



European Materials Research Society

# 2026 Spring Meeting

May 25 - 29  
Strasbourg Convention Centre

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## SYMPOSIUM A

Thin-film chalcogenide materials for PV and solar energy conversion

Oral sessions : **LONDRES 2 - GROUND FLOOR**

Poster sessions : **ETOILE - FIRST FLOOR**

*Symposium Organizers:*

**Bart VERMANG** (Main organizer A), University of Hasselt / Institute for Materials Research, Belgium

**Martina SCHMID** (Main organizer B), University of Duisburg-Essen, Germany

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**Xiaojing HAO**, University of New South Wales, Australia

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Monday May 25  
**A01 Bifacial CIGS Solar Cells (Hi-BITS Session)**

Chairperson(s): KAUFMANN Christian  
 SURESH Sunil

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08:30	205	Developing AI-driven tools for accelerated research of complex systems and monitoring of industrial production processes <b>GUC Maxim (Invited)</b>
09:00	1215	Insights into Cu(In,Ga)Se <sub>2</sub> growth behavior on transparent back contacts with an industrial deposition process and fabrication of sub-modules <b>WITTE Wolfram</b>
09:15	800	Investigation of GaO <sub>x</sub> formation at the (Ag,Cu)(In,Ga)Se <sub>2</sub> /In <sub>2</sub> O <sub>3</sub> :Sn interface with STEM and XPS techniques <b>VIOLAS André F.</b>
09:30	1578	Backside Passivation Approaches in Bifacial CIGSe Solar Cells <b>BAYAT Saeed</b>
09:45	1278	Enhancing bifaciality in high-performance ACIGSe bifacial solar cells <b>DE MARZI Matteo</b>

Monday May 25  
**A02 Light Management**

Chairperson(s): RATH Christoph  
 SIEBENTRITT Susanne

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10:30	798	Optimizing light trapping and scattering in tandem solar cells using nano-and micropatterned structures <b>POLMAN Albert (Invited)</b>
11:00	1539	Optical Simulations for the Optimization of Light Trapping Schemes in Ultrathin Cu(In,Ga)Se <sub>2</sub> Solar Cells <b>OLIVEIRA António J. N.</b>
11:15	1285	Towards a highly accurate digital twin of a thin-film solar cells on the example of Cu(In,Ga)Se <sub>2</sub> with light management measures <b>SONG Chang-Yun</b>
11:30	1952	Advanced Light Management and Passivation Strategies in Ultrathin CIGS Solar Cells <b>KOZLOV Loukiana</b>
11:45	1851	Optimized Reflective Back Contacts and Ag Alloying for High-Efficiency Ultrathin CIGS Solar Cells <b>HAJHEMATI Javid</b>

Monday May 25  
**A03 Tandem PV**

Chairperson(s): GUC Maxim  
 DE MARZI Matteo

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14:30	1756	CIGS absorber development for monolithic Perovskite/CIGS tandem solar cells <b>KAUFMANN Christian (Invited)</b>
15:00	596	Record efficiency for transparent wide-bandgap Cu(In,Ga)S <sub>2</sub> solar cells <b>KAUR Kulwinder</b>
15:15	1967	Over 17% Efficient, Molecular-Ink based (Ag, Cu)(In,Ga)(S,Se) <sub>2</sub> Solar Cells and Monolithic Chalcogenide-Perovskite Tandem Solar Cells <b>SURESH Sunil</b>
15:30	1787	Effects of Ag Incorporation in a 1.0 eV CuInSe <sub>2</sub> Bottom Cell with a Hole Transport Layer <b>ZHOU Zhuangyi</b>
15:45	1982	Suppressing Buried Interface Nonradiative Recombination Losses Toward High-Efficiency Antimony selenide Solar Cells <b>CHEN Guojie</b>

Monday May 25  
**A04 Doping**

Chairperson(s): CARRON Romain  
 KAUR Kulwinder

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16:30	2031	Doping Strategies for High-Efficiency Flexible CIGS and Perovskite/CIGS Tandem Solar Cells <b>YANG Chunlei (Invited)</b>
17:00	211	Optimizing Na and Rb incorporation along with bandgap grading for high efficiency ultra-thin CIGSe solar cells <b>RATH Christoph</b>
17:15	1719	Ag-Alloying in Cu(In,Ga)Se <sub>2</sub> : A Study of Efficiency Gains and Reduced Urbach Energy <b>GUTZLER Rico</b>
17:30	1542	Silver-alloying technique for Cd-free and all-dry process Cu(In,Ga)S <sub>2</sub> solar cells <b>NISHIMURA Takahito</b>
17:45	2463	Influence of Ag Alloying on the Microstructural, Surface, and Optoelectronic Properties of ACIGS Absorbers for High-Efficiency Thin-Film Solar Cells <b>TOM Thomas</b>
18:00	2165	Understanding group-I-poor secondary phases in wide-gap (Ag,Cu)(In,Ga)Se <sub>2</sub> solar cells <b>JAMES Ann Maria</b>
18:15	2177	Interface recombination as the dominant performance limiting mechanism in state-of-the-art CIGS thin-film solar cells <b>BRAMMERTZ Guy</b>

Tuesday May 26  
**A05 Flexible CIGS and BIPV**  
 Chairperson(s): GROSSBERG-KUUSK Maarja  
 QIAN Chen

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- |       |      |  |
|-------|------|--|
| 08:30 | 3119 | Recent Progress in Development of Thin-Film Chalcopyrite Solar Cells on PXP<br><b>SUGIMOTO Hiroki (Invited)</b>  |
| 09:00 | 518  | Development of novel carrier-selective passivating contacts for flexible ultra-thin film solar cells<br><b>SIEIRA Bárbara</b>  |
| 09:15 | 1986 | Synergistic Mechanical-Optoelectronic Engineering Enables Highly Deformable and Efficient Flexible Sb <sub>2</sub> Se <sub>3</sub> Solar Cells<br><b>CHEN Mingdong</b> |
| 09:30 | 2274 | Efficient and Aesthetically Tunable Flexible CIGS Solar Cells for Building-Integrated Photovoltaics<br><b>PINHEIRO Xavier Leitão</b>                                   |
| 09:45 | 2813 | Optimization of wide bandgap Cu(In,Ga)Se <sub>2</sub> for indoor applications<br><b>BIDAUD Thomas</b>  |

Tuesday May 26  
**A06 Antimony-Chalcogenide Solar Cells**  
 Chairperson(s): COLOMBARA Diego  
 PLATZER BJÖRKMAN Charlotte

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- |       |         |  |
|-------|---------|--|
| 10:30 | 1339    | Tailoring the defect structure of Sb <sub>2</sub> Se <sub>3</sub> via doping to increase the absorber's potential for efficient solar energy conversion<br><b>GROSSBERG-KUUSK Maarja (Invited)</b> |
| 11:00 | 317     | In situ Na <sub>2</sub> S additive strategy enabling certified 10.7% efficiency antimony chalcogenide solar cells<br><b>Hao Xiaojing</b>   |
| 11:15 | 937     | Enhancing the efficiency of Sb <sub>2</sub> (S,Se) <sub>3</sub> solar cells beyond 9% via SDS assisted microstructural control<br><b>GUPTA Harshvardhan</b>  |
| 11:30 | 2661    | Prospects in the Development of Ultrathin Sb <sub>2</sub> (S,Se) <sub>3</sub> Thin Films by Close-Spaced Sublimation for Photovoltaic Applications<br><b>BABU SUSEELA Athulya</b>                  |
| 11:45 | 1182    | Alternatives to Te-adhesion layer for selenium solar cells.<br><b>PAYNO David</b>  |
| 12:00 | 21_2812 | Bismuth- and Silver-Alloyed Chalcogenide Thin Films: Tunable Optoelectronic Properties for Photovoltaic Applications<br><b>KUMAR Jitendra</b>  |

Tuesday May 26  
**A07 Contacts and Interfaces**  
 Chairperson(s): BIRANT Gizem  
 SUGIMOTO Hiroki

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- |       |      |   |
|-------|------|---|
| 13:45 | 634  | Contact- and interface engineering for CIGS and CZTS-based thin film solar cells<br><b>PLATZER BJÖRKMAN Charlotte (Invited)</b>   |
| 14:15 | 452  | ALD Zinc Tin Oxide Buffers for Chalcopyrite Solar Cells: Electrical Barriers and Conduction Band Cliffs<br><b>KOREN Boaz</b>  |
| 14:30 | 2287 | Nanoscale electrical insights into Cd-free Zn <sub>1-x</sub> Sn <sub>x</sub> O <sub>y</sub> buffer layers for CIGSe thin-film solar cells<br><b>NICOARA Nicoleta</b>      |
| 14:45 | 2956 | PVD buffer layer for high efficiency, stable and wide bandgap Cu(In,Ga)S <sub>2</sub> thin film solar cell<br><b>BARREAU Nicolas</b>                                      |
| 15:00 | 2653 | Towards Cd-free wide-bandgap photovoltaics: tuning ZTO buffer layers for CuGaSe <sub>2</sub> thin films deposited by Pulsed Electron Deposition<br><b>COLOMBARA Diego</b> |
| 15:15 | 2818 | A Temperature-Stable, High-Mobility Titanium-Doped In <sub>2</sub> O <sub>3</sub> Transparent Back Contact for Bifacial ACIGSe Solar Cells.<br><b>MUDGAL Sapna</b>        |
| 15:30 | 2556 | TCAD Investigation of Cu <sub>3</sub> Sb <sub>5</sub> S <sub>4</sub> as a Hole Transport Layer in CIGS Solar Cells<br><b>Shapouri Samaneh</b>                             |
| 15:45 | 998  | Comparative study of electron transport layers CdS and TiO <sub>2</sub> for Sb <sub>2</sub> (S,Se) <sub>3</sub> solar cells<br><b>MOOSI GOVINDHARAJULU Srinivasan</b>     |

Tuesday May 26  
**APO2 Poster session 2**

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- |       |         |  |
|-------|---------|--|
| 16:30 | 03_1211 | Linking Alkali Content to Admittance and Impedance Signatures in CIGS Solar Cells through 2D Device Simulations<br><b>LICHOCKI Eryk</b>                          |
| 16:30 | 04_1234 | Growth of crystalline selenium thin-films<br><b>Hemmingsen Tobias Høyrup</b>   |
| 16:30 | 05_1314 | Governing Factors on the Performance, Reproducibility and Stability of Sb <sub>2</sub> S <sub>3</sub> solar cells<br><b>GALCA Aurelian Catalin</b>               |
| 16:30 | 06_1319 | Modelling chalcogenide solar cells from first principles to utility scale using SOLEY<br><b>JEHL Li-Kao Zacharie</b>   |
| 16:30 | 07_1321 | Temperature-dependent current-voltage analysis of co-evaporated Sb <sub>2</sub> Se <sub>3</sub> -based substrate thin-film solar cells<br><b>SCAFFIDI Romain</b> |

16:30	08_134	Tuning the Optoelectronic properties of MoSe <sub>2</sub> Nanosheets through Heterostructure Formation with Ag <sub>2</sub> Se nanocrystals <b>YADAV Jyoti</b>
16:30	09_1415	Development of integrated CIGS solar cells on lightweight flexible substrates <b>KAMIKAWA Yukiko</b>
16:30	10_1455	Spectroscopic Assessment of Open-Circuit Voltage Losses in CIGS Thin-Film Solar Cells and Tandem Devices <b>CAO Siliang</b>
16:30	11_149	Investigation of Electrical and Optical Properties of Chemical Vapor Deposition Grown MoS <sub>2</sub> (1-x)Se <sub>2x</sub> <b>BHARTI Kamini</b>
16:30	12_1553	Hybrid optical modelling of light trapping in thin-film solar cells <b>Jehl Li-Kao Zacharie</b>
16:30	13_1563	Interfacial Phenomena Control Photoelectrocatalytic Activity and Selectivity of Cu(In,Ga)S <sub>2</sub> Photocathodes <b>REIS SANTOS Daniely</b>
16:30	14_1631	Ionic chalcogenides for photovoltaic application <b>VLÁŠKOVÁ Kristina</b>
16:30	15_1636	Hole Transport Layer to Improve Efficiency in Chalcogenide Thin-Film Solar Cells <b>Endrino Jose Luis</b>
16:30	16_1639	Materials-efficient fabrication process for micro-stripped semi-transparent and bifacial Cu(In,Ga)S <sub>2</sub> solar cells <b>FONSECA José</b>
16:30	17_1736	Chalcogenide compound semiconductors at low temperatures <b>SCHORR Susan</b>
16:30	18_1763	High-Throughput and inline All-Sputtered CIGSSe: Pathways to Efficient Sub-micrometer Flexible Photovoltaics <b>VIOLAS André F.</b>
16:30	19_1836	CZTSSe by spray deposition: an analysis of the selenization process <b>VENERI Alessandro</b>
16:30	20_1845	Structural, Optical, and Electrical Properties of Inverted Sb <sub>2</sub> S <sub>3</sub> /CdS Thin-Film Heterostructures for Photovoltaic Applications <b>PRIETO RAMÍREZ Rocio</b>
16:30	21_1849	Nanoimprint Lithography-Enabled Light-Trapping Architectures for Ultrathin and Bifacial Solar Cells <b>RIBEIRO Enzo</b>
16:30	22_1850	Precursor Solution Concentration Engineering for Spin-Coated CZTS Thin-Film Absorbers <b>SAAR Annabel</b>
16:30	23_1857	Optimization of Sustainable Grid Deposition Process for Flexible CIGS Solar Cells <b>PIRES Ana Rita</b>
16:30	25_221	Computationally driven exploration of the structure and electronic properties of Cu <sub>2</sub> GeSe <sub>3</sub> for use in high-performance thin film photovoltaic alloys. <b>COX Philippa</b>

16:30	26_414	Bias-free Solar Hydrogen Generation Coupled with Plastic Reforming Using Ag-Substituted Cu <sub>2</sub> CdSnS <sub>4</sub> Photocathodes <b>ZHANG Shuo</b>
16:30	27_682	Of Bandgaps and Broken Voltages: A Hyperspectral View of Perovskite/CIGS Tandems <b>BIRANT Gizem</b>
16:30	28_834	Fabrication-route-dependent excitonic and phononic responses in monolayer WS <sub>2</sub> under controlled environments <b>OH Hye Min</b>
16:30	29_869	Optimizing Alkali Halide Incorporation in CIGS Absorber Layers: A Comparative Study of NaF and NaBr <b>DUFOULON Vincent</b>
16:30	30_900	Defect State Engineering of Cu <sub>2</sub> SnS <sub>3</sub> Nanocrystals for Solar-Thermal-Electrical Conversion Application <b>ROY Abhishek</b>

Wednesday May 27

## A09 Photoelectrodes for Solar Fuels

Chairperson(s): DE WILD Jessica

MÖNIG Harry

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08:30	3007	Design of Earth Abundant Chalcogenide as Photocathode for Solar Water Splitting by Defects and Interface Engineering <b>WONG Lydia (Invited)</b>
09:00	93	Boosting CO <sub>2</sub> photo-reduction and selectivity switching from CH <sub>4</sub> to CO on tin disulfide thin film having fluorine-dopant pairing with sulfur vacancy <b>MAMO Tadios Tesfaye</b>
09:15	3212	Engineering Sb <sub>2</sub> S <sub>3</sub> Photocathodes with Improved Charge Transport and Long-Term Stability for Solar Hydrogen Evolution <b>GHORBANI Mina</b>
09:30	2609	Self-Powered Electrochemical Ammonia Production with >95% Faradic efficiency using Kesterite Photocathodes anchored with Ru-based single-atom Covalent Organic Framework. <b>SURESH Sunil</b>
09:45	1890	PV Materials, PEC Design: Adapting solution-based kesterite absorbers deposited on transparent substrates for solar fuel applications <b>CORSETTI Valentina</b>

Wednesday May 27  
**A10 Chalcogenide Perovskites**

Chairperson(s): CORSETTI Valentina  
 WONG Lydia

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- 10:30 2783 Chalcogenide perovskite thin films for photovoltaics  
**JARAMILLO Rafael (Invited)**
- 11:00 2722 High Optoelectronic Quality in BaZr<sub>5</sub> Thin Films by Reactive Sputtering and Low-Temperature Solid-State Sintering  
**ITZHAK Anat**
- 11:15 1551 Impact of the Cation Ratio on BaZr<sub>5</sub> Crystallization Kinetics in Sulfurization of Oxide Precursors  
**RÖTTGER Adriana**
- 11:30 2825 Temperature-dependent spectroscopic properties of chalcogenide perovskites  
**KAYASTHA Prakriti**
- 11:45 306 Exploring CaZrO<sub>3</sub>-xSx Oxy-Chalcogenide Perovskite Thin Films  
**ALTHUBYANI Hussain**

Wednesday May 27  
**A11 Characterization and Material Insights**

Chairperson(s): JARAMILLO Rafael  
 SCHORR Susan

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- 13:45 1762 Nanoscale interface analytics at the p/n-junction of chalcopyrite thin-film solar cells  
**MÖNIG Harry (Invited)**
- 14:15 1199 Na segregation and back interface characterization in pure sulphide CIGS absorber  
**DEMOULIN Rémi**
- 14:30 1323 Nanoscale optical and structural properties of sodium-doped sulphide CIGS absorber  
**Dongmo Richel**
- 14:45 1642 Cross-sectional analysis of epitaxial CIGSe solar cells via Kelvin probe force microscopy  
**BAGHESTANI Elham**
- 15:00 1671 Suppression of Ga<sub>2</sub>O<sub>3</sub> Growth on bifacial CIGS/ITO Solar cells by NaF-Precursor Interface Engineering  
**MEESEN Felix**
- 15:15 1280 Chemo-mechanical coupling as key for understanding the thermodynamics of Ag<sub>x</sub>Cu<sub>(1-x)</sub>GaSe<sub>2</sub> thin films  
**KARANIKOLAS Vasileios**
- 15:30 2290 Novel insights into the tail states of Cu(In, Ga)Se<sub>2</sub> absorber layers from full-spectrum photoluminescence fitting.  
**DE WILD Jessica**
- 15:45 773 Compact models for capacitance spectroscopy of CIGS solar cells  
**LAUWAERT Johan**

Thursday May 28  
**A12 Emerging Materials (ReNewPV Session – COST Action CA21148)**

Chairperson(s): KUMARI Neha  
 ROMEO Alessandro

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- 08:30 992 Influence of deposition method and sodium incorporation on Sb<sub>2</sub>S<sub>3</sub> thin films for superstrate solar cells  
**LÁZARO-CASTRILLÓN Luna**
- 08:45 1623 Effect of annealing thermal profiles on the performance of hydrothermally deposited Sb<sub>2</sub>S<sub>3</sub> thin films for photovoltaic applications  
**PIERRI ENEVOLSEN Andrea Maria**
- 09:00 1476 From Molecular-Induced Repair to Interfacial Nucleation Control: A Kinetics-Guided Strategy for High-Efficiency Cd-Free Sb<sub>2</sub>(S,Se)<sub>3</sub> Solar Cells  
**HU Yue**
- 09:15 2376 Adjusting nucleation chemistry for the atomic layer deposition of antimony selenide on metal oxide surface  
**LIAO Pei-Chun**
- 09:30 1655 Enhancing USP-deposited Sb<sub>2</sub>S<sub>3</sub> Solar Cell Performance via Annealing Process for Interfacial Defect Passivation  
**ASARE Ernest Adiyiah**
- 09:45 361 The effect of the sulphurisation rate on Bi<sub>2</sub>S<sub>3</sub> films prepared by thermal vapour sulphurisation of sputtered bismuth precursors.  
**FORSYTH-HUGHES Jake**

Thursday May 28  
**A13 Kesterite Solar Cells**

Chairperson(s): ISHIZUKA Shogo  
 PIERRI ENEVOLSEN Andrea maria

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- 10:30 1981 Controllable SnS-Vapor-Assisted Selenization to Enhance Carrier Transport for Highly Efficient Kesterite Solar Cells  
**JIAN Yue**
- 10:45 959 Rapid Cooling After Device Annealing for High-Efficiency Pure-Sulfide CZTS Thin-Film Solar Cells  
**NASYORI Achmad**
- 11:00 1989 Quasi-epitaxial heterojunction interface reconstruction enables 11.96% certified efficiency in Cd-free Cu<sub>2</sub>ZnSnS<sub>4</sub> solar cells  
**LUO Ping**
- 11:15 2799 Vibrational properties of wurtz-kesterite Cu<sub>2</sub>ZnSiSe<sub>4</sub> and of Cu<sub>2</sub>ZnGe<sub>x</sub>Si<sub>1-x</sub>Se<sub>4</sub> solid solutions  
**ROTARU Victoria**
- 11:30 3433 Chalcogenide Photovoltaics: A Reflective Perspective on Past and Future  
**Tiwari Ayodhya (Invited)**

Thursday May 28

## A14 CdTe and Emerging Absorber Materials

Chairperson(s): SALOMÉ Pedro

WITTE Wolfram

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13:45	1248	Advances of CdTe Photovoltaics <b>BECKER James (Invited)</b>
14:15	801	Recombination at grain boundaries in CdTe absorber layers: influence of Se alloying and CdCl <sub>2</sub> treatment <b>ABOU-RAS Daniel</b>
14:30	1877	How to dope CdTe with Sb using Sb <sub>2</sub> Se <sub>3</sub> as a back contact. <b>ARTEGIANI Elisa</b>
14:45	1489	Carrier-Lattice Interactions as a Design Metric for Chalcogenide Energy Materials <b>DIMITRIEVSKA Mirjana</b>
15:00	2402	Ordering and phase stability in prototypical chalcogenide perovskite BaZr(S,Se) <sub>3</sub> <b>FRANSSON Erik</b>
15:15	272	Unveiling Charge Recombination Pathways in Pnictogen Chalcogenide Solar Cells <b>LÓPEZ Cibrán</b>
15:30	1237	Advancement of AgBiS <sub>2</sub> photovoltaics using a molecular precursor ink <b>KUMARI Neha</b>
15:45	41	Sputtering-Sulfurization Synthesis of Wide-Gap Barium Copper Sulfide Thin Films <b>LABLALI Younes</b>

Thursday May 28

## APO4 Poster session 4

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16:30	01_1866	The CuIn <sub>x</sub> Ga <sub>1-x</sub> Se films deposition from granular target with RF magnetron sputtering in a "pulsating arc" mode <b>NAZAROV Oleksiy</b>
16:30	03_1858	How the molybdenum process influences the growth of CZTS: a comparative study of different lab-grown and commercial molybdenum substrates <b>VENERI Alessandro</b>
16:30	05_1870	Vapour transport deposition and thermal evaporation of Sb <sub>2</sub> Se <sub>3</sub> absorbers: how the growth process influences the properties of the photovoltaic devices. <b>ARTEGIANI Elisa</b>
16:30	06_1882	CdTe solar cells for tandem Si solar cells <b>MUKHTAR Mariyam</b>
16:30	08_2086	Alkali co-alloying effects on CZTSSe solar cells <b>KIM Junho</b>

16:30	09_2114	Flexible and lightweight Cu(In,Ga)(S,Se) <sub>2</sub> for photovoltaic applications with reduced processing temperatures <b>PROT Aubin</b>
16:30	10_2168	Carrier-Resolved Photo-Hall Analysis of Selenium Thin Films and Solar Cells <b>NIELSEN Rasmus</b>
16:30	11_2276	Modeling Hole Extraction in CIGSe Solar Cells with Transparent ITO Back Contacts via Tunneling <b>WOLF Oliver</b>
16:30	12_2289	Exploring a Near-Complete Rear Passivation for Ultra-Thin ACIGS <b>PINHEIRO Xavier Leitão</b>
16:30	13_2346	Investigation of Tin Monosulfide Heterostructure Solar Cells with Zinc Tin Oxide and Molybdenum Oxide Interlayers <b>SPASOVA Stanka</b>
16:30	14_2381	Bulk and interfacial defects in Sb <sub>2</sub> Se <sub>3</sub> chalcogenide thin film solar cells <b>URBANIAK Aleksander</b>
16:30	15_2382	The effect of RbF-PDT on Ag-containing low-temperature grown low bandgap Cu(In,Ga)Se <sub>2</sub> absorbers for tandem solar cells <b>ADELEYE Damilola</b>
16:30	16_2582	Controlled Cu-Ag Substitution in Electrodeposited Kesterite (Cu,Ag) <sub>2</sub> ZnSnS <sub>4</sub> Thin Films <b>ZAKI Mohamed Yassine</b>
16:30	17_2591	Layer-Dependent Growth and Electrical Performance of Sb <sub>2</sub> S <sub>3</sub> Thin-Film Chalcogenide Solar Cells for Photovoltaic Applications <b>BENAISSA Nouhaila</b>
16:30	18_2618	Non-destructive Steady-state and Time-resolved Photoluminescence Characterization of Photovoltaic Devices <b>GUTIERREZ-PARTIDA Emilio</b>
16:30	19_2625	High band gap Cu(In,Ga)S <sub>2</sub> based solar cell for tandem application : Investigation of the absorber/ITO back contact interface <b>HAREL Sylvie</b>
16:30	20_2650	Epitaxial growth of large-grained wide-bandgap Cu(In,Ga)Se <sub>2</sub> on glass using layer-exchanged Ge seed layers <b>NISHIDA Takeshi</b>
16:30	22_2987	numerical simulation approach of all kesterite thin film solar cells <b>KHEMIRI Naoufel</b>
16:30	23_3027	Impact of Interface Layers on Close Space Sublimation Deposited Antimony Sulphide Solar Cells <b>ALMUSHAWWAH Aeshah A</b>
16:30	24_3035	Effect of deposition time on one-step deposited Cu(In,Ga)Se <sub>2</sub> films using a ternary Cu-In-Ga target <b>OUBAKI Rachid</b>
16:30	25_3113	Resonant Raman spectra of cadmium sulfide wurtzite: A first principles simulations study <b>KACHMAR Ali</b>
16:30	26_3145	Interface engineering for photovoltaics : Design and characterization of high-performance thin films based on chalcogenide perovskites. <b>AOUSGI Fethi</b>

16:30	27_3190	Model and experimental studies of micropatterned solar cell devices for semi-transparent PV applications <b>PHIPPS Phipps</b>
16:30	28_3247	High Purity Synthesis of Lead-free Chalcogenide Perovskites for Photovoltaics <b>EL MAQUED Mo</b>
16:30	29_3276	Synthesis and photoluminescence characterization of nano-sized CdSe <b>NEDEGLO Natalia</b>
16:30	30_3282	GaSe thin films with a vertically stacking wall-like structure for novel optoelectronic and sensing application <b>Vatavu Elmira</b>

**Friday May 29**  
**A16 CIGS Materials**  
Chairperson(s): **CABALLERO Raquel**  
**MOURA Margarida**

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08:30	197	Grain growth without guaranteed performance: Unravelling the contradictory impact of Ag on CIGS photovoltaics using a realistic 3D Digital Twin <b>SONG Chang-Yun</b>
08:45	1979	Tracing the Origins of Non-Radiative Recombination in Ag-Alloyed Wide-Gap Cu(In,Ga)Se <sub>2</sub> Solar Cells <b>MITMIT Ceren</b>
09:00	1156	Comparative analysis of different epitaxial growth techniques for Cu(In,Ga)Se <sub>2</sub> thin films deposited on GaAs substrates <b>FALL Penda</b>
09:15	1827	Microstructural Evolution and Sodium Diffusion in Solution-Processed CIGS Absorbers via Hybrid Se/Se <sub>2</sub> Sulfo-selenization <b>MA Ye</b>
09:30	2403	Metastability in CIGS: Experimental challenges to the model and paths toward a revised framework <b>URBANIAK Aleksander</b>
09:45	1632	Pushing the performance of micro-stripped semi-transparent Cu(In,Ga)Se <sub>2</sub> solar cells by improved selenization process and edge collection <b>RODRIGUES Nuno</b>

**Friday May 29**  
**A17 Antimony Chalcogenide and Se Solar Cells (ReNewPV Session – COST Action CA21148)**  
Chairperson(s): **MITMIT Ceren**  
**SPALATU Nicolae**

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10:30	944	Sustainable, low-cost inorganic chalcogenide thin-film solar cells <b>CABALLERO Raquel (Invited)</b>
11:00	1648	Conformal ultrathin Sb <sub>2</sub> S <sub>3</sub> growth via interface modification for high V <sub>OC</sub> semi-transparent solar cells <b>HUSSIEN Hadeer</b>
11:15	1944	Sulfur-assisted defect passivation in hydrothermally grown Sb <sub>2</sub> S <sub>3</sub> absorbers for thin-film solar cells <b>GILSHTEIN Evgeniia</b>
11:30	641	Optimization of pulsed thermal evaporation parameters for tellurium-free selenium solar cells <b>MOURA Margarida</b>
11:45	3360	Dielectric-Based Tunnel Interfaces for Wide-Bandgap Selenium Solar Cells <b>TAMIN Charif</b>