Poster List for POSTER SESSION 1

(all odd-numbered posters)

Wednesday, Sept. 24, 12:50 – 14:40

P-01 **Hur Namwook** - Ulsan NIST, Republic of Korea
Multi-Threshold Voltage Selector-Only Memory Based on Non-Toxic amorphous Bi-Chalcogenides

P-03 **Hengyi Hu** - Huazhong University of Science & Technology, China
Investigation of the Electrical Performance and Crystallization Behavior of Carbon-Doped $Ge_iSb_4Te_7$

P-05 **Xue-Peng Wang** - Shenzhen University, China

Ultrathin antimony for ultralow-drift phase-change memory applications

P-07 **Stuart Kendall** - University of Exeter, UK
Mid-Infrared Reconfigurable Spatial Filtering via an Extraordinary Optical Transmission Phase-Change Metasurface

P-09 **Oumaima Meskini** – IM2NP, Aix-Marseille univ., CNRS & Solnil, France

Phase change materials combined with soft-NIL-prepared metasurfaces for large scale tunable photonic applications

P-11 **Mouad Mraouni** – INL, CNRS & STMicroelectronics, France
Nanostructures with low-loss phase-change materials: Towards large-scale reconfigurable nanophotonics

P-13 **Yudha Ramanda** – CINaM, Aix-Marseille univ. & CNRS, France
Sol-gel-based Vanadium Dioxide Thin Film and Conformal Metasurface

P-15 **Filip Ligmajer** – Brno University of Technology, Czechia
VO_2 nanostructures with controlled hysteresis for multilevel nanoscale switchable devices

P-17 **Junchao Song** - University of Exeter, UK
Fabrication-friendly Plasmonically-enhanced All-optical Integrated Photonic Phase-change Memory

P-19 **Kostiantyn Shportko** - Lashkaryov Instit. of Semicond. Physics of NAS, Ukraine
Optical characterization of GeTe-Sb_2Te_3 heterostructures prepared by pulsed laser deposition

P-21 **Joseph Pady** – University of Exeter, UK
Optimisation of Device Readout Efficiency for Phase-Change Integrated Photonic Computing

P-23 **Pierre Meilleur** – Univ. Grenoble Alpes, CEA-LETI & STMicroelectronics, France
Pushing the limits of embedded phase-change memories with innovative Se-rich alloys

P-25 **Mohamad Kanaan** - LTM, CEA-LETI & STMicroelectronics, France
Innovative Threshold-Changeable Memory (TCM) Based on Amorphous GeSbSeN

P-27 **Tushar Chakrabarty**– IEMN, Univ. Lille, CNRS & STMicroelectronics, France
Thermal metrology for phase change materials

P-29 **Victor Bogenschutz** – CEA-LETI & STMicroelectronics, France
Driving the Segregation and Crystallization in Ge-rich GeSbTe by Dopant Introduction

P-31 **Thomas Fernadez** - IM2NP, Aix-Marseille univ., CNRS, France
Time-resolved X-Ray Diffraction from laser-irradiated Ge-rich GST thin films

P-33 **Wei-Chiao Chang** - Tohoku University, Japan
The effects of V doping in CrN based ultra-low energy consumption phase change material

P-35 **Florent Mignerot** – IM2NP, Aix-Marseille univ. & CNRS, France
Crystallization investigations of Ge-rich GST cells using in situ thermal pulses coupled with STEM-EDX and HR-TEM analyses

P-37 **Jiangjing Wang** - Xi'an Jiaotong University, China
High-quality synthesis of $Ge_2Sb_2Te_5$/$TiTe_2$ thin films

P-39 **Shan Song** - Chemnitz University of Technology & Fraunhofer Institute for Electronic Nano Systems, Germany
Influence of Sputtering Parameters on the Stoichiometry and Crystallization Behavior of Germanium Telluride (GeTe) Films Grown by Confocal Magnetron Sputtering

Poster List for POSTER SESSION 2

(all even-numbered posters)

Thursday, Sept. 25, 12:35 – 14:30

P-02 **Kim Seunghwan** - Ulsan NIST, Republic of Korea
Threshold Switching in Solid-State Amorphous Tellurium Accessed via On-Device Electrothermal Melt-Quenching

P-04 **Simone Marcorini** - University of Milano-Bicocca, Italy
Viscosity and the breakdown of Stokes-Einstein relation in supercooled liquid $Ge_2Sb_2Te_5$ from simulations with a neural network potential

P-06 **Piotr Popek** - University of Groningen, The Netherlands
Towards cryogenic phase change materials for neuromorphic image recognition

P-08 **Dario Baratella** - University of Milano-Bicocca, Italy
Ab-initio study of electromigration in liquid GeAsSe alloys for selector device

P-10 **Beomsung Park** - Ulsan NIST, Republic of Korea
Self-aligned Atomically Thin Thermal Barrier for Highly Energy-Efficient Phase-Change Memory

P-12 **Sara De Simone** – CNR-IMM, Italy
Phase-change heterostructures based on $MoSe_2$ intercalated with $Ge_2Sb_2Te_5$

P-14 **Christian Petrucci** – CNR-IMM & Univ. Tor Vergata, Italy
Structural and electronic characterization of Ti-doped GST films: preliminary results

P-16 **Hamid Neggaz** - IM2NP, Aix-Marseille univ. & CNRS, France
Exploring ZnSb Phase Change Material Alloys for Nonvolatile Embedded-Memory Applications

P-18 **Chaymaa Boujrouf** – IM2NP, Aix-Marseille univ., CNRS, France
Nanoscale investigation of electrically-induced transformations in Ge-rich GST for advanced phase change memory applications

P-20 **Nian-Ke Chen** - Jilin University, China
Thermal melting induced band-gap closing and electronic delocalization in Ovonic threshold switching material GeSe

P-22 **Yuxing Zhou** - University of Oxford, UK
Atomistic simulations of Ge–Sb–Te devices for memory applications and neuromorphic computing tasks

P-24 **Qundao Xu** – Huazhong University of Science and Technology, China
Multiscale Design of Doped Antimony-Based Phase-Change Materials

P-26 **Wen-Xiong Song**- Shanghai Instit. of Microsystem and Information Techno., China
Structural ordering of amorphous motifs under electric field in threshold switching chalcogenides

P-28 **Yu-Ting Huang**- State Key Laboratory of Integrated Optoelectronics, Jilin University, China
Complex charge density waves and phases transitions in two-dimensional III_2–VI_3 materials for low-power consumption memory

P-30 **Minh-Anh Luong** – CEMES-CNRS & Univ. Toulouse, France
On the origin and growth of voids in N-doped Ge-rich GeSbTe alloys subjected to thermal annealing

P-32 **Adrien Delpoux**- LPCNO, Univ. Toulouse, France
Impedance Spectroscopy of intermediate states in Ge-rich GeSbTe PCM cells

P-34 **Anbarasu Manivannan** – Indian Institute of Technology Madras, India
Design of All-dielectric Ge-rich Ge-Sb-Te based optical modulator with high modulation efficiency

P-36 **Aastik Agnihotri** - Indian Institute of Technology Madras, India
Improving Insertion Loss and Isolation in GeTe-based RF Switch using Coplanar Waveguide Layout Optimization

P-38 **Frédéric Leroy** - CINaM, Aix-Marseille univ. & CNRS, France
Ferroelectric domain structure and growth of GeTe thin films on silicon substrates: the key role of atomic steps

P-40 **Konstantinos Konstantinou**- University of Turku, Finlan
Evolution of structural disorder and energy landscape in amorphous $Ge_2Sb_2Te_5$ under non-equilibrium conditions