

## 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<sub>1</sub>Sb<sub>4</sub>Te<sub>7</sub>*
- 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<sub>2</sub> 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<sub>2</sub>Te<sub>3</sub> 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 Fernandez** – 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  $\text{Ge}_2\text{Sb}_2\text{Te}_5/\text{TiTe}_2$  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*
- P-18      **Chaymaa Boujrout** – IM2NP, Aix-Marseille univ., CNRS, France  
*Nanoscale investigation of electrically-induced transformations in Ge-rich GST for advanced phase change memory applications*

## Poster List for POSTER SESSION 2

(all even-numbered posters)

**Thursday, Sept. 25, 12:50 – 14:45**

- 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  $\text{Ge}_2\text{Sb}_2\text{Te}_5$  from simulations with a neural network potential*
- P-06      **Piotr Poppek** – 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  $\text{MoSe}_2$  intercalated with  $\text{Ge}_2\text{Sb}_2\text{Te}_5$*
- 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-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, Finland  
*Evolution of structural disorder and energy landscape in amorphous  $Ge_2Sb_2Te_5$  under non-equilibrium conditions*