



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

March 7 – 10, 2023 / COEX Seoul, Korea

20F. RRAM and PCM	
Session Date:	March 8(Wed.), 2023
Session Time:	15:15-16:40
Session Room:	Room F (#317)
Session Chair:	Dr. Gabriele Navarro (CEA-LETI)

[20F-1] [Invited] 15:15-15:40

Device-Algorithm Co-optimization for Neuromorphic Computing

Sangbum Kim

Seoul National University

[20F-2] 15:40-15:55

Analysis of Valence Change Mechanism Memristors Considering Charge Transition of Oxygen Vacancies

Juseong Park and Kyung Min Kim

Korea Advanced Institute of Science and Technology

[20F-3] 15:55-16:10

Controllable Conductive Filament Formation in Resistive-RAM Using ZnO Nanoparticles and Its Mechanisms

Jun-Ho Byun, Woon-San Ko, Ki-Nam Kim, Do-Yeon Lee, Eun-Gi Kim, Eun-A Koo, So-Yeon Kwon and Ga-Won Lee

Chungnam National University

[20F-4] 16:10-16:25

Crossbar Arrays Based on “Wall” Phase-Change Memory (PCM) and Ovonic-Threshold Switching (OTS) Selector: a Device Integration Challenge Towards New Computing Paradigms in Embedded Applications

G. Bourgeois, V. Meli, R. Antonelli, C. Socquet-Clerc, T. Magis, F. Laulagnet, B. Hemard, M. Bernard, L. Fellouh, P. Dezest, J. Krawczyk, S. Dominguez, F. Baudin, J. Garrione, C. Pellissier, J.-A. Dallery, N. Castellani, M.-C. Cyrille, C. Charpin, F. Andrieu and G. Navarro

Université Grenoble Alpes CEA-Leti

[20F-5] 16:25-16:40

Five-Fold Reduction in RESET Energy Consumption by Nitrogen Doping in Phase Change Memory

Wasi Uddin¹, Ajay Kumar Agrawal¹, Paritosh Meihar¹, Avinash Singh², Tarun Malviya², Rohit Ranjan², Sandip Lashkare¹, Kumar Priyadarshi¹ and Udayan Ganguly¹

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