



7th IEEE Electron Devices Technology and Manufacturing (EDTM) Conference 2023

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27G. High Voltage Compact Modeling

Session Date:	March 8(Wed.), 2023
Session Time:	17:00-18:25
Session Room:	Room G (#318)
Session Chair	Prof. Jongwook Jeon (Konkuk University)

[27G-1] [Invited]

17:00-17:25

Deep-Learning Based Parameter Extraction of Device Models

Sourabh Khandelwal and Fredo Chavez

Macquarie University

[27G-2]

17:25-17:40

An Improved Robust Infinitely Differentiable Drift Resistance Model for BSIM High Voltage Compact Model

Anant Singhal¹, Garima Gill¹, Girish Pahwa², Chenming Hu² and Harshit Agarwal¹

¹Indian Institute of Technology Jodhpur, ²University of California

[27G-3]

17:40-17:55

A New Back-To-Back Graded AlGa_N Barrier for Complementary Integration Technique Based on GaN/AlGa_N/GaN Platform

Jinggui Zhou¹, Huy-Binh Do² and Maria Merlyne De Souza¹

¹The University of Sheffield, ²Ho Chi Minh City University of Technology and Education

[27G-4]

17:55-18:10

Characterization and Modeling of I-V, C-V and Trapping Behavior of SiC Power MOSFETs

Mohammad Sajid Nazir, Ahtisham Pampori, Yawar Hayat Zarkob, Anirban Kar and Yogesh Singh Chauhan

Indian Institute of Technology Kanpur

[27G-5]

18:10-18:25

Accurate Dynamic Performance of SiC MOSFET SPICE Modeling with Parasitic Capacitances Optimization

Chien-Neng Huang, Kung-Yen Lee, Chih-Jung Chang and Yan-Yu Wen

National Taiwan University