

nanoGe Fall Meeting19 (NGFM19)

#RadDet19. Radiation Detection Semiconductors Materials, Physics and Devices

Berlin, Germany, 2019 November 4th - 5th
Conference Chairs: Mahshid Ahmadi and Germà Garcia-Belmonte

Conference Program

November 4th - Day 2 (Monday)	
	Plenary Session
09:00 - 09:30 Session-K1	Efrat Lifshitz *(Schulich Faculty of Chemistry, Solid State Institute, Russell Berrie Nanotechnology Institute and the Helen Diller Quantum Information Center; Technion, Haifa, Israel)*, Maksym Kovalenko, Andrew Rappe The Effect of Magnetism on the Optical Properties of Bulk and Confined Perovskite Structures
09:00 - 09:30 Session-K2	Daniel Nocera *(Harvard University)* Sustainable and Renewable Carbon and Nitrogen Cycles for Fuel and Crop Production
	RadDet
09:30 - 10:00 RadDet-I1	Fei Ye, Wallace C.H. Choy *(Department of Electrical and Electronic Engineering, The University of Hong Kong)* A new kind of Cuboid CH3NH3PbI3 Single Crystals for Highly Performed X-ray and Photon Detectors
10:00 - 10:30 RadDet-I2	Lei R. Cao *(1. Nuclear Engineering Program, Department of Mechanical and Aerospace Engineering, The Ohio State University, Columbus, Ohio, 43210, USA)*, Lei Pan, Yuanxiang Feng, Praneeth Kandlakunta, Jinsong Huang Acquisition and Evaluation of Gamma-ray Energy Spectrum with CsPbBr3
10:30 - 11:00	**Coffee Break**
	RadDet
11:00 - 11:30 RadDet-I1	Gebhard J. Matt *(I-Meet Lehrstuhl für Werkstoffe der Elektronik- und Energietechnik, FAU University)*, Ievgen Levchuk, Judith Knüttel, Shreetu Shrestha, Johannes Dallmann, Rainer Hock, Wolfgang Heiss, Christoph J. Brabec High Performance X-ray to Current Converters Fabricated Via Sintering or Melting of a Metal-halide Perovskite
11:30 - 12:00 RadDet-O1	Eric Gros-Daillon *(University Grenoble Alpes, CEA-LETI)*, Jean-Marie Verilhac, Oriane Baussens, Smail Amari, Julien Zaccaro, Alain Ibanez, Pierre Rohr Investigation on Chromium and PEDOT-PSS Electrodes on CH3NH3PbBr3 Single Crystals: Impact on Dark Current and X-ray Photocurrent
12:00 - 12:30 RadDet-O2	Maximilian Schultz, Nico Leupold, Ralf Moos, Fabian Panzer *(Soft Matter Optoelectronics, Department of Physics, University of Bayreuth, Bayreuth 95440, Germany)* A Solvent free Route for Halide Perovskite Film Processing Based on Pressure Treatment of Perovskite Powders
12:30 - 14:00	**Lunch**
	RadDet
14:00 - 14:30 RadDet-I1	Xiaogang Liu *(National University of Singapore)* All-inorganic Perovskite Nanocrystal Scintillators
14:30 - 15:00 RadDet-I2	Mao-Hua Du *(Oak Ridge National Laboratory)* Self-Activated Low-Dimensional Metal Halide Phosphors and Scintillators
15:00 - 15:30 RadDet-I3	Michael Saliba *(TU Darmstadt)* Bright and Fast Scintillation of Organolead Perovskite MAPbBr3 at Low Temperatures
15:30 - 16:00	**Coffee Break**

	RaDet 1.4
16:00 - 16:30 1.4-O1	Ferdinand Grozema *(Department of Chemical Engineering, Delft University of Technology, The Netherlands)* Radiation-induced conductivity in 3D and 2D hybrid perovskites
November 5th - Day 3 (Tuesday)	
	Plenary Session
08:30 - 09:00 Session-K1	Juan Bisquert *(1 Institute of Advanced Materials (INAM), Universitat Jaume I, Castellon, 12006 (Spain))* Understanding Time Scales of Ionic and Electronic Phenomena in Perovskite Solar Cells
08:30 - 09:00 Session-K2	William Tisdale *(Massachusetts Institute Of Technology)* Nonequilibrium Dynamics of Excitons and Charges in Semiconductor Nanomaterials
	RadDet 2.1
09:00 - 09:30 2.1-I1	Eric Lukosi *(Department of Nuclear Engineering, University of Tennessee, Knoxville, TN 37996)*, Jeremy Tisdale, Travis Smith, Ryan Tan, Bogdan Dryzhakov, Andrew Shayotovich, Andrew Naylor, Kate Higgins, Jessica Charest, Bin Hu, Mahshid Ahmadi Engineering Hybrid Perovskite Materials for Spectroscopic Sensing of Ionizing Radiation
09:30 - 10:00 2.1-I2	Yadong Xu *(MIIT Key Laboratory of Radiation Detection Materials and Devices)* The Progress on Solution-processed Metal Halide Perovskites for Nuclear Radiation Detection in NPU
10:00 - 10:30 2.1-I3	Sergii Yakunin *(Laboratory for Thin Films and Photovoltaics, Empa – Swiss Federal Laboratories for Materials Science and Technology, CH-8600 Dübendorf, Switzerland)*, Maksym Kovalenko Solution-processed Metal Halide Perovskites of Various Dimensionalities for Hard-radiation Detection Using Direct Conversion and Scintillation
10:30 - 11:00	**Coffee Break**
	RadDet 2.2
11:00 - 11:30 2.2-I2	Guangda Niu *(Wuhan National Laboratory for Optoelectronics, Huazhong University of Science and Technology, Wuhan City, Hubei Province, China, 430074)*, Bo Yang, Weicheng Pan, Haodi Wu, Jiang Tang X-ray Detection and Imaging Based on Lead-free Double Perovskites
11:30 - 12:00 2.2-I1	K. P. Gradwohl, O. Gybin, J. Janicskó-Csáthy, N. Abrosimov, R. R. Sumathi *(Leibniz Institute for Crystal Growth (IKZ))* High Purity Germanium Crystals for Detector Application - the Path Traveled so far and the Way Ahead
12:30 - 14:00	**Lunch**
14:00 - 15:30	**RadDet 2.3**
15:30 - 16:00	**Coffee Break**
16:00 - 17:00	**RadDet 2.4**
17:00 - 19:00	**Poster Session**

Poster Contribution

001	Yadong Xu *(Key Laboratory of Radiation Detection Materials and Devices)* Solution-processed Metal Halide Perovskites for Nuclear Radiation Detection