

**WSMON4: Ultrafast Pump
Probe Optical Microscopy
Techniques and their
Applications in Nanoscience**

Report of Contributions

Contribution ID: 1

Type: **not specified**

Introduction/opening remarks by organizers

Monday, 17 May 2021 10:00 (5 minutes)

Contribution ID: 2

Type: **not specified**

Ultrafast Studies of Isomerization and Proton Transfer in Photoactive Fluorescent Proteins

Monday, 17 May 2021 10:05 (30 minutes)

Presenter: MEECH, Steve (Dept. Chemistry, University of East Anglia, United Kingdom)

Contribution ID: 3

Type: **not specified**

IMEC's AttoLab adaptation of ultrafast pump probe spectroscopy and lensless imaging techniques to study nanodevice fabrication and high energy radiolysis of photoresists

Monday, 17 May 2021 10:35 (30 minutes)

Presenter: PETERSEN, John (IMEC, Leuven, Belgium)

Contribution ID: 4

Type: **not specified**

Synchrotron and Optical Probing of Mixed Halide Perovskites for Photovoltaics

Monday, 17 May 2021 11:05 (30 minutes)

Presenter: HODGES, Deidra R. (Electrical Engineering, UT El Paso, TX)

Contribution ID: 5

Type: **not specified**

Pump-probe spectroscopy reveals fundamental excited state dynamics of noble metal nanoparticles

Monday, 17 May 2021 11:45 (30 minutes)

Presenter: FRON, Eduard (Dept. Chemistry, K.U.Leuven, Belgium)

Contribution ID: 6

Type: **not specified**

Ultrafast Dynamic Microscopy of Exciton and Charge Transport

Monday, 17 May 2021 12:15 (30 minutes)

Presenter: HUANG, Libai (Dept. Chemistry, Purdue University)

Contribution ID: 7

Type: **not specified**

Ultrafast Pump-Probe Microscopy of Photocarrier Transport in 2D Materials and Heterostructures

Monday, 17 May 2021 13:45 (30 minutes)

Presenter: ZHAO, Hui (Department of Physics and Astronomy, The University of Kansas)

Contribution ID: 8

Type: **not specified**

Low Energy Spectroscopies with Synchrotron Radiation: From Micro to Nano and Opportunities for Time-Resolved Methods

Monday, 17 May 2021 14:15 (30 minutes)

Presenter: CARR, Larry (NSLS-2 Brookhaven National Laboratory, NY)

Contribution ID: 9

Type: **not specified**

Poincaré engineering of the nanofemto topology of surface plasmon polariton fields

Monday, 17 May 2021 14:45 (30 minutes)

Presenter: PETEK, Prof. Hrvoje (Department of Physics and Astronomy, University of Pittsburgh)

Contribution ID: 10

Type: **not specified**

Unraveling fundamental processes in two-dimensional nanomaterials with ultrafast nonlinear optical microscopy

Monday, 17 May 2021 15:25 (30 minutes)

Presenter: PRASANKUMAR, Rohit (Center for Integrated Nanotechnologies Los Alamos National Laboratory, NM)

Contribution ID: 11

Type: **not specified**

Time-resolved hard x-ray diffraction microscopy for nanoscience

Monday, 17 May 2021 15:55 (30 minutes)

Presenter: WEN, Haidan (X-Ray Science Division, Argonne National Laboratory)

Contribution ID: 12

Type: **not specified**

Discussion on the future of the ultrafast/synchrotron field and concluding remarks

Monday, 17 May 2021 16:25 (20 minutes)