| Thursday, 29.02.2024 |  |  |                 |   |  |  |
|----------------------|--|--|-----------------|---|--|--|
| _                    | Fu <mark>ndament</mark> a<br>ph <mark>otophysic</mark> s |  | 10:30<br>24 min | Many-body interactions in two-dimensional halide perovskites: exciton-electron compleexes & electron-phonon coupling                        |  |  |
|                      | Presentations 1  |  | 11:00<br>12 min | Coherent exciton dynamics in lead-free double perovskites   |  |  |
|                      |  |  | 11:15<br>24 min | Understanding and suppressing interfacioal charge recombination for high performance perovskite solar cells (SURPRISE II)                   |  |  |
|                      |  |  | 11:45<br>12 min | Spin dynamics of excitons, carriers and nuclei in metal halide perovskite nanostructures  |  |  |
|                      |  |  | 12:00<br>18 min | Spatially resolved studies on addressable defects in hybrid organic-inorganic perovskite micro-crystals prepared in the gas phase           |  |  |
|                      |  |  |                 |   |  |  |
|                      | Crystals &<br>n formation                                |  | 14:00<br>18 min | Electroluminescent perovskite nanocrystals – From tailor-made assemblies to optoelectronic properties                                       |  |  |
|                      | Presentations 2  |  | 14:25<br>12 min | Dielectric effects in hybrid perovskites and charge selective trap states   |  |  |
|                      |  |  | 14:40<br>12 min | Control over grain size and crystallinity: Role o trap states in perovskites II (Perocryst)   |  |  |
|                      |  |  | 14:55<br>12 min | Coupled exp. & theo. Investigation of the process parametes controling the perovskite structure formation: towards thick defect-free layers |  |  |
|                      |  |  |                 |   |  |  |

15:10

12 min

Control of exciton recombination and transfer

with tailored material design

## Friday , 01.03.2024

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|----|---------------------------|----|-----------------|--|--|--|
|    | Defects  Mixed  mposition | os | 09:00<br>12 min | Correlating defect densities with recombination losses in halide-perovskite solar cells (CRE-ATIVE)  |  |  |
|    |                           |    | 9:15<br>12 min  | Improving intrinsic stability of perovskite solar cells by additives   |  |  |
|    |                           |    | 9:30<br>12 min  | Defect Spectroscopy and Device<br>Characterization (Projekt PERFECT)   |  |  |
|    |                           |    | 9:45<br>12 min  | Understanding the evolution on structure, ion migration and defect properties during (de)mixing of lead-halide perovskites (DE-MIX)                                      |  |  |
| Со |                           |    | 10:00<br>12 min | Hybrid multi-junction solar cells based on a monolithic integration of a wide-bandgap organo-metal-halide perovskite and low-bandgap organic polymer sub-cells (MUJUPO2) |  |  |
|    |                           |    | 10:15<br>12:min | Two-dimensional perovskites – from fundamental understanding to their application at interfaces in perovskite solar cells  |  |  |
|    | Stacks &                  |    |                 |  |  |  |
|    | Presentations 4 green     |    | 11:00<br>24 min | Highly efficient all-perovskite tandem solar cells with reduced recombination losses and improved stability by innovative characterization (HIPSTER-PRO)                 |  |  |
|    |                           |    | 11:30<br>18 min | Interfaces in all-perovskite tandem solar cells  |  |  |
|    | Pre                       |    | 11:55<br>18 min | Perovskite solar cells with graphite electrodes: advanced interfaces for highest performance and stability (PeroGAIN)  |  |  |
|    |                           |    |                 |  |  |  |