



The world of photovoltaics meets in Milan from 26 to 30 September 2022

for WCPEC-8, the 8th edition of the World Conference on Photovoltaic Energy Conversion.

CEA, INES and ITE INES.2S will be present with 49 oral or poster presentations and will (co-) chair 6 sessions.

Date	Session	Type	Title	Authors CEA	Partners	Context
27-sept	08:30	4BV.1.8	POSTER	Demonstration of Colored BIPV Façades: Installation and First Results	Ya-Brigitte Assoa, Ioannis (John) Tsanakas , Rémi Sanson, Romain Joubert, Philippe Thony, Paul Messaoudi, Fabien Chabuel	Multi partners H2020 BE-SMART
27-sept	08:30	4BV.1.31	POSTER	On-Board Photovoltaic Kit for Existing Vehicles	Benjamin Commault, Bertrand Chambion , Lionel Serra, Fathia Karou, Shehrazade Nassibi	INES.2S
27-sept	08:30	4BV.1.49	POSTER	Solar Resource Evaluation in Dynamic and Static through Solar Tracking System at 1 Hz for VIPV Applications	Shehrazade Nassibi, Bertrand Chambion , Loic Lonardoni, Lionel Serra, Benjamin Commault, Fabien Chabuel, Jérémie Aimé	INES.2S
27-sept	10:30	1BO.2.1	ORAL	Simplified Cell Cutting, Efficient Edge Passivation, Copper Metallization: Tackling the last Hurdles for Optimized SHJ Integration in Shingle Module Configuration	Samuel Harrison , Vincent Barth, Carolyn Carrière, Mickael Albaric, Benoit Martel	Applied Materials H2020 HIGHLITE
27-sept	10:30	1BO.2.3	ORAL	Closing the Gap Between n & p-Type Silicon Heterojunction Solar Cells: 24 % Efficiency on Lightly Doped GA Wafers	Adrien Danel , Nicolas Chaugier, Jordi Veirman, Renaud Varache, Mickael Albaric, Etienne Pihan	
27-sept	10:30	2BO.7.3	ORAL	Interfacial Limitations of ALD-grown Tin Oxide as an Electron Selective Layer in Perovskite-Based Solar Cells	Félix Gayot , Elise Bruhat, Matthieu Manceau, Eric de Vito, Denis Mariolle, Stéphane Cros	
27-sept	13:30	3BV.3.5	POSTER	Characterisation of Soiling on PV Module by Microscopic Image Processing With New Parametrics	Sébastien Arbaretaz , Eric Pilat	Univ. Savoie Mont Blanc, Grenoble INP INES.2S
27-sept	13:30	3BV.3.25	POSTER	Experimental Study of Shading Effect on PV Cells by Reverse Electrical Polarization	Imed Derbali, Aurélien Raddenzati, Bertrand Chambion , Lionel Serra, Loic Lonardoni, Fabien Chabuel	Univ. Savoie Mont Blanc INES.2S
27-sept	13:30	3BV.3.32	POSTER	Computation of Faulty IV Curves Based on a Distributed Solar Cell Algorithm	Carlos Cárdenas-Bravo , Duy Long Ha	INES.2S
27-sept	15:15	1BO.4.4	ORAL	Insights into the Recombination at the Interface of poly-Si Passivating Contacts for Application in c-Si Solar Cells	Raphael Cabal, Sébastien Dubois	EPFL, IPVF
27-sept	15:15	1BO.4.6	ORAL	Insights into Cut-edges of SHJ Solar Cells by EL and LBIC Characterization	Samuel Harrison	Univ. Ljubljana

27-sept	17:00	2BO.10.5	ORAL	In-Situ & Ex-Situ Study of Protons Irradiations of Perovskites Solar Cells for Space Applications	Carla Costa , Matthieu Manceau, Romain Cariou	ONERA	
27-sept	17:00	4BV.5.1	POSTER	Energy Management System for Hybrid DC-AC Microgrid Including PV Installations and Storage	Mohamed Amhal, Grégory Pais , Anthony Bier		
27-sept	17:00	4BV.5.7	POSTER	Design and Operation of the First Large Linear Vertical Bifacial PV Plant in France	Hervé Colin	CNR	INES.2S
27-sept	17:00	4BV.5.9	POSTER	One year performance assessment of HTJ modules on Horizontal Single Axis Tracker (HSAT)	Alexandre Mignonac, Hervé Colin	Multi partners	H2020 GOPV
27-sept	17:00	4BV.5.14	POSTER	Thermal PV Defects Degradation Monitoring Using a Mounted Thermal Camera	Dhiaeddine Melliti, Duy Long Ha, Mohamed Amhal, Ioannis (John) Tsanakas		INES.2S
28-sept	13:30	3CO.4.1	ORAL	Interconnection Heterojunction Industrial and Sustainable Strategy	Vincent Barth , Remi Monna, Romain Soulas, Florent Pernoud, Armand Bettinelli, Carolyn Carrière, Bertrand Hladys, Corentin Lucas, Samuel Harrison, Nouha Gazbour		
28-sept	13:30	3CO.4.2	ORAL	Improvement of Silicon Heterojunction Module Efficiency Using fast Illumination Post-treatments	Tristan Gageot , Jordi Veirman, Jean-Sébastien Caron, Pedro Jeronimo, Romain Soulas, Sylvain De Vecchi, Wilfried Favre	ENEL Green Power	
28-sept	13:30	3CO.4.6	ORAL	Pushing the Limits of Heterojunction Shingle Modules Performance, Cost and Sustainability	Carolyn Carrière, Samuel Harrison , Vincent Barth, Armand Bettinelli, Eszter Voroshazi	Applied Materials	H2020 HIGHLITE
28-sept	15:15	3CO.5.2	ORAL	PV Integration in Curved Parts: Mechanical Limits and Key Parameters from a Theoretical Point of View	Jean-Baptiste Charpentier , Tatiana Duigou, Bertrand Chambion, Philippe Voarino, Fabien Chabuel		INES.2S
28-sept	15:15	3CO.5.5	ORAL	Effect of Cooling Press on Residual Stresses, Optical Properties and Lifetime of Photovoltaic Modules	Bertrand Chambion , Vincent Meslier, Amandine Boulanger, Ichrak Rahmoun, Fabien Chabuel		INES.2S
28-sept	15:15	1CV.2.6	POSTER	Edge Passivation for Double Side Poly-Si/SiOx Passivated Contacts Solar Cells	Franck Dhainaut , Benoit Martel, Thibaut Desrues, Mickael Albaric, Sébastien Dubois	CNRS	
28-sept	17:00	2CO.3.1	ORAL	From Single Junction Perovskite Solar Cells to Large-area Silicon/Perovskite Tandems: Implications of Changing Substrate and Increasing Device Surface	Muriel Matheron , Andrii Voznyi, Lisa Champault, Jean-Patrice Rakotoniaina, Carine Roux, Séverine Bailly, Noella Lemaitre, Matthieu Manceau, Olivier Dupré		
28-sept	17:00	2CO.3.5	ORAL	Shunt Mitigation in Large Area Si-PK Tandem Devices	Olivier Dupré , Nathalie Nguyen, Caroline Bal, Perrine Carroy, Elise Bruhat, Noella Lemaitre, Muriel Matheron, Matthieu Manceau		
28-sept	17:00	3CO.6.3	ORAL	Overview of Key Results Achieved in H2020 HighLite Project Helping to Raise the EU PV Industries' Competitiveness	Samuel Harrison , Carolyn Carrière	H2020 HIGHLITE Partners	H2020 HIGHLITE

28-sept	17:00	3CO.6.6	ORAL	Extensive Module Interconnection Optimization by Simulation Balancing High Performance, Low Cost and Ag Consumption	Corentin Lucas , Yannick Veschetti, Remi Monna, Vincent Barth, Eszter Voroshazi		INES.2S
28-sept	17:00	4CO.9.4	ORAL	Optical and Colorimetric Study of a Digital Printer on Glass for Optimization of Aesthetics and Performance of BIPV	Benjamin Riedel , Philippe Thony, Ioannis Tsanakas	Univ. Savoie Mont Blanc	INES.2S
29-sept	08:30	4DO.16.3	ORAL	Optical Design and Optics Manufacturing of a Highly Integrated Micro-CPV for Space Applications	Anderson Bermudez-Garcia, Philippe Voarino , Olivier Raccurt		INES.2S
29-sept	08:30	3DV.1.24	POSTER	Towards the Optimization of the Lamination of Eco-Designed Photovoltaic Modules; First Step : Relevant Thermomechanical Characterization of Polymers	Dylan Habans , Eeva Mofakhami, Aude Derrier	CEMEF Mines ParisTech, PSL Research Univ.	INES.2S
29-sept	10:30	1DO.12.5	ORAL	Reduction of Indium Deposition for Silicon Heterojunction Solar Cells with Short Term Industrial Perspective	Frédéric Jay , Tristan Gageot, Raphael Cabal, Sylvain De Vecchi, Jordi Veirman, Benjamin Thiriot, Wilfried Favre		
29-sept	10:30	3DO.17.3	ORAL	Extensive Module Backsheet Qualification Protocol Correlated to SHJ Module Reliability	Timea Bejat , Marion Sérasset, Eszter (Esther) Voroshazi, Romain Soulas, Lorenzo Carbone, Lionel Sicot, Vincent Barth, Marion Vite	ENEL Green Power	
29-sept	10:30	5DV.2.39	POSTER	Potential and Risk of PV Waste Management in Europe – PHOTORAMA Circular Model	Claire Agraffeil, David Pelletier	bifa Environmental Institute, LuxChemtech	H2020 PHOTORAMA
29-sept	10:30	5DV.2.44	POSTER	Energy Transition, Solar PV and Circular Economy: Triple Helix Approach to a Second Life for PV Modules in Chile	Nouha Gazbour, Delfina Muñoz	Univ. of Antofagasta	ATAMOSTEC
29-sept	10:30	5DV.2.53	POSTER	Recovery of Silver from Solar Panel Waste by Leaching In Deep Eutectic Solvent	Charly Lemoine, Yann Petit, Marlène Chapuis, Emmanuel Billy		
29-sept	10:30	5DV.2.70	POSTER	Multilateral Industrial Research on Solar Energy – the Success Story of INES.2S	Jens Merten , Anis Jouini	Multi partners	INES.2S
29-sept	13:30	4DO.3.5	ORAL	Photovoltaics Modules and Systems Monitoring within HighLite H2020 Project	Hervé Colin, Samuel Harrison	H2020 HIGHLITE Partners	H2020 HIGHLITE
29-sept	13:30	4DO.3.6	ORAL	Imagery and Monitoring Data Coupling Towards Complete PV Plant Diagnostics	Dhiaeddine Melliti, Duy Long Ha, Ioannis (John) Tsanakas , Laurent Sauvage, Pascal Raux, Philippe Bellon	ENER-PACTE	INES.2S
29-sept	13:30	3DV.3.16	POSTER	Stability Analysis on Shingled High-Efficiency BAPV Modules	Carolyn Carrière, Samuel Harrison	PI Berlin, Fraunhofer ISE	H2020 HIGHLITE
29-sept	15:15	4DO.4.1	ORAL	Review of On-Site Inspection Techniques for the Qualification of PV Power Plants	Ioannis (John) Tsanakas	Multi partners	
29-sept	15:15	5DO.14.4	ORAL	The Strategic Research and Innovation Agenda for Reliable, Bankable, Sustainable and Circular Solar PV	Delfina Muñoz	Multi partners	
29-sept	17:00	4DO.5.1	ORAL	State-of-Play and Emerging Challenges in PV Energy Yield Simulations: a Multi-case Mult i-model Benchmarking Study	Ioannis (John) Tsanakas , Arnaud Jay, Clément Gregoire,	Multi partners	
30-sept	08:30	3EO.1.4	ORAL	Quantifying the Energy Impact of Soiling thanks to the Tool SoilRatio	Eric Pilat, Hervé Colin , Rémi Monna, Mohamed Amhal		INES.2S

30-sept	08:30	4EO.2.4	ORAL	GaN based Panel-Integrated, High-Efficiency DC/DC Optimizer for Maximizing the Yield of the Large Photovoltaic Power Plant	Stephane Catellani, <u>Van-Sang Nguyen</u> , Anthony Bier, Tony Delaplagne	ENEL Green Power	
30-sept	13:30	2AV.1.20	POSTER	Optimization of Coating Parameters for Enabling High-Performance Triple Cation Perovskite Solar Cell via Upscalable Hybrid Dry-Wet Deposition Route	Elise Bruhat, <u>Olivier Dupré</u> , Solenn Berson, Matthieu Manceau	IPVF, EDF R&D	
30-sept	13:30	2AV.1.41	POSTER	Light and Heat Induced Degradation of Encapsulated Carbon-Based Perovskite Solar Cells	Nikoleta Kyranak, <u>Félix Gayot</u> , Stéphane Cros	Multi partners	SOLAR ERA NET UNIQUE / ANR
30-sept	17:00	2AV.3.10	POSTER	Towards Indium Free TCO-Based Recombination Layers in Perovskite on Silicon Tandem Solar Cells	<u>Elise Bruhat</u> , Perrine Carroy, Saad Makhadi, Caroline Bal, Olivier Dupré, Elsa Parrat, Florian Dupont		
30-sept	17:00	2AV.3.13	POSTER	Development of Electron Selective Tin Oxide Via Vacuum Based Deposition for Manufacturable Perovskite on Silicon Tandem Solar Cells	<u>Elise Bruhat</u> , Perrine Carroy, Félix Gayot, Caroline Bal, Nathalie Nguyen		
30-sept	17:00	2AV.3.18	POSTER	Si-based Tunnel Recombination Junction for Perovskite / Silicon Tandem Solar Cells	<u>Baptiste Marteau</u> , Thibaut Desrues, Quentin Rafhay, Anne Kaminski, Sébastien Dubois	Grenoble INP	