nanoGe Fall Meeting19 (NGFM19)

#Exciup19. Excitonic up-downconversion

Berlin, Germany, 2019 November 6th - 7th
Conference Chairs: Bruno Ehrler and Akshay Rao

Conference Program

November 6th - Day 4 (Wednesday)	
08:45 - 09:00	**Announcement of the day & Presentation of NFM20 /Plenum-Room B4**
	Plenary Session 5 / Plenum Chair: Jacky Even Room: Plenum
09:00 - 09:30 Plenum-K1	David Mitzi *(Duke University)* Organic-Inorganic Perovskites: Unrivaled Versatility for Semiconductor Design and Fabrication
	Plenary Session 6 / Room B4 Chair: Erwin Reisner Room: Breakout 4
09:00 - 09:30 B4-K1	Jenny Zhang *(Department of Chemistry, University of Cambridge - UK)* Semi-artificial Photosynthesis: a Platform for Studying and Wiring Photosynthesis
	Exciup 1.1 / Room B5 Chair: Bruno Ehrler Room: Breakout 5
09:30 - 10:00 B5-I1	Richard Friend *(Cavendish Laboratory, Department of Physics, University of Cambridge, UK)* New materials for singlet exciton fission to triplet pairs
10:00 - 10:30 B5-O1	Benjamin Daiber *(Center for Nanophotonics, AMOLF, Science Park 104, The Netherlands)*, Koen v.d. Hoven, Joris Y. Bodin, Stefan Luxembourg, Moritz Futscher, Bruno Ehrler Efficiency Potential and Application of Singlet Fission Enhanced Silicon Solar Cells using Different Energy Transfer
10:30 - 11:00	**Coffee Break**
	Exciup 1.2 / Room B5 Chair: Timothy Schmidt Room: Breakout 5
11:00 - 11:30 B5-O1	Raj Pandya *(Optoelectronics Group, Cavendish Laboratory, University of Cambridge, UK.)*, Akshay Rao Optical Projection and Spatial Separation of Spin Entangled Triplet-Pairs from the S1 (21Ag-) State of Pi-Conjugated Systems
11:30 - 12:00 B5-I1	Xiaoyang Zhu *(Department of Chemistry, Columbia University, New York, New York 10027, United States)* Understanding and Controlling the Triplet Pair States in Singlet Fission
12:00 - 13:30	**Lunch**
	Exciup 1.3 / Room B5 Chair: Artem Bakulin Room: Breakout 5
14:00 - 14:15 B5-O1	David Jones *(School of Chemistry, Bio21 Institute, University of Melbourne, , Parkville, VIC 3010, Australia.)* Non-traditional Singlet Fission Materials
14:15 - 14:30 B5-O2	Elham M. Gholizadeh, Timothy Schmidt *(PhD student)* Oxygen-Enhanced Upconversion of near Infrared Light from Below the Silicon Band Gap
14:30 - 15:00 B5-I1	Ferdinand Grozema *(Delft University of Technology (TU Delft), The Netherlands)* Triplet Dynamics in Perylenediimides

15:00 - 15:30 B5-I2	Luis Campos *(Department of Chemistry, Columbia University, New York, New York 10027, United States)* Materials Design for Third Generation Solar Cells
15:30 - 16:00	**Coffee Break**
	Exciup 1.4 / Room B5 Chair: Artem Bakulin Room: Breakout 5
16:00 - 16:30 B5-O1	Alexandr Zaykov *(Institute of Organic Chemistry and Biochemistry of the CAS)*, Josef Michl, Zdeněk Havlas, Eric Buchanan, Milena Jovanović Singlet Fission: Chromophores for Exciton Downconversion
November 7th - Day 5 (Thursday)	
08:45 - 09:00	**Announcement of the day / Plenum-Room B4**
	Exciup 2.1 / Room B5 Chair: Luis Campos Room: Breakout 5
09:00 - 09:30 B5-O1	Kazuhiko Seki *(National Institute of Advanced Industrial Science and Technology (AIST), Tsukuba Central 5, 1-1-1 Higashi, Tsukuba, Ibaraki 305-8565, Japan)*, Tomoaki Yago, Ryuzi Katoh Diffusion-limited Geminate Delayed Fluorescence by Singlet Fission and Triplet Fusion
09:30 - 10:00 B5-I1	Artem Bakulin *(Department of Chemistry and Centre for Plastic Electronics, Imperial College London)* Carrier-Carrier vs Carrier-Phonon Interactions in Lead-halide Perovskite Materials: Role of Carrier Density, Nanoconfinement, and Surface Ligands
10:00 - 10:30 B5-O2	Silvia Ferro *(Institute AMOLF)*, Bruno Ehrler Harnessing Singlet Fission for Perovskite Photovoltaic Applications
10:30 - 11:00	**Coffee Break**
	Exciup 2.2 / Room B5 Chair: Ferdinand Grozema Room: Breakout 5
11:00 - 11:30 B5-O1	Jonas Sandby Lissau *(SDU NanoSYD, Mads Clausen Institute, University of Southern Denmark)*, Malika Khelfallah, Morten Madsen Routes towards Improved Solar Energy Conversion in Organic and Hybrid Solar Cells via Photon Upconversion
11:30 - 12:00 B5-I1	Timothy Schmidt *(ARC Centre of Excellence in Exciton Science, School of Chemistry, UNSW Sydney, Australia)* Photochemical upconversion and photovoltaics
12:00 - 13:30	**Lunch**
	Exciup 2.3 / Room B5 Chair: Ferdinand Grozema Room: Breakout 5
13:30 - 14:00 B5-O1	Sarah Wieghold, Alexander Bieber, Zachary VanOrman, Lea Nienhaus *(Florida State University)* NIR-to-visible Upconversion Sensitized by Bulk Lead Halide Perovskites
14:00 - 14:15 B5-O2	Victor Gray *(Department of Chemistry, Ångström Laboratory, Uppsala University)*, Jesse Allardice, Simon Dowland, Zhilong Zhang, James Xiao, Neil Greenham, Akshay Rao Energetic Dependence of Triplet Energy Transfer to PbS Quantum Dots for Singlet-Fission Based Photo-multiplication
14:15 - 14:30 B5-O3	Sourav Maiti *(Delft University of Technology, The Netherlands)*, Silvia Ferro, Benjamin Daiber, Alyssa van den Boom, Sidharam Pujari, Han Zuilhof, Bruno Ehrler, Sachin Kinge, Laurens D. A. Siebbeles Dynamics of Singlet Fission in Tetracene and Triplet Transfer to Silicon
14:30 - 14:45 B5-O4	Frederik Eistrup, Klaus Schwarzburg, Sergiu Levcenco, Dennis Friedrich, Thomas Unold, Klaus Lips, Eva Unger, Rowan MacQueen *(Helmholtz-Zentrum Berlin für Materialien und Energie GmbH, Germany)* Thin film halide perovskite as a triplet fusion sensitizer: present status and open questions

14:45 - 15:15 B5-I1	Felix Castellano *(North Carolina State University)* Triplet Migration Across Quantum Dot-Molecular Interfaces
15:30 - 16:00	**Coffee Break**
17:00 - 19:00	**Poster Session**