APS March Meeting 2019 – 2DCC Presentations

Note: The following 18 have either acknowledged the 2DCC in their abstract or will in their talk/poster

**Session B02: Dielectric & Ferroic Oxides -- Flexoelectric, Photovoltaic, and Piezoelectric properties**
11:15 AM–2:15 PM, Monday, March 4, 2019
BCEC Room: 107A

Abstract: B02.00006: Complex chalcogenides as highly-polarizable semiconductors*
1:03 PM–1:15 PM

Presenter: Rafael Jaramillo (MIT)
2DCC User – Bulk Growth Facility

**Session E03: Novel Transport in Topological Systems**
8:00 AM–11:00 AM, Tuesday, March 5, 2019
BCEC Room: 107B

Abstract: E03.00009: \( \mu \)-ARPES studies of few-layer WTe\(_2\)
9:36 AM–9:48 AM

Presenter: Antonio Rossi (University of California, Davis)
2DCC User – Bulk Growth Facility

**Session E13: 2D Materials (General) -- Growth, Mostly CVD/T**
8:00 AM–10:48 AM, Tuesday, March 5, 2019
BCEC Room: 153B

Abstract: E13.00004: From Synthesis to Quantum Properties of Novel 2D Layers*
8:36 AM–9:12 AM

Presenter: Joshua Robinson (Materials Science and Engineering, Penn State University)
2DCC In-House Research – Thin Films Facility

**Session E40: Magnetic Excitations in Oxides**
8:00 AM–11:00 AM, Tuesday, March 5, 2019
BCEC Room: 208

Abstract: E40.00012: Terahertz emission spectroscopy of YIG | topological insulator bilayers
10:36 AM–10:48 AM

Presenter: Evan Jasper (Department of Physics, The Ohio State University)
2DCC User – Thin Films Facility

**Session F15: 2D Materials (Semiconductors) -- Optical Properties I**
11:15 AM–2:15 PM, Tuesday, March 5, 2019
BCEC Room: 154

Abstract: F15.00003: Exciton regulation of resonant Raman scattering in monolayer MoS\(_2\)
11:39 AM–11:51 AM

Presenter: Yuanxi Wang (Materials Research Institute, Penn State University)
2DCC In-house Research – Theory/Simulation Facility
Session G70: Poster Session I (2:00pm-5:00pm)
2:00 PM, Tuesday, March 5, 2019
BCEC Room: Exhibit Hall

Abstract: G70.00071: Schottky diode based on large area CVD-grown WSe$_2$
Presenter: Ahmad Matar Abed (Physics and Electronics, University of Puerto Rico at Humacao)
2DCC User – Thin Films Facility

Abstract: G70.00040: Optical Properties of MBE-grown (Bi$_{1-x}$Sb$_x$)$_2$Te$_3$ Thin Films
Presenter: Phoebe Killea (Kenyon College)
2DCC User – Thin Films Facility

Session R41: Spin Dynamics II
8:00 AM–11:00 AM, Thursday, March 7, 2019
BCEC Room: 209

Abstract: R41.00002: Ferromagnetic resonance and proximity effect in WTe$_2$/magnetic insulator heterostructure
8:12 AM–8:24 AM
Presenter: Peng Li (Department of Applied Physics, Stanford University)
2DCC User – Thin Films Facility

Session S02: Topological Materials -- Magnetic Materials
11:15 AM–2:15 PM, Thursday, March 7, 2019
BCEC Room: 107A

Abstract: S02.00003: Crossover of Quantum Anomalous Hall to Topological Hall Effects in Magnetic Topological Insulator Sandwich Heterostructures
11:39 AM–11:51 AM
Presenter: Jue Jiang (Physics, Penn State University)
2DCC In-house Research – Thin Films Facility

Abstract: S02.00006: Anomalous Hall Effect in Intrinsic Antiferromagnetic Topological Insulator MnBi$_2$Te$_4$
12:15 PM–12:27 PM
Presenter: Seng Huat Lee (Materials Research Institute, Penn State University)
2DCC In-house Research – Bulk Growth Facility

Abstract: S02.00009: Anisotropic magnetotransport and planar Hall effect in the quantum anomalous Hall regime
12:51 PM–1:03 PM
Presenter: Michelle Tomczyk (Physics, Penn State University)
2DCC In-house Research – Thin Films Facility
Abstract: S02.00010: Berry Phase Engineering in Magnetic Topological Insulator Heterostructures*
1:03 PM–1:15 PM
Presenter: Fei Wang (Physics, Penn State University)
2DCC In-house Research – Thin Films Facility

Abstract: S02.00012: Magneto-Transport Study of Magnetic/Nonmagnetic Topological Insulator Heterostructures*
1:27 PM–1:39 PM
Presenter: Di Xiao (Physics, Penn State University)
2DCC In-house Research – Thin Films Facility

Session T70: Poster Session III(1:00pm-4:00pm)
1:00 PM, Thursday, March 7, 2019
BCEC Room: Exhibit Hall

Abstract: T70.00239: Characterization of 2D Hybrid Systems: Graphene and Beyond
Presenter: Sajedeh Pourianejad (JSNN, UNC Greensboro)
2DCC User – Thin Films Facility

Abstract: T70.00236: Inversion-domain-free growth of epitaxial MoS$_2$ on hBN assisted by substrate defects: towards full orientation control
Presenter: Yuanxi Wang (Materials Research Institute, Pennsylvania State University)
2DCC In-House Research – Theory/Simulation Facility

Session V02: Topological Materials -- Mesoscopic and Novel Probes
2:30 PM–5:30 PM, Thursday, March 7, 2019
BCEC Room: 107A

Abstract: V02.00008: Topological Hall Effect in Dual-gated Magnetic Topological Insulator Heterostructures
3:54 PM–4:06 PM
Presenter: Run Xiao (Physics, Penn State University)
2DCC In-house Research – Thin Films Facility

Session V13: 2D Materials -- Optical Properties
2:30 PM–5:30 PM, Thursday, March 7, 2019
BCEC Room: 153B

Abstract: V13.00009: Electric field effect studies of atomically thin crystals of ferroelectric In$_2$Se$_3$
4:54 PM–5:06 PM
Presenter: Justin Rodriguez (Physics, Penn State University)
2DCC User – Bulk Growth Facility
**Session X09: Topological Materials -- Thin Films**
8:00 AM–10:48 AM, Friday, March 8, 2019
BCEC Room: 151A

**Abstract: X09.00006: In-situ analysis of MBE-grown ZrTe₅ thin films**
9:24 AM–9:36 AM

**Presenter:** Timothy Pillsbury (Physics and Materials Research Institute, Pennsylvania State University)

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