Parihar<sup>1</sup>, Jun Z. Huang<sup>2</sup>, Huilong Zhang<sup>2</sup>, Weike Wang<sup>2</sup> and Kimihiko Imura<sup>2</sup>

<sup>1</sup>Indian Institute of Technology Kanpur, <sup>2</sup>MaxLinear Inc.

#### [7G-2]

11:20-11:35

#### Small-Signal Model of Nanosheet FET for High-Frequency Range: A Design Perspective of Parallel Stacking and Dual-Dielectric Spacer

Jyoti Patel<sup>1</sup>, Nitya Aggarwal<sup>2</sup>, Navjeet Bagga<sup>3</sup> and S. Dasgupta<sup>1</sup>

<sup>1</sup>Indian Institute of Technology Roorkee, <sup>2</sup>Indian Institute of Technology Kanpur, <sup>3</sup>Indian Institute of Technology Bhubaneswar

#### [7G-3]

11:35-11:50

#### Statistical Analysis of Intrinsic High-Frequency Characteristic Fluctuation of Emerging Silicon Gate-All-Around Nanosheet (NS) MOSFETs at Sub-3-nm Nodes

Sekhar Reddy Kola<sup>1</sup>, Yiming Li<sup>1</sup>, Min-Hui Chuang<sup>1</sup>, Kazuhiko Endo<sup>2,3</sup> and Seiji Samukawa<sup>1</sup>

<sup>1</sup>National Yang Ming Chiao Tung University, <sup>2</sup>Tohoku University, <sup>3</sup>National Institute of Advanced Industrial Science and Technology

#### [7G-4]

11:50-12:05

#### Radio Frequency Performance of High Mobility 2D Monolayer Au<sub>2</sub>S-Based Transistors

Om Maheshwari<sup>1</sup>, Jiang Cao<sup>2</sup>, Youseung Lee<sup>2</sup>, Mathieu Luisier<sup>2</sup> and Tarun Agarwal<sup>1</sup>

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