

2023 GRAPHENE AND BEYOND WORKSHOP

Poster Session

May 18, 2023

	FIRST	LAST	AFFILIATION	POSTER TITLE
1	Ying-Ting	Chan	Rutgers University	Metastable zero-field skyrmion lattice at room temperature in van der Waals (Fe _{0.5} Co _{0.5}) ₅ GeTe ₂
2	Kwanho	Kim	University of Pennsylvania	CMOS-back-end-of-line-compatible AlScN/MoS ₂ ferroelectric field-effect transistors
3	Zengle	Huang	Rutgers University	Spin-polarized scanning tunneling microscopy study of rare-earth monpnictide NdSb
4	Gwangwoo	Kim	University of Pennsylvania	Exciton Confinement in Atomically-Thin, Lateral Quantum Heterostructures
5	Seng Huat	Lee	Penn State	Bulk Synthesis of Layered Van der Waals Materials at 2DCC
6	Nicholas	Trainor	Penn State	Effect of pre-anneal chemistry on the growth and properties of epitaxial MoS ₂ on sapphire
7	William	Huang	Rochester Institute of Technology	Fabrication and Characterization of Local Aluminum Bottom Gated Graphene Transistor with ALD Al ₂ O ₃ Gate Dielectric
8	Carlton	Drew	Penn State	Transport studies on 2D ferromagnetic Mn(Bi,Sb) ₆ Te ₁₀ /BN/graphite tunneling junction and 2D antiferromagnetic MnPS ₃ /graphene QH heterostructures
9	Reynolds	Dziobek-Garrett	Johns Hopkins University	Photon Upconversion in a 2D Inorganic–Organic Semiconductor Heterostructure
10	Jacob	Eisensmith	Rochester Institute of Technology	Critical Examination of Cross Quantum Capacitance on Electric Double Layer Gated 2D Field Effect Transistors
11	Nader	Sawtarie	University of Pittsburgh	Defect engineering of graphene with plasma treatment for 2D metal confinement heteroepitaxy (CHet)
12	Anthony	Trofe	UNCG	Dynamics of Photoluminescence Changes in Two Dimensional Dichalcogenides Materials
13	Na	Zhang	Penn State	Star-shaped WS ₂ Monolayers with Twin Grain Boundaries Promoted by Molybdenum Atoms
14	Hsun	Chuang	Naval Research Laboratory	Emergent moiré phonons due to zone folding in WSe ₂ -WS ₂ van der Waals heterostructures
15	Fabício	Vasconcelos	Visiting scholar	Electronic properties of 2D dimensional systems based on graphene and beyond

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16	Kate	Baumler	Penn State	Topochemical manipulations on ternary layered borides toward the synthesis of two-dimensional materials
17	Dnyanesh	Sarawate	University of Pittsburgh	Field-Controlled Ion-Locked Polymorphic Electronics for Hardware Security
18	Anuj	Bisht	Penn State	Investigating ReS ₂ /MoS ₂ 2D heterostructures
19	Huiran	Wang	University of Pittsburgh	Local Write, Read, and Erase of a Graphene/Monolayer Electrolyte/h-BN Heterostructure via Electric Force Microscopy
20	Hyosik	Kang	Penn State	Understanding rare earth point defects in MoS ₂ and WS ₂
21	Jared	Averitt	University of North Carolina - Greensboro	High Throughput Potential Neural Network Algorithm to Exploit Non-local Interactions on Graphene Interface
22	Shubham Sukumar	Awate	University of Pittsburgh	Strain-induced semiconducting to semi-metallic phase transition in MoTe ₂ using a single-ion conductor
23	Kathleen	McCreary	Naval Research Laboratory	Behavior of Excited States in 2H and 3R Bilayer WSe ₂
24	Wenbo	Ge	Rutgers University	Visualizing Temperature Driven Ferromagnetic to Antiferromagnetic Transition in MnSb ₂ Te ₄
25	M Saifur	Rahman	Penn State	Physical Vapor Deposition Techniques of Metals on 1L MoS ₂
26	Edgar	Dimitrov	Penn State	Characterization of Single Photon Emitters in Hexagonal Boron Nitride Nanoflakes
27	Natalya	Sheremetyeva	Penn State	Computational simulations of Raman-spectroscopy-related properties of materials
28	John Wyatt	Morrell	Rochester Institute of Technology	Realizing Gate-All-Around Vertical Nanowire Field-Effect Transistors Based on Van Der Waals Epitaxial InAs-on-2D Heterostructures
29	Yuanxi	Wang	University of North Texas	Rational Design of Defects with Small Huang-Rhys Factors in 2D Materials
30	Derrick Shao Heng	Liu	Penn State	MBE growth of the In-Se system for high-performance field effect transistor
31	Cori	Sutton	Rochester Institute of Technology	Achieving a Linear Synaptic Update in Electric Double Layer Gated 2D Field Effect Transistors for Applications in Artificial Neural Networks

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32	Bartolomeu	Viana Neto	Penn State	Optical Properties of Single-Layer WS ₂ and Substrate Influence
33	Roberto	Prado-Rivera	FIU 2DCC	2D Layered Chalcogenides from Ordered Vacancy Compounds
34	Xinyi	Li	Penn State	Channeling and Edge Reflections of Surface Polaritons Observed in Star-Shaped WS ₂ Islands via sSNOM Imaging
35	Maria	Hilse	Penn State	High-Temperature Superconductor FeSe Films Enabled Through Flux Ratio and Temperature Control