

2nd Perovskite Materials and Solar Cells Meeting

February 28th - March 1st 2024

Comisión Nacional de Energía Atómica

Buenos Aires, Argentina

Program

(v) stands for virtual sessions. Invited speakers are highlighted in green.

February 28th.

09:00 - 12:00 Registration

Oral presentations (Auditorio Emma Perez Ferreira)

10:30 – 11:30: Dr. M. Dolores Pérez.
 Welcome words – Presentation.
 Departamento de la Física de la Materia Condensada – INN - CNEA - UNSAM, San Martín

11:30 – 12:15: Dr. Juan-Pablo Correa-Baena. *Phase Transformations via Surface Defects in Halide Perovskites.* (v) Georgia Institute of Technology.

Lunch break

Oral presentations (Auditorio Emma Perez Ferreira)

13:45 – 14:05: **Nahuel Martínez**, Pablo Ravazzoli, Martin Santiago, Fernando Alvira, Mariana Berruet. *Avances para la fabricación de CSP-C en la UNCPBA.* IFAS (UNCPBA) CIFICEN (UNCPBA-CONICET), Tandil.

14:05 – 14:25: **Jorge Caram**, Maximiliano Senno, Silvia Tinte, Victoria Gómez Andrade, Dolores Pérez, Raúl Urteaga. *Layer-by-layer degradation technique for profiling MAPbl3 thin films using high-energy UV irradiation in an oxygen-exposed environment*. Instituto de Física del Litoral, Facultad de Ing. Química. **(V)**

14:30 - 16:00 Poster session



February 29th.

Oral presentations (Auditorio Emma Perez Ferreira)

09:15 - 10:00: Dr. Juan Bisquert

Halide perovskite synapses and neurons for information storage and processing. (v) Institute of Advanced Materials (INAM), Universitat Jaume I, Spain.

10:00 – 10:20: **Victoria A. Gómez A**, Andrade, Walter O. Herrera, Federico Redondo, Natalia Correa y Dolores Pérez. *Estructuras metalorgánicas de Fe y Ti: Materiales para aplicaciones fotovoltaicas*.

Laboratorio de Materiales Multifuncionales, Departamento de Física de la Materia Condensada. INN-CNEA-CONICET.

10:20 - 11:10 Coffee Break

11:10 – 11:30: M. B. Suárez, J. E. Durantini, L. Macor, C. Solis, D. A. Heredia, E. Durantini,

L. Otero, M. A. Gervaldo. *Polímeros orgánicos sintetizados electroquímicamente con potencial aplicación como contactos selectivos en PSSCs.* (v)

IIITEMA Departamento de Química, Universidad Nacional de Río Cuarto-CONICET, Córdoba.

11:30 – 11:50: **Silvia Tinte**, Maximiliano Senno, Sergio Dalosto, Jorge Caram, Raúl Urteaga, Javier Schmidt. *Modeling organic-inorganic halide perovskites from ab-initio calculations.* **(v)**

Instituto de Física del Litoral, Facultad de Ing. Química. ICMol – Universidad de Valencia.

Lunch break

Oral presentations (Auditorio Emma Perez Ferreira)

13:45 – 14:30: Dr. Javier Schmidt.

Javier Schmidt, Sergio Dalosto, Silvia Tinte, Davide Ceratti, Rafael Ferragut. *Positron Annihilation Lifetime Spectroscopy Applied to CH3NH3PbBr3 Single Crystals.*Instituto de Física del Litoral y Facultad de Ingeniería Química, CONICET y UNL. Santa Fe.

14:30 – 14:50: **Leonardo Kopprio**, Sylvain Le Gall. *Transient currents produced by mobile ions.* **(v)**

Group of Electrical Engineering—Paris (GeePs), CNRS, CentraleSupelec, Université Paris-Saclay, Sorbonne Université, France

14:50 – 15:10: Matías Córdoba, **Kurt Taretto**. Are mobile ions detrimental to perovskite solar cell efficiency? (v)

Dto. de Electrotecnia, Fac. de Ingeniería (UNCo), Neuquén.

15:10 - 15:55: Dr. Thomas Kirchartz

Using Transient Methods to Characterize Recombination and Extraction in Halide Perovskite Solar Cells. (v)



EK-5 Photovoltaik, Forschungszentrum Jülich.

Friday 1st.

Oral presentations (Auditorio Emma Perez Ferreira)

10:00 – 10:45: Dr. Federico Ventosinos

Sofia Chozas Barrientos, Federico Ventosinos, Manuel Piot, Vladimir Held, Lidon Gil

Escrig, Henk J. Bolink. Towards highly efficient fully evaporated perovskite/Si Tandem Solar Cells.

Instituto de Ciencia Molecular - ICMol, Universidad de Valencia.

10:45 – 11:05: **Andrés-Felipe Castro-Méndez**, Farzaneh Jahanbakhshi, Andrew M. Rappe, Juan-Pablo Correa-Baena. *Understanding and designing the growth of \alpha-FAPbl3 by thermal evaporation.* (**v**) Georgia Institute of Technology.

11:05 - 11:20 Coffee Break

11:20 – 11:40: **Natalia B. Correa Guerrero,** Guo Zhanglin, Ajay K. Jena, Shibayama Naoyuki, Tsutomu Miyasaka. *Semitransparent Silver–Bismuth Iodide Solar Cell with* V_{oc} above 0.8 V for Indoor Photovoltaics.

Departamento de la Física de la Materia Condensada – INN CNEA- CONICET. TOIN University of Yokohama,

11:40 – 12:00: **Herman Heffner**, Julius Brunner, Marcos Soldera, Andrés Fabián Lasagni, Yana Vaynzof. *Periodic Surface Microstructures on TCO to Enhance Optoelectronic Properties*. **(v)** TU Dresden.

12:00 – 13:00 Dr. Tsutomu (Tom) Miyasaka.

Discovery backgrounds of perovskite photovoltaics and high-voltage development of lead-based and lead-free perovskite solar cells.

TOIN University of Yokohama.

13:00 Adriana Serquis Closing ceromony. Comisión Nacional de Energía Atómica