

**Room G #107** 10:30-12:30**[Th-G1]** Carbon Nanotube Electronics**Session Chairs:**

Yoku Inoue (Shizuoka Univ., Japan),
Martin Kalbac (ASCR, Czech)

Th-G1-1 [Keynote] 10:30-11:00**Growth and Characterization of Semiconducting Carbon Nanotubes for Nanoelectronics**

Jiangtao Wang, Kaili Jiang, Xiang Jin, Zebin Liu, Guo Yu, Dongqi Li, Yujun He, Jie Li, Peng Liu, and Yang Wei
Tsinghua Univ., China

Th-G1-2 [Keynote] 11:00-11:30**Single-Walled Carbon Nanotubes for Perovskite Solar Cells**

Shigeo Maruyama^{1,2}

¹The Univ. of Tokyo, Japan, ²AIST, Japan

Th-G1-3 11:30-11:45**Investigation of Single-Walled Carbon Nanotube Synthesis Yield depending on Substrate Position in a Horizontal Chemical Vapor Deposition Reactor**

Sung-Il Jo and Goo-Hwan Jeong
Kangwon Nat'l Univ., Korea

Room H #108 10:30-12:30**[Th-H1]** Memory&Neuromorphic Devices**Session Chairs:**

Seung Jae Baik (Hankyong Nat'l Univ., Korea),
Yuan Lin (Univ. of Electronic Sci. and Tech. of China, China)

Th-H1-1 [Invited] 10:30-10:55**SiGe Epitaxial Memory for Neuromorphic Computing with Reproducible High Performance based on Engineered Dislocations**

Jeehwan Kim
MIT, USA

Th-H1-2 10:55-11:10**The Synaptic Plasticity of Low-Power Diffusion Memristor with Ag/Ta₂O₅/HfO₂/Pt Structure**

Yu-Rim Jeon, Changhwan Choi, Yawar Abbas, Andrey S. Sokolov, Boncheol Ku, and Sohyeon Kim
Hanyang Univ., Korea

Th-H1-3 11:10-11:25**Enabling the Tantalum Oxide based Memristor for Neuromorphic Applications**

Yawar Abbas, Andrey Sergeevich Sokolov, Yu-Rim Jeon, Sohyeon Kim, Boncheol Ku, and Changhwan Choi
Hanyang Univ., Korea

Th-H1-4 11:25-11:40**Prediction of Atomic Structure and Electronic Properties of A₂B₂XY (A = Si–Pb, B = Cl–I, and XY = PN and SiS) Inorganic Double Helices from First Principles Calculations**

Bijoy T.K.^{1,2}, Murugan P¹, and Vijay Kumar^{2,3}

¹CSIR, India, ²Dr. Vijay Kumar Foundation, India, ³Shiv Nadar Univ., India

Th-H1-5 [Invited] 11:40-12:05**Design of Dielectric Materials in Charge Trap Memories**

Seung Jae Baik
Hankyong Nat'l Univ., Korea

Th-H1-6 [Invited] 12:05-12:30**Interface Engineering in Flexible Semiconductor Heterojunctions**

Yuan Lin
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