PVSEC-34 Overview

Shenzhen World Exhibition & Convention Center Hall 18

Day	ROOM			
	CC101A+B	CC105A+B	CC101C	CC105C
Sunday Nov.5	Registration Registration desk, 2nd Floor, 12:00-21:00			
	Tutorials 14:00-16:00			
	Welcome Reception JIYU Function room, Hilton Hotel 18:30-20:30			
Monday Nov.6	Opening Ceremony, Plenary, Keynote North Ballroom A			
	8:30-12:00			
	Lunch			
	3rd floor, Hall 17			
	12:00-13:30			
	2MoO1	5MoO1	1MoO1	6MoO1
	13:30-14:55	13:30-15:00	13:30-14:55	13:30-14:50
	Break			
	2MoO2	5MoO2	7MoO1	6MoO2
	15:10-16:35	15:15-16:40	15:10-16:45	15:05-16:45
	Break			
	2MoO3	5MoO3	4MoO1	3MoO1
	16:50-18:35	16:55-18:15	17:00-18:25	17:00-18:20
	Poster Area1-9			
	Foyer of Hall 18			
	19:30-21:00			
Tuesday Nov.7	The 3rd Sino-Japan Joint Workshop on Photovoltaics	5TuO4	1TuO2	6TuO3
	8:30-10:20	8:30-9:50	8:30-9:55	8:30-10:10
	Break			
	The 3rd Sino-Japan Joint Workshop on Photovoltaics	5TuO5	1TuO3	3TuO2
	10:30-12:15	10:05-11:40	10:10-11:50	10:30-11:50
	Lunch			
	3rd floor, North Lobby			
	12:00-13:30			
	2TuO4	5TuO6	4TuO2	3TuO3

	13:30-14:55	13:30-15:05	13:30-15:10	13:30-14:50
	Break			
	2TuO5	5TuO7	8TuO1	7TuO2
	15:10-16:35	15:20-17:25	15:25-16:50	15:05-16:30
	Break			
	2TuO6		3TuO4	7TuO3
	16:50-18:30		16:55-18:20	16:45-18:10
	Banquet North Ballroom A 18:30-21:00			
Wednesday Nov.8	HAN's Sun Run 6:00-8:00			
	Plenary, Keynote North Ballroom A 9:00-12:00			
	Lunch 3rd floor, North Lobby 12:00-13:30			
	Technical Visiting 13:30-17:00			
Thursday Nov.9	2ThO7	5ThO8	7ThO4	6ThO4
	8:30-9:55	8:30-10:05	8:30-9:55	8:30-9:50
	Break			
	2ThO8	5ThO9	1ThO4	3ThO5
	10:10-11:50	10:20-12:05	10:10-12:00	10:15-11:35
	Lunch			
	3rd floor, North Lobby			
	12:00-13:30			
	2ThO9	5ThO10	9ThO1	3ThO6
	13:30-14:55	13:30-14:55	13:30-14:55	13:30-14:50
	Break			
	2ThO10	5ThO11	1ThO5	8ThO2
	15:10-16:35	15:10-16:35	15:05-16:30	15:05-16:35
	Break			
	6ThO5	5ThO12	4ThO3	7ThO5
	16:50-18:10	16:50-18:30	16:50-18:35	16:45-18:10
	Poster Area1-7 Foyer of Hall 18 19:30-21:00			
Friday Nov.10	2FrO11	5FrO13	3FrO7	3FrO8
	8:30-10:00	8:30-9:55	8:30-9:50	8:30-9:50
	Break			
	Closing ceremony Award ceremony			
	10:20-11:20			

Tutorials

Sunday, November 5, Room CC105A+B	
TIME	TOPICS and SPEAKERS
Chairman: Zhengxin Liu，Jingbi You	
14:00-14:40	The Development of Perovskite Solar Cells
	Jingbi You
	Institute of Semiconductors, CAS, China
14:40-15:00	Discussion
15:00-15:40	Process and equipment improvement of modern silicon heterojunction (SHJ) solar cell
	Zhengxin Liu
	Shanghai Institute of Microsystem and Information Technology, CAS, China
15:40-16:00	Discussion

The 3rd Sino-Japan Joint Workshop on Photovoltaics

Date: Tuesday, November 7, 2023

Time: 8:30 – 12:15

Organizers: China Renewable Energy Society Photovoltaic Committee, Japan Photovoltaic Society Japan Photovoltaic Society

Location: Room CC101A+B, Shenzhen World Exhibition & Convention Center, Shenzhen, China

Co-chair: Makoto Konagai, Tokyo City University, Japan Ying Zhao, Nankai University, China

Moderator: Keisuke Ohdaira, Japan Advanced Institute of Science and Technology, Japan Shengzhi Xu, Nankai University, China

TIME	TOPICS/SPEAKERS
Part1 - Chairman Professor Xiaodan Zhang	
8:30 – 8:35	Opening Remark
	Makoto Konagai
	Professor, Tokyo City University, Japan
8:35 – 8:40	Opening Remark
	Ying Zhao
	Professor, Nankai University, China
8:40 – 9:00	Review of PV Policies in China
	Sicheng Wang
	Research fellow, Energy Research Institute of the National Development and Reform Commission (NDRC), China
9:00 – 9:20	Japan's strategy for carbon neutrality and expectations for next- generation photovoltaic technology
	Shigeru Niki
	Dr, Sustainable Energy Unit, Technology Strategy Center (TSC), New Energy and Industrial Technology Development Organization (NEDO), Japan
9:20 – 9:40	Progress of silicon solar cell industrialization technology in China
	Wenjing Wang
	CTO, Huasun, China
9:40 – 10:00	Application of informatics to photovoltaic research
	Noritaka Usami
	Professor, Nagoya University, Japan
10:00 – 10:20	Progress of compound semiconductor thin film solar cell in china
	Yaohua Mai
	Professor, Jinan University, China
10:20 – 10:30	Break

Part2 - Chairman Professor Keisuke Ohdaira	
10:30 – 10:50	Metallization technology trends in Silicon solar cells
	Marwan Dhamrin

	Core Technology Center, Toyo Aluminum K.K. Professor, specially appointed at Osaka University, Japan
10:50 – 11:10	Current status and future development of perovskite solar cells in China
	Xiaodan Zhang
	Professor/Director, Nankai University, China
11:10 – 11:30	Current status and future development of perovskite solar cells in Japan
	Shuzi Hayase
	Professor, The University of Electro-Communications, Japan
11:30 – 11:50	Overview of the PV system and grid integration research activities in China
	Yibo Wang
	Research fellow, Institute of Electrical Engineering Chinese Academy of Sciences, China
11:50 – 12:10	Overview of the PV system and grid integration research activities in Japan
	Yuzuru Ueda
	Professor, Tokyo University of Science
	President, Japan Photovoltaic Society (J-PVS), Japan
12:10 – 12:15	Closing Remarks

6-Nov					
OPENING, KEYNOTE AND PLENARY SPEECHES					
North Ballroom A, Shenzhen World Exhibition & Convention Center, Hall 18					
Chairman: Ying Zhao，Director, CRES PV Committee, China					
8:30-8:55	Welcoming Address				
8:55-9:15	2023 CPVS Best Research-Cell Efficiencies release	Wenjing Wang	CRES PV Committee, China	Vice Director	
9:15-9:35	PVSEC Award Ceremony	Deren Yang	Chinese Academy of Science, Zhejiang University, NingboTech University,China	Professor,President,Academician	
OPENING, KEYNOTE AND PLENARY SPEECHES					
North Ballroom A, Shenzhen World Exhibition & Convention Center, Hall 18					
	TIME	TOPIC	SPEAKER	AFFILIATION	TITLE
Chairman: Yibo Wang, Researcher, Institute of Electrical Engineering of CAS, China					
Plenary	9:35-10:05	How Close Can We Get to 29% Silicon Cell Efficiency	Martin Green	University of New South Wales Sydney, Australia	Scientia Professor
Plenary	10:05-10:35	Outlook of transition of China's Energy Structure to 2060	Zhongying Wang	Energy Research Institute of the National Development and Reform Commission, China	Director General
Chairman : Meicheng Li ,Professor, North China Electric Power University, China					
Keynote	10:50-11:10	Growth and Defects of Czochralski Silicon for Solar Cell	Deren Yang	Chinese Academy of Science Zhejiang University, NingboTech University,China	Professor,President,Academician

Keynote	11:10-11:30	High Efficiency Silicon Heterojunction Technology Development in LONGi	Xixiang Xu	LONGi Central R&D Institute, LONGI Green Energy Technology Co., Ltd, China	Chief Scientist and Vice President
Keynote	11:30-11:50	Toward Highly Efficient All-perovskite Tandem Solar Cells and Modules	Hairen Tan	Nanjing University, China	Professor

8-Nov

OPENING, KEYNOTE AND PLENARY SPEECHES

North Ballroom A, Shenzhen World Exhibition & Convention Center, Hall 18

	TIME	TOPIC	SPEAKER	AFFILIATION	TITLE
Chairman: Pingqi Gao,Professor, Sun-Yat-Sen University, China					
Plenary	9:00-9:30	Going to Multi-terawatt Annual Production with Which Cell Technology	Pierre J. Verlinden	UNSW Sydney,Yangtze Institute for Solar Technology (YIST)	Adjunct Professor,Chief Scientist
Plenary	9:30-10:00	Standardization in Solar PV Technologies in Multi-Terawatt Era	Michio Kondo	WASEDA University, Japan	Professor
Keynote	10:00-10:20	TBD	Christian Peter	Managing Director, Solarlab Aiko Europe, Germany	Managing Director
Keynote	10:20-10:40	Perspectives on Industrial Perovskite/Silicon Tandem Solar Cells: OpportAFFILIATIONies and Challenges	Wei Long	Department of Emerging Technologies, Tongwei Solar, China	Director
Chairman: Yaohua Mai,Professor, Jinan University, China					
Keynote	10:55-11:20	The Pathway to >15% Efficiency Emerging Kesterite Solar Cells	Qingbo Meng	Institute of Physics, Chinese Academy of Sciences, China	Professor
Keynote	11:20-11:40	Advancing Perovskite Solar Cells: A Pathway to Unprecedented Efficiency	Sang Il Seok	Ulsan National Institute of Science and Technology, Korea	Distinguished Professor

Keynote	11:40-12:00	GW Scale Production of Flexible Crystalline Silicon PV Modules	Zhengrong Shi	Australian Academy of Technology Sciences and Engineering,unman Energy Co., Ltd, Shanghai University of Electric Power, China	Fellow,CEO,Professor

Area1. Advanced concepts and emerging materials for future PV power conversion

6-Nov-23					
Area1 1MoO1					
Types	Time	Topic	Name	AFFILIATION	Title
Host：Lianzhou Wang					
Invited Presentation	13:30	Trace-Ammonium-Halide-Assisted Optimization Strategies for Perovskite Solar Cells	Rui Zhu	Peking University	Professor
Invited Presentation	13:50	Perovskite Quantum Dots for Solar Cells and Beyond	Lianzhou Wang	The University of Queensland	Professor and Centre Director
Oral Presentation	14:10	Hot carrier cooling in two-dimensional (2D) perovskite nanocrystals using the Pump-Push-Probe technique	Ziyuan Ge	Imperial College London	PhD student
Oral Presentation	14:25	Interface Energetics in Perovskite Solar Cells	Qinye Bao	East China Normal University	Professor
Oral Presentation	14:40	Operando Surface and Bulk Carrier Trapping Dynamics in Perovskite Solar Cells Observed via Infrared Optical Activation Spectroscopy	Ziming Chen	Imperial College London	Marie Skłodowska-Curie Fellow
7-Nov-23					
Area1 1TuO2					
Types	Time	Topic	Name	AFFILIATION	Title
Host：Feng Liu					
Invited Presentation	8:30	Key Materials for Organic Solar Cells	Liming Ding	Nano Center of the Chinese Academy of Sciences	Researcher
Invited Presentation	8:50	Recent Advances in Double Fibril Network Morphology for Organic Solar Cells	Feng Liu	Shanghai Jiaotong University	Professor
Oral Presentation	9:10	Regulation of buried interface for efficient and stable perovskite solar cells	Xing Zhao	North China Electric Power University	Lecturer
Oral Presentation	9:25	Mixed Chalcogenides and Halides for Efficient and Stable Antimony Based Solar Cells	Riming Nie	Nanjing University of Aeronautics and Astronautics	Professor
Oral Presentation	9:40	Innovative high pressure synthesis of complex van der Waals (Sb,Bi)-chalcohalides for thin film photovoltaic applications	Edgardo Saucedo	Universitat Politècnica de Catalunya (UPC)	Professor
7-Nov-23					
Area1 1TuO3					
Types	Time	Topic	Name	AFFILIATION	Title

Host：Gang Li					
Invited Presentation	10:10	OPV Related	Yingping Zou	Central South University	Professor
Invited Presentation	10:30	Organic Photovoltaic – engineering active layer & applications	Gang Li	Hong Kong Polytechnic University	Professor Chair
Oral Presentation	10:50	A Polyfluoroalkyl-Containing Non-fullerene Acceptor Enables Self-Stratification in Organic Solar Cells	Chunchen Liu	South China University of Technology	Associate Researcher
Oral Presentation	11:05	Development of All-Weather Solar Cells Based on Voltage Loss Analysis	Meita ASAMI	Sungkyunkwan University	Research Associate
Oral Presentation	11:20	Investigation of the dynamic thermal equilibrium between the singlet state and the intermolecular charge transfer state in Y6 by ultrafast spectroscopy	Tong Wang	IMPERIAL COLLEGE LONDON	PhD Student
Oral Presentation	11:35	Study the thermalization mechanisms in CdSe/CdS core/shell low-dimensional systems for hot carrier multi-junction solar cells	Rui Wang	Hohai University	Graduate Student
9-Nov-23					
Area1 1ThO4					
Types	Time	Topic	Name	AFFILIATION	Title
Host：Pingqi Gao					
Invited Presentation	10:10	Research progress in the application of MOS targets for HJT and PSCs	Xianjie Zhou	APG Material All rights reserved	
Oral Presentation	10:30	Surface Ligand Control for High-efficiency PbS Colloidal Quantum Dots Photovoltaic Device	Wang Yinglin	Northeast Normal University	Professor
Oral Presentation	10:45	PdSe2 Quantum Dots for Improving the Photovoltaic Performance of Non-fullerene Organic Solar Cells	Shenghua LIU	Sun Yat-sen University	Associate professor
Oral Presentation	11:00	Light Harvesting for High Efficiency Low Cost Crystalline Silicon Solar cells	Liping Fang	Shenzhen MSU-BIT University	Senior Lecturer
Oral Presentation	11:15	Improvement of Open-circuit Voltage and Fill Factor of Silicon Quantum Dots Solar Cells by Bayesian Optimization Process	Yasuyoshi Kurokawa	Nagoya university	Associate Professor
Oral Presentation	11:30	Universal interface treatment for dopant-free materials applied to silicon heterojunction solar cells	Liqi Cao	Delft University of Technology	PhD candidate

Oral Presentation	11:45	Beyond standard front/back-contacted silicon heterojunction solar cell architectures	Paul Procel Moya	TuDelft	Researcher
9-Nov-23					
Area1 1ThO5					
Types	Time	Topic	Name	AFFILIATION	Title
Host: Meicheng Li					
Invited Presentation	15:05	Nature Energy: an overview of the journal	Giulia	Springer Nature	Senior Editor at Nature Energy
Invited Presentation	15:25	Inside Nature Communications: Insights into Scientific Publishing and Writing Tips	Natalie Lok Kwan Li	Springer Nature	Associate Editor, Nature Communications
Oral Presentation	15:45	A Study of Si-Ag Contact Formation using High-temperature Cu-based Fire-through Contact Paste	Dongjin Choi	Korea University	Postdoctoral Researcher
Oral Presentation	16:00	Challenges and Prospects Towards Developing Bismuth-Based Chalcogenide for Next Generation, Earth Abundant Photovoltaics	Nicolae Spalatu	Tallinn University of Technology	Senior Research Scientist
Oral Presentation	16:15	Interdigitated Back-Contacted Carbon Nanotube–Silicon Solar Cells	Yuhua Bai	Hebei University	Graduate Student

Area2. Perovskite and tandem solar cells and modules

6-Nov-23					
Area2 2MoO1					
	Time	Topic	Name	AFFILIATION	Title
Host: Jingbi You					
Invited Presentation	13:30	Optoelectronic spectroscopy of perovskite solar cells	Uwe Gunter Rau	Forschungszentrum Juelich GmbH	Head of Institute

Invited Presentation	13:50	Design Strategies for Efficient, Stable, and Commercially Viable Inverted Perovskite Solar Cells	Yi Hou	National University of Singapore	Assistant Professor
Oral Presentation	14:10	Enabling sputtered IZO as an interconnection for TOPCon-based tandem solar cells	Anastasia Hertanti Soeriyadi	University of Oxford	Postdoctoral Research Associate
Oral Presentation	14:25	Buffering mismatching losses of tandem solar cells by an ever-changing spectrum in outdoor operations	Kenji Araki	University of Miyazaki	Distinguished Professor
Oral Presentation	14:40	Perovskite fabrication using chemical vapour deposition (CVD) technology	Yong Li	CSIRO Australia	Research Fellow
6-Nov-23					
Area2 2MoO2					
	Time	Topic	Name	AFFILIATION	Title
Host：Qing Shen					
Invited Presentation	15:10	Equipment Assists the Development of Perovskite Solar Cell Industry	QiLin Chen	Shenzhen S.C New Energy Technology Corporation	Vice President
Invited Presentation	15:30	Efficient inverted perovskite solar cells enabled by molecular doping	Zhubing He	Southern University of Science and Technology	Professor
Oral Presentation	15:50	Stabilization of FAPbI3 with multifunctional alkali-functionalized polymer	Hong Zhang	Fudan University	Researcher/Deputy Director
Oral Presentation	16:05	Interface-induced Dynamic Intermediate Phase Refactoring for Efficient MA-and Br-free Perovskite Solar Cells	Guijun Li	Shenzhen University	Associate Professor
Oral Presentation	16:20	Measurement of Quantum Efficiency of perovskite-based solar cells	Yajun Gao	LONGi Green Energy Technology Co.,Ltd.	
6-Nov-23					
Area2 2MoO3					
	Time	Topic	Name	AFFILIATION	Title
Host：Zhubing He					

Invited Presentation	16:50	Efficient perovskite solar cells via charge carrier modulation and defect passivation	JingBi You	Institute of Semiconductors, Chinese Academy of Sciences	Professor
Invited Presentation	17:10	Efficient all-perovskite tandem solar modules	Ke Xiao	Nanjing University	Postdoctor
Invited Presentation	17:30	Phase stable and less defect tin-based perovskite nanocrystals: synthesis, optical property and photoexcited carrier dynamics	Qing Shen	The University of Electro-Communications	Professor
Oral Presentation	17:50	Design and numerical analysis of lead free all perovskite based tandem solar cells with power conversion efficiency > 28 %	Deboraj Muchahary	National Institute of Technology Raipur India	Assistant Professor
Oral Presentation	18:05	Thienothiophene-Based Dopant-free Hole-transporting Polymers: Side Chain Modification and Interface Passivation for an Inorganic Perovskite Solar Cell	Takeo Suga	Waseda University	Associate Professor
Oral Presentation	18:20	Research on High-Efficiency Silicon-Based Heterojunction Cell and Its Perovskite Tandem Solar Cells	Fengqin He	SPIC PV Industrial Innovation Center	Director of Battery Component R&D Room
7-Nov-23					
Area2 2TuO4					
	Time	Topic	Name	AFFILIATION	Title
Host: Molang Cai					
Invited Presentation	13:30	Outdoor Performance and Light-Induced Degradation of High-Efficiency Perovskite Solar Cells	Makoto Konagai	Advanced Research Laboratories, Tokyo City University	Professor
Invited Presentation	13:50	Perovskite: a wonder material for PV applications	Shengzhong Liu	Dalian National Laboratory for Clean Energy	Professor
Oral Presentation	14:10	Sn only and Sn-Pb mixed based perovskite solar cells: Additive engineering and surface modification to improve stability	Islam Ashraful	National Institute for Materials Science (NIMS)	Chief Researcher
Oral Presentation	14:25	Lead-Free Tin Halide Perovskite Solar Cells	Xiangyue Meng	University of Chinese Academy of Sciences	Researcher

Oral Presentation	14:40	Report of 1245mm*635mm Perovskite Modules Passing Full Sequence of IEC61215 and IEC61730	Buyi Yan	Microquanta Semiconductor	Management
7-Nov-23					
Area2 2TuO5					
	Time	Topic	Name	AFFILIATION	Title
Host：Hiroshi Segawa					
Invited Presentation	15:10	Application of Laser Processing Equipment in Perovskite solar cells	Rong Wang	Shenzhen Han's Photovoltaic Equipment Co., Ltd.	HansPV Process Manager
Invited Presentation	15:30	Stable cell architectures and scalable processes for 784 cm2 perovskite solar modules	Yinghuan Kuang	IMEC, Belgium	Senior Researcher & Project Leader
Oral Presentation	15:50	Buried interface optimization improves photovoltaic performance of perovskite solar cells	Qifeng Han	Shanghai Jiao Tong University	Long term Associate Professor of Teaching Track
Oral Presentation	16:05	Exploring Efficient Deposition Techniques for Large-area Perovskite-Silicon Tandem Solar Cells	Romika Sharma	Solar Energy Research Institute of Singapore (SERIS)	Research Fellow
Oral Presentation	16:20	High-efficiency perovskite/silicon tandem solar cell achieved by PbCl2 additive	Lingbo Jia	LONGi Green Energy Technology Co., Ltd.	Senior Chief Engineer
7-Nov-23					
Area2 2TuO6					
	Time	Topic	Name	AFFILIATION	Title
Host：Jiang Liu					
Invited Presentation	16:50	High Performance Perovskite Solar Cells and Modules	Hiroshi Segawa	The University of Tokyo	Professor
Invited Presentation	17:10	Highly Efficient and Stable Mixed-halide Wide-bandgap Perovskite Solar Cells	Molang Cai	North China Electric Power University	Professor
Oral Presentation	17:30	Engineering organic hole-transporting layer for efficient perovskite solar cells	Luozheng Zhang	Yangzhou University	Professor
Oral Presentation	17:45	Scalable techniques for perovskite solar modules toward mass production	Jun Shao	UtmoLight	Brand manager

Oral Presentation	18:00	Scalable Efficient p-i-n-based FAPbI3 Perovskite Solar Modules	Hang Hu	Karlsruhe Institute of Technology	Professor
Oral Presentation	18:15	Multifunctional UV filter for efficient and stable perovskite solar cells	Fengyou Wang	Jilin Normal University	Professor
9-Nov-23					
Area2 2ThO7					
	Time	Topic	Name	AFFILIATION	Title
Host：Liyuan Han					
Invited Presentation	8:30	Recent Progress and Key Challenges in Upscaling Flexible All-perovskite Tandem Mini-modules	Fan Fu	Empa - Swiss Federal Laboratories for Materials Science and Technology	Group leader
Invited Presentation	8:50	Stable and ultralight flexible perovskite solar cell module	Yiqiang Zhan	Fudan University	Vice President
Oral Presentation	9:10	Managing Iodine and Tin Based Defects for Efficient and Stable Mixed Sn-Pb Perovskite Solar Cells	Jing Zhang	Ningbo University	Professor
Oral Presentation	9:25	Interfacial gradient heterostructure for efficient CsPbI3 perovskite solar cells and printed minimodules	Dongmei Li	Institute of Physics, Chinese Academy of Sciences	Professor
Oral Presentation	9:40	Interfacial Treatment at Lead Halide Perovskite/Electron Transport Layer of Perovskite Solar Cells	Masatoshi Yanagida	National Institute for Materials Science (NIMS)	Principal researcher
9-Nov-23					
Area2 2ThO8					
	Time	Topic	Name	AFFILIATION	Title
Host：Ulrich W. Paetzold					
Invited Presentation	10:10	Efficient and stable perovskite solar cells towards commercialization	Liyuan Han	Shanghai Jiao Tong University	Professor
Invited Presentation	10:30	Minimizing Buried Interfacial Defects for Efficient Inverted Perovskite Solar Cells	Yong zhen Wu	East China University of Science and Technology	Professor

Oral Presentation	10:50	A binary 2D perovskite passivation for efficient and stable perovskite/silicon tandem solar cells	Qi Chen	Beijing Institute of Technology	Professor
Oral Presentation	11:05	Reconstructing Subsurface Lattice for Stable Perovskite Photovoltaics	Yong Wang	Zhejiang University	Researcher
Oral Presentation	11:20	Multifunctional Regulation of Highly Orientated Tin-Lead Alloyed Perovskite Solar Cells	Zhongmin Zhou	Qingdao University of Science and Technology	Professor
Oral Presentation	11:35	Stabilizing Strategies for Efficient Perovskite Solar Cells	Yanbo Wang	Shanghai Jiao Tong University	Assistant Professor
9-Nov-23					
Area2 2ThO9					
	Time	Topic	Name	AFFILIATION	Title
Host: Hyun Suk Jung					
Invited Presentation	13:30	Advanced Materials and Processes for All Thin-Film Perovskite-Based Tandem Photovoltaic	Ulrich W. Paetzold	Karlsruhe Institute of Technology	Tenure-Track-Professor
Invited Presentation	13:50	Composition Design and Interface Modulation of Perovskite Solar Cells	BaoMin Xu	Institute of Microstructure Technology / Light Technology Institute	Professor
Oral Presentation	14:10	Edge Passivation for Efficient Perovskite/Silicon Tandem Solar Cells	Bingbing Chen	Hebei University	Associate Researcher
Oral Presentation	14:25	NiOx based inverted perovskite solar cells and modules	Yousheng Wang	Jinan University	Associate professor
Oral Presentation	14:40	Interfacial Engineering for High Performance All-perovskite Tandem Solar cells	Zhibin Yang	Shanghai Jiao Tong University	Associate Professor
9-Nov-23					
Area2 2Th10					
	Time	Topic	Name	AFFILIATION	Title
Invited Presentation	15:10	Close Loop Recycling Process for Sustainable Perovskite Solar Cells	Hyun Suk Jung	Sungkyunkwan University (SKKU)	Professor
Invited Presentation	15:30	Over 33% efficient perovskite/silicon tandem using commercial CZ wafer	Jiang Liu	Longi Green Energy Technology Co.	Technology Expert

Oral Presentation	15:50	Monolithic Perovskite/Organic Tandem Solar Cells	Hin-Lap YIP	City University of Hong Kong	Professor
Oral Presentation	16:05	Supramolecule host-guest inclusion strategy for enhancing the stability and biocompatibility of perovskite materials and devices	Wu-Qiang Wu	Sun Yat-sen University	Professor
Oral Presentation	16:20	Developing a comprehensive understanding of the interface between evaporated nPACz self-assembled monolayers and perovskites	Thomas Feeney	Karlsruhe Institute of Technology (KIT)	Professor
10-Nov-23					
Area2 2Fr11					
	Time	Topic	Name	AFFILIATION	Title
Host：Shengzhong Liu					
Invited Presentation	8:30	High efficiency perovskite single junction solar cell module and its application to tandem solar cell.	Masanori Kanematsu	Kaneka Corporation	Chief Researcher
Invited Presentation	8:50	Heterointerface and Intragrain Microstructures in Perovskite Solar Cells	Yuanyuan Zhou	The Hong Kong University of Science and Technology (HKUST)	Tenured Associate Professor
Invited Presentation	9:10	Obstacles and solutions on the commercialization of perovskite crystalline silicon tandem solar cells	Zijia Li	Chint New Energy Technology Co., Ltd.	Director of Front technology research and development
Invited Presentation	9:30	All-Perovskite Tandem Solar Cells	Dewei Zhao	Sichuan University	Professor
Oral Presentation	9:50	Emergent of developing perovskite/CIGS tandem solar cells	Yong Peng	Wuhan University of Technology	Researcher

Area3. Thin film compound semiconductor solar cells

6-Nov-23					
Area3 3MoO1					
	Time	Topic	Name	AFFILIATION	Title
Host：Zhiqiang Li					

Invited Presentation	17:00	Suppress band tailing of pure sulfide kesterite solar cell through solution cadmium alloying	Hao Xin	Nanjing University of Posts and Telecommunications	Professor
Oral Presentation	17:20	Ink formulation and printing of Cu2ZnSn(S,Se)4 thin film solar cells	Xianzhong Lin	Sun Yat-sen University	Professor
Oral Presentation	17:35	Key Aspects for A High Efficiency Kesterite Solar Cell Baseline Production	Alex Jimenez Arguijo	Fundació Institut de Recerca Energética de Catalunya (IREC)	PhD Student
Oral Presentation	17:50	Over 11% efficiency Cd-free high bandgap Cu2ZnSnS4 solar cells enabled by bulk and interface engineering	Ao Wang	University of New South Wales	Student
Oral Presentation	18:05	4.3% Efficient Kesterite Solar Cell Modules	Mingjun Yuan	Nanjing University of Posts and Telecommunications	Student
7-Nov-23					
Area3 3TuO2					
	Time	Topic	Name	AFFILIATION	Title
Host：Hao Xin					
Invited Presentation	10:30	Exploring Emerging Chalcogenides in Thin Film and Perovskite Solar Cells	Lydia Helena Wong	National Technological University	Associate Professor
Oral Presentation	10:50	Controlling Selenization Equilibrium Enables High-Quality Kesterite Absorbers for Efficient Solar Cells	Yanhong Luo	Chinese Academy of Sciences	Professor
Oral Presentation	11:05	Revealing the role of Ag alloying in metal precursors in kesterite thin films and solar cells	Mingrui He	University of New South Wales	Research Fellow
Oral Presentation	11:20	11.88% efficient flexible CZTSSe solar cell	Han Xu	Nankai University	Doctor
Oral Presentation	11:35	The role of grain boundaries in regulation of recombination in Cu2SnZn(S, Se)4 via in-situ sodium doping	Liangzheng Dong	Singhua University	PhD Student
7-Nov-23					
Area3 3TuO3					
	Time	Topic	Name	AFFILIATION	Title

Host：Xianzhong Lin					
Invited Presentation	13:30	Growth and High efficient thin film solar cells composed of earth abundant elements	Yi Zhang	Nankai University	Professor Director
Oral Presentation	13:50	The optoelectronic properties of I2-II-IV-VI4 type crystals	Jun Zhang	Lingnan Normal University	Director of Advanced Testing and Analysis Center
Oral Presentation	14:05	High-efficiency Cu2ZnSn(S,Se)4 solar cells by electrostatic spraying	Jiangjian Shi	Institute of Physics CAS	Associate research fellow
Oral Presentation	14:20	Boosting Kesterite Solar Cell Efficiency through Molecular Ink-based Lithium Doping and Alloying	Yuancai Gong	Universitat Politecnica de Catalunya	Postdoctoral
Oral Presentation	14:35	Fabrication of high-efficiency Sb2(S,Se)3 solar cell via sputtering and post-selenization/sulfurization: influence of S/(S+Se) ratio	Yu-Jen Hung	National Changhua University of Education	Ph.D Student
7-Nov-23					
Area3 3TuO4					
	Time	Topic	Name	AFFILIATION	Title
Host：Yi Zhang					
Invited Presentation	16:55	17.26% High Efficiency CdTe Solar Module (1.92m2) and the Roadmap to Achieve Above 18% Module Efficiency in China National Building Materials Group	Ganhua Fu	CTF Solar GmbH	Vice general manager
Invited Presentation	17:15	High-efficiency flexible Sb2Se3 solar cells by back interface and absorber bulk deep-level trap engineering	Zhiqiang Li	Hebei University	Professor
Oral Presentation	17:35	Full-inorganic Sb2S3 Photovoltaic Devices Based on Vacuum Method	Hui Deng	Fuzhou University	Associate professor
Oral Presentation	17:50	Band Gap and Defect Engineering for High-Performance Cadmium-free Sb2(S,Se)3 Solar Cells and Modules	Cong Liu	Guangxi University	Student
Oral Presentation	18:05	High Efficiency Bifacial and Semitransparent Sb2(S,Se)3 Solar Cells	Kaiwen Sun	University of New South Wales	Senior Lecturer

9-Nov-23					
Area3 3TuO5					
	Time	Topic	Name	AFFILIATION	Title
Host：Wei Liu					
Invited Presentation	10:15	CdTe Thin Film Solar Cells with Efficiency Exceeding 20%	Kai Shen	Jinan University	Associate Professor
Oral Presentation	10:35	20%-Efficient CdTe Thin Film Solar Cells with Gradient Band Alignment at the Front Interface	Dengbing Li	Soochow University	Professor
Oral Presentation	10:50	Development of CuSbSe2 Photovoltaic Absorb Layer for Thin Film Solar Cells	Lei Wan	Hefei University of Technology	Associate Professor
Oral Presentation	11:05	Tailoring the carrier transport in the Sb2Se3 solar cell via modifying oxygen content at the heterojunction interface	Zixiu Cao	Nankai university	PhD Student
Oral Presentation	11:20	Systematic Analysis of Ag Addition Effects on Bulk and Interface Properties in CIGSe Solar Cells	Yosuke Abe	Tokyo Institute of Technology	Master Student
9-Nov-23					
Area3 3ThO6					
	Time	Topic	Name	AFFILIATION	Title
Host：Kai Shen					
Invited Presentation	13:30	Effect of high-temperature CdSe process on the properties of MZO layer	Anhong Hu	Advanced Solar Power (Hang Zhou) Inc.	R&D Vice Director
Oral Presentation	13:50	Improved Performance of Low-temperature Cu(In,Ga)Se2 Solar cells: Synergistic effects of Ag Modification and Na post-treatment	Jingyi Ma	Nankai university	Doctor
Oral Presentation	14:05	High-efficiency flexible CIGS solar cells achieved by NaF incorporation and active tuning of Ga grading	Weimin Li	Shenzhen Institute of Advanced Technology,Chinese Academy of Sciences	Associate Professor
Oral Presentation	14:20	Organic Passivation of Deep Defects in Cu(In,Ga)Se2 Film	Jianhui Chen	Hebei University	Professor
Oral Presentation	14:35	Cu(In,Ga)Se2 growth on patterned substrates	Ricardo Poeira	University of Luxembourg	Doctoral Researcher

10-Nov-23					
Area3 3ThO7					
	Time	Topic	Name	AFFILIATION	Title
Host：Jianjun Li，Taowen Wang					
Invited Presentation	8:30	Classification of defect-mediated interfacial recombination for emerging heterojunction solar cells	Jianjun Li	LONGi Central R&D Institute	Technology Expert
Oral Presentation	8:50	Development of In2S3 buffer layer for Cu(In,Ga)Se2 solar cells by open-air CVD method	Akihiro Funaki	Tokyo Institute of Technology	1st year doctoral Student
Oral Presentation	9:05	Advancing Solar Cell Technology: High-Efficiency Sub-Micron Cu(In,Ga)Se2 Solar Cell with Enhanced Hole Selective Transport Structure	Taowen Wang	University of Luxembourg	PhD
Oral Presentation	9:20	Towards substrate-independent and highly efficient (Ag,Cu)InSe2 solar cells	Maximilian Krause	EMPA	PhD Student

10-Nov-23					
Area3 3ThO8					
	Time	Topic	Name	AFFILIATION	Title
Host：Weimin Li					
Invited Presentation	8:30	High Efficiency Flexible Chalcopyrite Solar Cells with Narrow-Gap Absorber for Tandem Applications	Hiroki Sugimoto	PXP Corporation	Director / CTO
Oral Presentation	8:50	Small Negative Effect of Domain Boundary on Carrier Lifetime of BaSi2 Absorber Films	Kosuke O. Hara	University of Yamanashi	Associate Professor
Oral Presentation	9:05	Ag-alloyed wide bandgap chalcopyrite solar cells with Zn(O,S) buffer layers.	SATEESH PRATHAPANI	Helmholtz-Zentrum Berlin	Postdoc
Oral Presentation	9:20	Control of hole concentration of B implanted sputter-deposited BaSi2 films by post annealing and its solar cell application	Takumi Sato	University of Tsukuba	Student

Oral Presentation	9:35	Molecular Beam Epitaxy Deposition of ZnSnP2 Absorbing Layer under Laser Irradiation	Isshin Sumiyoshi	Kyoto University	Student

Area4. III-V compound semiconductor, concentrator and space technologies

6-Nov-23

Area4 4MoO1

	Time	Topic	Name	AFFILIATION	Title
Host：Qiang Sun,Ned Ekins-Daukes					
Invited Presentation	17:00	Overview for III-V Compound Solar Cell R&D Activities in Japan	MASAFUMI YAMAGUCHI	Toyota Technological Institute	Professor Emeritus, Invited Research Fellow
Invited Presentation	17:20	The Fabrication of Flexible Inverted Metamorphic Five-junction Solar Cells	Junhua Long	Suzhou Institute of Nano-Tech and Nano-Bionics, Chinese Academy of Sciences	Associate Professor
Oral Presentation	17:40	Pathways to low-cost III-V photovoltaic solar cells	Ned Ekins-Daukes	UNSW	Professor
Oral Presentation	17:55	500V Flexible Thin Film Solar Module and Experimental Investigation of Secondary Discharge	Wu Min	SISP	Deputy Director Researcher
Oral Presentation	18:10	Effect of bending deformation on photoelectric performance and radiation effect of flexible IMM3J solar cell	Ke Liu	Harbin Institute of Technology	Student
Oral Presentation	18:25	Monolithic Epitaxial Growth of GaAs/Si Tandem Solar Cell with SiO2/SiNx Dielectric Protection Layer for III-V/Si Triple Junction Applications	Yeonhwa Kim	Korea Institute of Science and Technology (KIST)	Ph D candidate

7-Nov-23

Area4 4TuO2

	Time	Topic	Name	AFFILIATION	Title
Host：Tu Jie lei;Kenji Araki					
Invited Presentation	13:30	The Strain-Balanced Quantum Well Solar Cell – Enabling Record Efficiency Tandem Devices	Ned Ekins-Daukes	The University of New South Wales	Professor

Invited Presentation	13:50	High Specific Power Flexible Modules with Shingled IMM 3J GaAs Solar Cells	Xiaoshun Wang	State Key Laboratory of Space Power Sources, Shanghai Institute of Space Power-Sources	Senior Engineer
Oral Presentation	14:10	Approaches for High-efficiency Si Tandem Solar Cells and Modules	MASAFUMI YAMAGUCHI	Toyota Institute of Technology: Toyota Kogyo Daigaku	Professor Emeritus
Oral Presentation	14:25	Large Area 5J Solar Cells Based on the Direct Bonded Process	He Wang	Tianjin Institute of Power Sources	Senior Engineer
Oral Presentation	14:40	High Efficiency Flexible GaAs Triple Junction Solar Cell for Space Application	Abuduwayiti Aierken	Yunnan Normal University	Professor
Oral Presentation	14:55	1.65 eV AlGaAs Tunnel Junctions for Molecular Beam Epitaxy-Grown III-V/Si Tandem Cells	May Angelu Madarang	Korea Institute of Science and Technology - University of Science and Technology	Master
9-Nov-23					
Area4 4ThO3					
	Time	Topic	Name	AFFILIATION	Title
Host：Qiang Sun,Ned Ekins-Daukes					
Invited Presentation	16:50	VIPV as the energy source in disaster zones	Kenji Araki	University of Miyazaki	Distinguished Professor
Invited Presentation	17:10	Algainp/Algaas/Gaas Triple-Junction Solar Cells Grown Inverted By MOCVD	Heng Zhang	Tianjin Institute of Power Sources	Senior Engineer
Invited Presentation	17:30	Spectral response measurement for GaAs multi-junction photovoltaic power converters	Yiyong Wu	Harbin Institute of Technology	Professor
Oral Presentation	17:50	Super-Efficient Coloured PV for Vehicles	Yunxun Liao	The University of New South Wales	Postdoctoral Researcher
Oral Presentation	18:05	Current Enhancement of Ultrathin GaAs Solar Cells with Rear Light Scattering Structure Using Self-Assembled Silver Nanoparticles	Ryoya Tsuchida	The University of Tokyo	Student
Oral Presentation	18:20	Large-Area Flexible Solar Array Encapsulation for Space Missions	Weinan Zhang	Harbin Institute of Technology	Student

Area5. Materials, cells and modules of crystalline Silicon PV

6-Nov-23					
Area5 5MoO1					
	Time	Topic	Name	AFFILIATION	Title
Host：Zhengxin Liu					
Invited Presentation	13:30	The Progress of HJT solar cell in China	Wenjing Wang	Anhui Huasun Energy Co., Ltd	CTO
Invited Presentation	13:50	Connecting the dots: sputter damage, UV degradation and light soaking in silicon heterojunction solar cell.	Kaining Ding	Forschungszentrum Jülich GmbH	Head of silicon heterojunction solar cell and module department, IEK-5
Invited Presentation	14:10	Effective boron doping of LPCVD deposited intrinsic silicon intrinsic silicon	Xiajie Meng	Tongwei solar (Chengdu) Co. Ltd	Deputy Director
Oral Presentation	14:30	Over 26% Record Efficiency for Heterojunction Solar Cells on Very-thin Silicon Wafer	Xiaoning Ru	LONGi Green Energy Technology Co., Ltd.	technical expert
Oral Presentation	14:45	Indium-free silicon heterojunction solar cells over 26% conversion efficiency for massive production	Shi Yin	LONGi Green Energy Technology Co., Ltd.	Senior R&D Chief Engineer

6-Nov-23					
Area5 5MoO2					
	Time	Topic	Name	AFFILIATION	Title
Host：Dengyuan Song					
Invited Presentation	15:15	Conductive copper pastes for PV metallization	Ofer Shochet	Copprint Technologies Ltd.	CEO and Co-Founder
Invited Presentation	15:35	Transparent Silicon Heterojunction Solar Cells	Kwangyong Seo	UNIST	Professor
Oral Presentation	15:55	The dopant content of hydrogenated amorphous silicon obtained through optical constant	Zhenfei Li	Shanghai Institute of Microsystem and Information Technology	Postdoctor
Oral Presentation	16:10	Gradient Zn(O,S)/Mg electron selective heterocontact and as a conductive back layer for HJT solar cells	Junfeng Zhao	Nankai University	Student

Oral Presentation	16:25	The effect of surface electric fields on the light soaking enhancement of silicon heterojunction solar cells	Donghao Liu	Department of Materials, University of Oxford	Ph.D Student
6-Nov-23					
Area5 5MoO3					
	Time	Topic	Name	AFFILIATION	Title
Host：Wenjing Wang					
Invited Presentation	16:55	Flexible crystalline silicon solar cell	Shenglei Huang	Chinese Academy of Sciences Shanghai Microsystem	Doctoral Student
Oral Presentation	17:15	Rapid illuminated annealing process to improve the efficiency of silicon heterojunction solar cells	KRISHNA SINGH	SERIS	Research Fellow
Oral Presentation	17:30	Disruption of Si–H bonds by short wavelength photons and its impact on the performance of silicon solar cells and modules	Jian Yu	Southwest Petroleum University	Doctor
Oral Presentation	17:45	Light-induced Performance Changes of Transparent Passivating Contacts Solar Cells: Light Soaking Gains and UV Degradation	Binbin Xu	Research center Jülich	PhD Candidate
Oral Presentation	18:00	A Stability Study of Silicon Heterojunction Solar Cells Exposed to Ultraviolet Light	Jinli Yang	Chinese Academy of Sciences	Student
7-Nov-23					
Area5 5TuO4					
	Time	Topic	Name	AFFILIATION	Title
Host：Olindo Isabella					
Invited Presentation	8:30	Quality Risks of New PV Cell Technologies: TOPCon and HJT	Bram Hoex	University of New South Wales, Sydney	Professor
Oral Presentation	8:50	Bayesian Optimization of Carrier Selectivity of P-Type Silicon Nano-Crystal/Silicon Oxide Compound Layer	Kazushi Mizutani	Nagoya University	Professor
Oral Presentation	9:05	The influence of light-heat treatment on dark-state degradation of SHJ solar cells	Shangzhi Cheng	IEE, CAS & Anhui Huasun Energy Co., Ltd	Intern at Huasun Technology R&D Center

Oral Presentation	9:20	Characterisation of Passivating Contacts using Time-Of-Flight Elastic Recoil Detection Analysis	Yifu Shi	University of Oxford	Phd Student
Oral Presentation	9:35	Transparent conductive GZO thin films grown by reactive plasma deposition for silicon heterojunction solar cells	Xiaofeng Wang	Nankai University	Student
7-Nov-23					
Area5 5TuO5					
	Time	Topic	Name	AFFILIATION	Title
Host: Kaining Ding					
Invited Presentation	10:05	Photoluminescence imaging applications across the PV value chain: from ingots to systems	Thorsten Trupke	University of New South Wales, Australia	Professor
Oral Presentation	10:25	Investigation on Light-induced Microstructure Stability of p-type Microcrystalline Silicon for Improving Performance of HJT solar cells	Honghua Zhang	Shanghai Institute of Microsystem and Information Technology Chinese Academy of Sciences	Postgraduate
Oral Presentation	10:40	Impact of DC Power on Passivation Quality of Intrinsic Amorphous Silicon Deposited by Facing Target Sputtering	Li ShaSha	Tokyo Institute of Technology	Student
Oral Presentation	10:55	Transparent-Conductive-Oxide- and Dopant-Free Crystalline Silicon Heterojunction Solar Cells with Efficiency of 22.9%	Haihuai Cai	Sun Yat-sen University	Postgraduate
Oral Presentation	11:10	Analysis of carrier transport mechanisms of p-contacts in p- and n-type SHJ devices	Jiajun Shen	Sun Yat-sen University	Phd Student
Oral Presentation	11:25	Optimization of a-Si:H/Si passivation contact interface structure by machine learning potential molecular dynamics simulations	Ryoji Asahi	Nagoya University	Professor
7-Nov-23					
Area5 5TuO6					
	Time	Topic	Name	AFFILIATION	Title
Host: Jichun Ye					

Invited Presentation	13:30	N-type i-TOPCon Advanced Technology and Photovoltaic Technology trends	Zhiqiang Feng	Trina Solar, State Key Laboratory of PV Science and Technology	Vice-President
Invited Presentation	13:50	Technical Progress in Perovskite/ TOPCon Tandem Solar Cell Technology	Xinyu Zhang	Jinko Solar Co., Ltd.	R&D Deputy GM
Invited Presentation	14:10	Recent development, challenges, and future strategies of TOPCon solar-cell technologies	Jichun Ye	Ningbo Institute of Materials Technology & Engineering (NIMTE)	Professor
Invited Presentation	14:30	Serving Terawatt PV Market with Gigawatt Machines: High Capacity PVD Solutions Used in Mass Production of High Efficiency Solar Cells	Zhenhao Zhang	VON ARDENNE Vacuum Equipment (Shanghai) Co. Ltd.	General Manager
Oral Presentation	14:50	Application of dual-layer polysilicon deposited by PECVD in n-type TOPCon solar cells	Dong Ding	Shanghai Jiao Tong University	Research Associate
7-Nov-23					
Area5 5TuO7					
	Time	Topic	Name	AFFILIATION	Title
Host：Zhiqiang Feng					
Invited Presentation	15:20	Transport and passivation mechanisms for high efficiency silicon solar cells	Paul Procel Moya	Delft University of Technology	Researcher
Invited Presentation	15:40	High Temperature Passivated Contact Solutions for Solar Cell Mass Production	Zhang Wu	LAPLACE Renewable Energy Technology Co., Ltd.	Vice General Manager
Invited Presentation	16:00	Charged Up Solar Cells: The Role of Interface Electric Fields in Silicon Photovoltaic Technology	Sebastian Bonilla	University of Oxford	Associate Professor of Materials
Invited Presentation	16:20	Excellent surface passivation of boron-doped polysilicon passivated contact featured with an iVoc of ~740 mV and a single-sided J0, s of ~ 4.0 fA/cm2	Yuheng Zeng	Ningbo Institute of Materials Technology & Engineering, Chinese Academy of Sciences	Staff
Oral Presentation	16:40	Application of plasma immersion ion implantation technics to TOPCon solar cells	Noboru Yamaguchi	Tokyo Institute of Technology / ULVAC, inc.	Student / Project Leader

Oral Presentation	16:55	Ex-situ Phosphorus-doped Poly-Si Passivating Contacts for High Efficiency Solar Cells via Sputtering	Thien Truong	The Australian National University	Research Fellow
Oral Presentation	17:10	Passivation enhancement mechanism of TiOx/c-Si heterostructures prepared by atomic layer deposition	Yuto Michishita	Nagoya University Graduate School of Engineering	Student
Oral Presentation	17:25	Compensating Cutting Losses by Passivation Solution for Industry Upgradation of TOPCon and SHJ Solar Cells	Xuning Zhang	Hebei Key Lab of Optic-Electronic Information and Materials College of Physics Science and Technology Hebei University	Associate Researcher
9-Nov-23					
Area5 5ThO8					
	Time	Topic	Name	AFFILIATION	Title
Host：Jian Sheng					
Invited Presentation	8:30	Analysis of Heterojunction Back Contact (HBC) Solar Cell Industrialization Technology Route	Rui Jia	Institute of Microelectronics of The Chinese Academy of Sciences	Professor
Invited Presentation	8:50	TBD	Christian Peter	Solarlab Aiko Europe	Managing Director
Invited Presentation	9:10	LONGi High-Efficiency Hybrid Passivated Back Contact (HPBC) Solar Cell R&D and Industrial Application Progress	Heng Sun	LONGi Central R&D Institute	R&D Chief Engineer
Invited Presentation	9:30	Development of Mass- Production- Ready Hybrid BC Solar Cell Technology	Jinyan Zhang	Gold Stone （Fujian）Energy Company Limited	
Oral Presentation	9:50	Copper and Aluminum Screen Printed Contacts for IBC Solar Cell Technology for a Sustainable 1TW Photovoltaic Market	Radovan Kopecek	ISC Konstanz	Director
9-Nov-23					
Area5 5ThO9					
	Time	Topic	Name	AFFILIATION	Title
Host：Rui Jia					

Invited Presentation	10:20	Implementing a self-passivated aluminum masking layer for a cost-effective approach to substitute silver with copper electroplating for the metallization of SHJ solar cells	Leonard Tutsch	PV2+ GmbH	CTO
Invited Presentation	10:40	Formation of n+ Silicon Layer by Screen-Printing Aluminum Paste: A Novel Technique	Marwan Dhamrin	Osaka University/ Toyo Aluminium K.K.	S.A. Professor / Senior Specialist
Invited Presentation	11:00	"Flashboard": Automated Analysis of Solar Cell Production Data based on Machine Learning and Simulation	Sven Wasmer	WAVELABS Solar Metrology Systems GmbH	Data Scientist
Oral Presentation	11:20	Interfacial Engineering and Capping of Vanadium Oxide Hole Transport Layers For Silicon Solar Cells	Yap Qi Jia	Solar Energy Research Institute of Singapore, National University of Singapore	PhD Student
Oral Presentation	11:35	Self-Aligned Laser Opening and Stencil Metallisation for Silver-Free Contacts in Silicon Solar Cells	Yuelin Xiong	University of Oxford	Student
Oral Presentation	11:50	Minimizing errors in testing of reduced-silver metallization schemes for TOPCon solar cells	Zongtao Liu	University of Oxford	Postdoctoral Researcher
9-Nov-23					
Area5 5ThO10					
	Time	Topic	Name	AFFILIATION	Title
Host：Xuegong Yu					
Invited Presentation	13:30	Defect Control In Cast Monocrystalline Silicon	Shuai Yuan	Zhejiang University	Tenure Track Researcher
Invited Presentation	13:50	Pioneering R&D for Ga-doped Si solar cells for terrestrial and space applications	Masafumi Yamaguchi	Toyota Technological Institute	Professor Emeritus, Invited Research Fellow
Oral Presentation	14:10	Research Progress on Thin Crystalline Silicon Solar Cells	Ying Xu	Hebei University	Professor
Oral Presentation	14:25	3D-curved crystalline Si modules: Size, Stress, Mismatching loss, and Coverage loss	Kenji Araki	University of Miyazaki	Distinguished Professor
Oral Presentation	14:40	Atomic-Layer-Deposited Zinc Oxide As Electron - Selective Contact For Bifacial Crystalline Silicon Solar Cells With Bifaciality Factor of 96.3%	Anzhi Xie	Sun Yat-sen University	Student
9-Nov-23					

Area5 5ThO11					
	Time	Topic	Name	AFFILIATION	Title
Host：Masafumi Yamaguchi					
Invited Presentation	15:10	Multilayer Antireflection Coating for Solar Module Glass	Ning Song	UNSW Sydney	Lecturer
Invited Presentation	15:30	Some advances of single crystal growth technology of silicon for solar cells	Lijun Liu	Xi'an Jiaotong University	Professor
Oral Presentation	15:50	Analysis of carrier induced degradation exhibited on a silicon wafer via hydrogen and emitter dopant complex	MyeongSeob Sim	Korea University	Seoul
Oral Presentation	16:05	Extraction of dark characteristic parameters of solar cells and PV modules by combining an intelligent optimization algorithm with the I-V characteristic equations	Bin Ai	Sun Yat-sen University	Professor
Oral Presentation	16:20	Charged oxide inversion layer solar cell with fabrication temperature below 500 ºC	Jingyan Chen	University of Oxford	PhD Student
9-Nov-23					
Area5 5ThO12					
	Time	Topic	Name	AFFILIATION	Title
Invited Presentation	16:50	Approaches towards transparent polysilicon passivated contacts	James Bullock	The University of Melbourne	Head, Electronic Materials and Devices Group
Invited Presentation	17:10	New mechanism and applications of interface passivation in solar cells	Jianhui Chen	Hebei University	PI, Deputy Director in Province-Ministry Co-Construction Collaborative Innovation Center of Photovoltaic Technology
Oral Presentation	17:30	Phosphorus- and Boron-Doped Poly-Si/SiOx Passivating Contacts via Inkjet Printing	Jiali Wang	Australian National University	PhD Student
Oral Presentation	17:45	Three dimensional DLTS analysis using machine learning for evaluating process-induced defects in crystal Si solar cells	Yoshio Ohshita	Toyota Technological Institute	Professor
Oral Presentation	18:00	Influence of surface contaminating elements on crystalline Si solar-cell surfaces on	Yiming Qin	Niigata University	Student

		potential-induced degradation			
Oral Presentation	18:15	Is There Enough Low-Iron Sand for TW PV Growth?	Tamal Chowdhury	UNSW	PhD Student
10-Nov-23					
Area5 5FrO13					
	Time	Topic	Name	AFFILIATION	Title
Host：Wenzhu Liu					
Invited Presentation	8:30	Green Solar Wafers	Frank Siebke	NexWafe GmbH	SVP Strategic Business Development
Invited Presentation	8:50	Plasma-Assisted Epitaxially Grown Silicon with Tunable Porosity for Photovoltaic Applications and Beyond	Joon-Ho Oh	Korea Institute of Energy Research (KIER)	Principal Researcher
Oral Presentation	9:10	SiO2/SiNx protection layers for high Voc silicon solar cells by preventing minority-carrier lifetime degradation during molecular beam epitaxy growth	Eunkyo Ju	Korea institute of science and technology	Student Researcher
Oral Presentation	9:25	Supersaturated carbon in photovoltaic czochralski silicon	Zhenchao Hong	State Key Laboratory of Silicon and Advanced Semiconductor Materials	Student
Oral Presentation	9:40	High-mobility Cerium-doped Indium Oxide and the Impact of Its Thickness-dependence in SHJ Solar Cells	Zhibin Liu	Sun Yat-sen University	

Area6. Performance and Reliability of PV modules

6-Nov-23					
Area6 6MoO1					
	Time	Topic	Name	AFFILIATION	Title
Host：Ning Yang					
Invited Presentation	13:30	Indoor and outdoor evaluation of curved modules for VIPV	Rebeca Herrero Martín	Universidad Politécnica de Madrid	Researcher/Associate Professor

Oral Presentation	13:50	Innovative PV module design tolerant to partial shading	Paul Wang	Yangtze River Delta Solar Photovoltaic Technology Innovation Center	Researcher
Oral Presentation	14:05	Towards Widely Applicable Calibration of Optical Soiling Sensors	Bing Guo	Texas A&M University at Qatar	Associate Professor
Oral Presentation	14:20	Advanced Multi-layer AR Coatings to Improve Durability of Solar Modules	Yiyu Zeng	University of New South Wales	Postdoctoral Fellow
Oral Presentation	14:35	Aging Analysis of Si PV Modules Using Finite Element Model with Extracted Parameters	Jingwei Zhang	Hohai University	Doctor
6-Nov-23					
Area6 6MoO2					
	Time	Topic	Name	AFFILIATION	Title
Host：Muqing Liu					
Invited Presentation	15:05	Very short-time-interval performance evaluation of a photovoltaic system	Yasuhiro Matsumoto	Research Center and Advanced Studies of the National Polytechnic Institute	Professor
Invited Presentation	15:25	Technology innovation trends of high-efficiency module and product value analysis 姓名 Jun Zhang	Jun Zhang	JA SOLAR Technology Co.,Ltd., China	Senior Manager of Product and Technology Department
Oral Presentation	15:45	Photoluminescence Imaging on Silicon Modules Using Blue LED Floodlights	Min Hsian Saw	Solar Energy Research Institute of Singapore	Research Fellow
Oral Presentation	16:00	Photovoltaic Power Generation Forecasting Model	Jiahui Xu, Bing Gao, Muqing Liu	Yangtze River Delta Solar Photovoltaic Technology Innovation Center	Researcher
Oral Presentation	16:15	Bypass diode fault mode diagnosis and detection at PV modules with thermoelectric modules	Jaehwan Ko	Seoul National University of Science and Technology	Student
Oral Presentation	16:30	Intelligent Photovoltaic Component Modular-Recycling Project	Thierry BEHEREGARAY	Shanghai Yikang New Energy Technology Co., Ltd	CEO
7-Nov-23					
Area6 6TuO3					
	Time	Topic	Name	AFFILIATION	Title
Host：Jun Wang					

Invited Presentation	8:30	LONGi Back Contact (BC) Module Technology Innovation and Mass Production Progress	Xumin Zhang	LONGi Central R&D Institute	R&D Chief Engineer
Invited Presentation	8:50	Challenges of Implementing Performance-to-Peers Algorithms for Fault Detection in Distributed Commercial PV Systems	Yinyan Liu	The University of New South Wales	Postdoctoral Research Associate
Oral Presentation	9:10	Photovoltaic System First Order Degradation Rate Estimation with Clear Sky Data and Year over Year on Synthetic Data	Loic Guillemot	TotalEnergies	Research Engineer on PV Applications
Oral Presentation	9:25	The Mechnism of Aging Differences between Double glass and Single-glass n-type TOPCon Modules	Quanzhang An	Changzhou Yijing Optoelectronic Technology Co., Ltd	Component Technical Director
Oral Presentation	9:40	power generation comparison of N type and P type modules in different application scenarios based on simulation	Jiongyi Cao	Huaneng Tiancheng financial leasing Co. Ltd	Senior Manager
Oral Presentation	9:55	Research on Identification Method and Environmental Adaptability Application of Photovoltaic Module Mathematical Model in Response to Multidimensional Environmental Variables	Nuo Cao	National Key Laboratory of Environmental Adaptability for Industrial Products, China National Electric Apparatus Research Institute Co., Ltd	Senior Engineer
9-Nov-23					
Area6 6ThO4					
	Time	Topic	Name	AFFILIATION	Title
Host：Zhen Zhang					
Invited Presentation	8:30	Outdoor PL imaging applications for module performance testing in PV power plants	Zi Ouyang	The University Of New South Wales	Senior Research Fellow
Oral Presentation	8:50	Modeling and measurement of curved VIPV and BIPV modules – Impact of non-uniform solar irradiance and dynamic shading	Kenji Araki	University of Miyazaki	Distinguished Professor
Oral Presentation	9:05	Evaluation of nominal module operating temperature of TOPCon and PERC bifacial module based on outdoor weathering	Jun.Wu, Hao.huang	CSI	Senior Engineer

Oral Presentation	9:20	Investigation of Potential-Induced Degradation and Its Recovery in Perovskite Mini-Modules	Junchuan Zhang	Ningbo Institute of Materials Technology and Engineering/University of Science and Technology of China	Student
9-Nov-23					
Area6 6ThO5					
	Time	Topic	Name	AFFILIATION	Title
Host：Quanchang An					
Invited Presentation	16:50	Hidden Fingerprints: How Solar Cell Handling Leads to Damp Heat Failures in Silicon Heterojunction Technology	Chandany Sen	The University Of New South Wales	Postdoctor Researcher
Oral Presentation	17:10	Investigation PID Failure on PV modules Operation in Thailand by Impedance spectroscopy	Yaowanee Sangpongsanont	King Monkut's University of Technology Thonburi	Researcher
Oral Presentation	17:25	A prediction model of outdoor degradation rates of 2-terminal perovskite/silicon tandem solar cells using machine learning	Dong Chung Nguyen	Aoyama Gakuin University	Postdoctor Researcher
Oral Presentation	17:40	The Development Trend of End-of-Life Photovoltaic Module Recycling Processes: Fieldization, Mechanization, Intelligentization and Marketization	Jiahui Xu	East China University of Science and Technology/Yangtze Institute for Solar Technology	Postdoctor
Oral Presentation	17:55	Is Concentric Circle Defect a Reliability Issue? Reliability Test Results of Concentric Circle TOPCon Cell	Tao Xu	CSI solar	Chief Reliability Engineer

Area7. PV system and BOS

6-Nov-23					
Area7 7MoO1					
	Time	Topic	Name	AFFILIATION	Title

Host：Shimin Li　Liang Ji					
Invited Presentation	15:10	Overview of Trackers in PV systems and today's challenges	Sumanth Lokanath	Ray-Illuminati LLC	Founder & Principal
Oral Presentation	15:30	The application and effect of photovoltaic tracking system in different conditions	Shimin Li	Gansu Natural Energy Research Institute	President
Oral Presentation	15:45	Challenges and Progress Developing Safety Standards for Solar Trackers	David Kresse	Nextracker	Sr. Director Systems Engineering
Oral Presentation	16:00	Advancing Photovoltaics to New Heights: The Transformative Potential of “Sun-Tracking Photovoltaic Generator”	Sicheng Wang	Energy Research Institute (ERI), National Development and Reform Commission (NDRC)	Professor
Oral Presentation	16:15	Vertically mounted heterojunction solar modules performance analysis and innovative application	Wei Cao	Anhui Huasun Energy Co., Ltd.	Senior Product Development Engineer
Oral Presentation	16:30	Wind tunnel experiments study on wind loads of flexible support multi-row solar photovoltaic arrays	Qian Wu	LONGi Green Energy Technology Co., Ltd.	Senior Manager
7-Nov-23					
Area7　7TuO2					
	Time	Topic	Name	AFFILIATION	Title
Host：Yanhu Zhang,Benzhong Cheng					
Invited Presentation	15:05	Matrix calculation of 3D solar irradiance	Kenji Araki	University of Miyazaki	Distinguished Professor
Invited Presentation	15:25	Digital And Intelligent Innovation of Renewables System Technology	An Wei	Sungrow Power Supply Co., Ltd.	Technical Expert
Oral Presentation	15:45	An AI Based IV+CV Technology for PV Powerplant O&M at Sungrow	Tian Zhao	SUNGROW (SHANGHAI)	Director of the System Simulation Group of the Smart Energy Digital Platform Department of the Central Research Institute
Oral Presentation	16:00	Towards the development of an empirical model of air pollution impact on solar PV output for industry use	Haohui Liu	Envision Digital	Principal Scientist

Oral Presentation	16:15	Absorption of PV Power Prediction Errors With Headroom Control by SVR Model Using Parameters Variation of Different Initial Values	Jindan Cui	Tokyo University of Science	Doctor
7-Nov-23					
Area7 7TuO3					
	Time	Topic	Name	AFFILIATION	Title
Host：Liang Ji,Liuchen Chang					
Invited Presentation	16:45	PV Connector Standards Update	Liang Ji	UL Solutions	Principal Engineer
Invited Presentation	17:05	Estimation of solar radiation forecast error range by cloud spatial distribution and time variation using Random Forest and Support Vector Machine	Yuyang Tu	Tokyo University of Science	Graduate Student
Oral Presentation	17:25	Conservative Power Theory and its Applications in Modern Smart Grid	Liuchen Chang	University of New Brunswick	Professor Emeritus
Oral Presentation	17:40	Improvement of Solar Nowcasting through Data-driven Modelling of Cloud Microphysics	Jun Sasaki	Japan Weather Association	Member
Oral Presentation	17:55	Vehicle-Integrated Photovoltaics (VIPV): Insights into Photovoltaic Performance & Energy Generation Modelling	Zhen Yang	The University of New South Wales	PhD Student
9-Nov-23					
Area7 7ThO4					
	Time	Topic	Name	AFFILIATION	Title
Host：Meiqin Mao,Liuchen Chang					
Invited Presentation	8:30	Future Semiconducting PowerSystem and Grid FormingTechnology	Yunfeng Liu	Huawei Digital Power Technologies Co.,LTD.	Professor
Invited Presentation	8:50	Impact of Background Harmonics on LCL Filter Capacitor Reliability	Dao Zhou	Aalborg University, Denmark	Associate Professor
Oral Presentation	9:10	A Robust Conservative Power Theory-based Direct Power Control for Grid-tied Inverter	Meiqin Mao	Hefei University of Technology	Professor
Oral Presentation	9:25	Using inverter MPPT voltage to detect vegetation shading	Haohui Liu	Envision Digital	Principal Scientist
Oral Presentation	9:40	Research on large capacity and high ratio DCT for PV DC power generationr	Yiqing Ma	Tsinghua university	Student

9-Nov-23					
Area7 7ThO5					
	Time	Topic	Name	AFFILIATION	Title
Host：Yunfeng Liu,Yanghu Zhang					
Invited Presentation	16:45	Optimal matching design and the analysis of the number of PV modules in a series string	Shimin Li	President of Gansu New Energy Association	Professor
Invited Presentation	17:05	Evolution of Interconnection Requirements of Distributed Energy Resources	Liuchen Chang	University of New Brunswick	Professor Emeritus
Oral Presentation	17:25	Inverter Reliability: A Review of Current Status and Pathways to Predictive Maintenance	Wayne Li	EPRI	Principal Technical Leader
Oral Presentation	17:40	A Conservative Power Theory-based PLL-less Control Strategy and Performance Evaluation for Single-phase PV Grid-tied Inverter	Yong Ding	Hefei University of Technology	Student
Oral Presentation	17:55	Influence of multiple operating parameters on the safety performance of alkaline electrolyzer cell using PV power	Jiaming Tan	Hefei University of Technology	Student

Area8. Grid integration of PV system

7-Nov-23					
Area8 8TuO1					
	Time	Topic	Name	AFFILIATION	Title
Host：Yibo Wang,Jianhui Su					
Invited Presentation	15:25	Challenges in PVs interconnection to the Distribution Networks and Technologies to overcome them	Nikos Hatziargyriou	National Technical University of Athens	Professor Emeritus
Invited Presentation	15:45	Hardware-in-the-Loop methodologies supporting renewable integration	Alkistis Kontou	National Technical University of Athens	Professor
Oral Presentation	16:05	High Step-Up DC–DC Topology with Device Multiplexing and Integrated Cascade Structure	Junlong Lu	Institute of Electrical Engineering of Chinese Academy of Sciences	Doctor

Oral Presentation	16:20	Current prediction study of a multi-objective control model adapted to the LVRT of a grid-connected inverter	Bowen Feng	School of Electrical and Automation Engineering,Hefei University of Technology,Hefei,Anhui,China	Student
Oral Presentation	16:35	Research on micro power grid configuration operation scheme in plateau area	Wenjing Sun	Institute of Electrical Engineering Chinese Academy of Sciences	Engineer
9-Nov-23					
Area8 8ThO2					
	Time	Topic	Name	AFFILIATION	Title
Host：Yibo Wang，Jianhui Su					
Oral Presentation	15:05	Integrated Virtual Power Plant Based on Cloud-edge-terminal Collaborative Control	Ran Zheng	Nanjing Research Institute,Sungrow Power Supply(Nanjing) Co.,Nanjing,Jiangsu,China	R & D Engineer
Oral Presentation	15:20	Fine-tuned Emergency Control Strategy for Photovoltaic Equipment under Frequency Instability Conditions	Tiangang Huang	Sungrow Research Center,Sungrow Power Supply (Nanjing) Co. Ltd.,Nanjing,Jiangsu,China	Integrated Energy System Engineer
Oral Presentation	15:35	Research on mobile energy storage vehicles planning with multi-scenario and multi-objective requirements	Yuanyuan Chen	Renewable Power Generation System Research Department,Institute of Electrical Engineering, Chinese Academy of Science,Beijing,Beijing,China	Research Associate
Oral Presentation	15:50	Estimation of Solar Irradiance of Hyderabad (India) using Gaussian Process Regression	Jinesh Mohan	Tokyo Institute of Technology	Student
Oral Presentation	16:05	An Analytical Method based on Coupled Multi-physics Model for Photovoltaic Arrays Simulation	Yuanqing Yao	Institute of Electrical Engineering, Chinese Academy of Sciences	Research Associate

Oral Presentation	16:20	Grid-connected PV-Hydrogen Systems Providing Secondary Frequency Regulation: Modeling, Controller Design and Verification	Mingjun Zhang	Tsinghua University	Student

Area9. PV business model, policy and standard					
9-Nov-23					
Area9 9ThO1					
	Time	Topic	Name	AFFILIATION	Title
Host: Junjun Zhang					
Invited Presentation	13:30	Trends of Global PV Market	Izumi KAIZUKA	IEA PVPS Task 1 / RTS Corporation	Deputy Manager/Director
Invited Presentation	13:50	PV Roles 2060 in Carbon Neutral Scenario	Sicheng Wang	Energy Reaserch Institute	Researcher
Oral Presentation	14:10	Comparative Study on Technical Requirements of Multinational Photovoltaic Grid Connection Standards	Yinghua Dong	Renewable energy research department,China electrical power research institute,Nanjing,Jiangsu,China	Senior Engineer
Oral Presentation	14:25	Electrical Performance Test of N-type Bifacial Photovoltaic Module Based on Different Standards	Feifei Jiang	Institute of Electrical Engineering, Chinese Academy of Sciences	Research Associate
Oral Presentation	14:40	Carbon Footprint Trade Barriers for Photovoltaic Products	Danni Gao	China Testing & Certification International Group Co.,Ltd	Engineer

Poster November 6, 2023

Area1. Advanced concepts and emerging materials for future PV power conversion				
6-Nov-23				
		Topic	Name	AFFILIATION
poster	1MoP.1	Effect of DC magnetron sputtering power on the performance of thin-film transistors	ZhongPan	Sungkyunkwan University
poster	1MoP.2	11.50% of the Incident Light Intensity can be Obtained Under a 6×6 cm2 Occluded Area of the Photovoltaic Glass by Inserting a Uniform Bubbled Layer	Yingfeng Li	North China Electric Power University
poster	1MoP.3	Improvement of TFT-NVM charge retention characteristics by H2O2 treatment	Wang Fucheng	Sungkyunkwan University
poster	1MoP.4	A Study on the Mechanisms and Rules Governing the Energy Losses of Photovoltaic Modules Caused by Semi-transparent Obstructions	Yingfeng Li	North China Electric Power University
poster	1MoP.5	Alkyl Chain Engineering of Bithiophene Imide-Based Polymer Donor for Organic Solar Cell	Yuanqing Bai	South China University of Technology
poster	1MoP.6	Novel In-situ Self-doping Cathode Interlayer Materials with Thickness-insensitivity for High-efficiency Organic Solar Cells Through Polymer Planar Backbone Regulation Strategy	Haiyang Zhao	South China University of Technology
poster	1MoP.7	Ferrite-Based Photoelectrodes for Direct Conversion of Solar Energy to Electrochemical Energy	Xin Sun	North China Electric Power University

poster	1MoP.8	Hydrometallurgy Strategy for Lead Halide Perovskite Materials	Qiang Zeng	Central South University
poster	1MoP.9	Ligand-engineered TiO2 Deposition for High Efficiency Planar Perovskite Solar Cells	Hao Huang	North China Electric Power University
poster	1MoP.10	Defect Engineering for Efficient and Stable Perovskite Solar Cells	Hao Huang	North China Electric Power University
poster	1MoP.11	Structure Optimization of PEDOT:PSS/Si Hybrid Solar Cells with SiNWs	Qi Geng	North China Electric Power University
poster	1MoP.12	Photo-rechargeable Properties of NiAl-LDH/g-C_3N_4 Heterojunction Material	Xiao-Jun Lv	NCEPU
Area2. Perovskite and tandem solar cells and modules				
6-Nov-23				
		Topic	Name	AFFILIATION
poster	2MoP.1	Tailored strategies targeting the buried heterointerface in perovskite solar cells	Tong Xiao	Hong Kong Baptist University
poster	2MoP.2	Crystallization Modulation of α-FAPbI3 Perovskite Solar Cells with High Efficiency and Long-Term Stability	Yiqiang Zhang	Zhengzhou University
poster	2MoP.3	Unveiling Property of Hydrolysis-Derived DMAPbI3 and the Removal of Dimethylammonium for Efficient CsPbI3 Perovskite Solar Cells	Yang Liu	University of Electronic Science and Technology of China

poster	2MoP.4	Tailoring the Grain Boundaries Grooves for High-Performance Perovskite Solar Cells	Mingwei Hao	Hong Kong Baptist University
poster	2MoP.5	Tungstate-mediated In-situ Passivation of Grain Boundary Grooves in Perovskite Solar Cells	Rundong Fan	Peking University
poster	2MoP.6	Anti-fatigue perovskite solar cells by interfacial Starch-polyiodide supermolecule buffer layer	Yu Zhang	Peking university
poster	2MoP.7	Effect of Surface Morphology Change by Laser Scribing Process on Deposition of Perovskite Layer of Large-area Perovskite Solar Modules	Li Xu	National Taiwan University
poster	2MoP.8	Thermal evaporation of CsPbBrCl2 thin films for photovoltaic power converters of optical wireless power transmission systems	Atsuto Watanabe	Tokyo Institute of Technology
poster	2MoP.9	Effects of Vacuum-Deposited Niox Surface Treatments for Inverted Perovskite Solar Cells	saiqiang Wang	Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences
poster	2MoP.10	Understanding annealing and stability effects in AZO-Al2O3 nanolayers for Si-based tandem solar cells	Yan Wang	University of Oxford
poster	2MoP.11	NanoLBIC Characterisation of Inhomogeneities in Perovskite Solar Cell Devices	Yifu Shi	University of Oxford
poster	2MoP.12	Reducing voltage loss Alignment in Printable Mesoscopic Solar Cells through CsPbBr3 Quantum Dot Post-Processing	Jinwei Gong	Huazhong University of Science and Technology
poster	2MoP.13	Textured Anti-reflection films for Monolithic Perovskite/Silicon Tandem Solar Cells	Fuhua Hou	Inner Mongolia University
poster	2MoP.14	Research on current collection through-holes for film-type perovskite solar cells	Ryousuke Ishikawa	Tokyo City University
poster	2MoP.15	Effective Passivation with Self-Organized Molecules for Perovskite Photovoltaics	Xinhui Luo	Shanghai jiao tong university, China
poster	2MoP.16	Device simulation on CsPbBr3 optical power converter	Yuejie Tan	Tokyo Institute of Technology

		using a-ZSO between TCO and Electron transport layer		
poster	2MoP.17	Interfacial Engineering of Wide Bandgap Perovskite for High Efficiency Perovskite/Cu(InGa)Se2 Tandem Solar Cells	Xia Chen	Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences
poster	2MoP.18	The construction of efficient and stable heterostructures in inverted perovskite solar cells	Ziyang Zhang	Shanghai jiao tong university
poster	2MoP.19	Improved Electrical Properties of AZO Thin Films Based on Atomic Layer Deposition of Modified Silver Nanowires	Jinxing He	Shenzhen technology university
poster	2MoP.20	Demonstration of Top Contact-Less Perovskite/Silicon 2-Terminal Tandem Solar Cells for Minimizng Parasitic Absorption	Dowon Pyun	Korea University
poster	2MoP.21	Highly-Efficient Non-Toxic Perovskite Solar Cells by Slot-die Coating	Chia-Feng Li	National Taiwan University
poster	2MoP.22	A High-Efficiency and Photostable Wide Bandgap Perovskite Solar Cells Fabricated via Composition Engineering	Sheng-wen Huang	Ming-Chi University of Technology
poster	2MoP.23	Research on the Performance Improvement of Perovskite Solar Cells Based on the A-site Cation Incorporation.doc	Aoxi He	Sichuan University
poster	2MoP.24	Additive engineering for stable Sn-based perovskite solar cells	Md. Emrul Kayesh	National Institute of Materials Science
poster	2MoP.25	Controlling the intermediate phase to improve the crystallinity and orientation of Cs3Sb2ClxI9-x films for efficient solar cells	Yafei Zhang	Hebei University of Technology
poster	2MoP.26	Interfacial Engineering of Wide-Bandgap Perovskite for Efficient Perovskite/CdTe Tandem Solar cells	Ya Jie Yang	Sichuan University
poster	2MoP.27	Volatile Additive for High-Performance and Anti-Solvent Free Perovskite Solar Cells	Du Yifan	Southern University of Science and Technology
poster	2MoP.28	Influence of rotational speed and glass bead amount during etching by MPAT on Si texture size	Pengyu Yang	Japan Advanced Institute of Science and Technology
poster	2MoP.29	Micellization of Surface-Active Ionic Liquids for Monolithic Perovskite/Silicon Tandem Solar Cells with Suppressed Strain Corrosion	Xinlong Wang	Ningbo Institute of Materials Technology and Engineering
poster	2MoP.30	Application of Low-Temperature Deposited W-doped In2O3 Transparent Electrodes for p-i-n and n-i-p Structured Perovskite Solar Cells	Jingyu Chu	Shanghai Normal University
poster	2MoP.31	Inhibition of defect-induced α-to-δ phase transition for efficient and stable formamidinium perovskite solar cells	Tian Chen	Shenzhen Campus of Sun Yat-sen University
poster	2MoP.32	Multiple Function Synchronous Optimization by PbS Quantum Dots for Highly Stable Planar Perovskite Solar Cells with Efficiency Exceeding 23%	Li He	Shanghai Jiao Tong University
poster	2MoP.33	Ceiling of Barium Substitution for B-site Cation in Organometal Halide Perovskite Solar Cells	Ying-Han Liao	Chang Gung Univeristy
poster	2MoP.34	High-Performance Perovskite Solar Cells based on	Ming-Chung Wu	Chang Gung University

		Various Metal-Doped TiO2 Electron Transport Layer		
poster	2MoP.35	Predictions of the bandgap and formation energy for highly stable inorganic lead-free halide perovskite solar cell by Machine learning	Qixin Zhang	Yunnan Normal University
poster	2MoP.36	Chelated PbI4 pseudo-octahedron surface for efficient and stable perovskite solar cells	Bin Wen	Shenzhen Campus of Sun Yat-sen University
poster	2MoP.37	Bifunctional conjugated organic molecule in printable mesoscopic perovskite solar cells	Chuang Yang	Huazhong University of Science & Technology
poster	2MoP.38	Aiming at the industrialization of Perovskite Solar Cells: coping with stability challenge	Zexiong Qiu	Huazhong University of Science and Technology
poster	2MoP.39	Manipulating the Formation of 2D/3D Heterostructure in Stable High-Performance Printable CsPbI3 Perovskite Solar Cells	Yachao Du	Shaanxi Normal University
poster	2MoP.40	Direct growth of high quality and thickness controlled large area (over 2500 mm2) perovskite single crystal on a substrate for X-ray detector application.	Youngseung, Choi	korea advanced institute of science and technology
poster	2MoP.41	TiO2/SnO2 Electron Transport Bilayer for Large-Area Low-Temperature Fabrication of Perovskite Solar Cell	Xianhuan Yu	Nara Institute of Science and Technology (NAIST)
poster	2MoP.42	Wide-Bandgap Perovskite Solar Cell Using a Fluoride-Assisted Surface Gradient Passivation Strategy	Nan Yan	Shaanxi Normal University
poster	2MoP.43	Interface Modification of Gd Doped SnO2 Electron Transport Layer for Efficient and Stable Perovskite Solar Cells	Renjie Wang	Fuzhou University
poster	2MoP.44	Ambient-Air-Stable Ti2CTx MXene Passivation Inverted Perovskite Solar Cells	Peng Wu	Kunming University of Science and Technology
poster	2MoP.45	Achieving small temperature coefficients in carbon-based perovskite solar cells by enhancing electron extraction	Xian Zhang	Hebei University of Technology
poster	2MoP.46	Graded heterojunction improves wide-bandgap perovskite for highly efficient 4-terminal perovskite/silicon tandem solar cells	Wenming Chai	Xidian university
poster	2MoP.47	Acetic Acid Based Solvent Enables Fabrication of Wide-Band-Gap (2.0 eV) Perovskite Solar Cells with a VOC of 1.325 V	Jian Cheng	Hanyang university
poster	2MoP.48	On the Ion Coordination and Crystallization of Metal Halide Perovskites by In-situ Dynamic Optical Probing	Zixin Zeng	City University of Hong Kong
poster	2MoP.49	ZnO/SnO2 Bilayer as Electron Transport Layer for FAPbI3 Perovskite Solar Cell	Xuli Ning	Inner Mongolia University
poster	2MoP.50	Cesium halides facilitate perovskite film growth to explore device performance	Xiaoqi Ren	Inner Mongolia University
poster	2MoP.51	Relevance between wide bandgap organic-inorganic hybrid perovskite solar cell performance and Pb management	Haikuo Guo	Inner Mongolia University
poster	2MoP.52	Temperature Effect on the Crystallization of Formamidine-based Perovskite	Yunfan Wang	City university of Hong Kong

poster	2MoP.53	24.65% Efficient inverted perovskite solar cells based on interface passivation treatment of inorganic hole transport layer by mixed self-assembled monolayer	Wenbo Peng	Southern University of Science and Technology
poster	2MoP.54	CsPbCl3-cluster-widened bandgap and inhibited phase segregation in a wide-bandgap perovskite and its application to NiOx-based perovskite/silicon tandem solar cells	Yuanyuan Ding	Shihezi University
poster	2MoP.55	Enhanced flexibility and light utilization for high-efficiency all-air-processed carbon-based perovskite solar cells	Siqi Li	XINTE ENERGY CO., LTD
poster	2MoP.56	Efficient and Stable Inverted All-Inorganic Perovskite Solar Cells Based on Hole Selective Monolayers	Siliang Cao	University of Tsukuba
poster	2MoP.57	Visualizing Interfacial Energy Offset and Defects in Efficient 2D/3D Heterojunction Perovskite Solar Cells and Modules	Weichuang Yang	Chinese Academy of Sciences
poster	2MoP.58	Enhancing Open-Circuit Voltage of Mixed Tin-Lead Perovskite Solar Cells with Metal Powder and Ethylenediamine Passivation	Sejin Kim	Korea Advanced Institute of Science and Technology
poster	2MoP.59	Zr(Ac)4 stabilized SnO2 quantum dots as ETL for efficient and stable perovskite solar cells	Haipeng Jiang	Jilin Normal University
poster	2MoP.60	A Design Strategy of Additive Molecule for Pscs: Anchoring Intrinsic Properties of Functional Groups	Fengyou Wang	Jilin Normal University
poster	2MoP.61	Highly Stable N-I-P Structured Formamidinium Tin Triiodide Solar Cells Through The Stabilization Of Surface Sn2+ Cations	Manman Hu	Ulsan National Insititute of Science and Technology
poster	2MoP.62	Tuning the chemistry of solution-less perovskite processes for PVK-silicon tandem cells	Gregory Wilson	CSIRO
poster	2MoP.63	In situ polymerization of cross-linked perovskite–polymer composites for highly stable and efficient perovskite solar cells	He Guo	Sungkyunkwan University
poster	2MoP.64	Development of high-performance long-term stable and low-cost perovskite solar cells	Jing Zhang	University of Surrey
poster	2MoP.65	Ion-Charged Dielectric Doping of Graphene Transparent Conducting Electrodes in Perovskite/Silicon Tandem Cells	John O'Sullivan	University of Oxford

poster	2MoP.66	High Accuracy Optical Ray-Tracing Models for Single-Junction Perovskite Solar Cells	Varsha DAHIYA	National University of Singapore c/o Solar Energy Research Institute of Singapore, Singapore
poster	2MoP.67	Scalable Two-Terminal All-Perovskite Tandem Solar Modules With Advanced Laser-Patterned Interconnections	David Benedikt Ritzer	Karlsruhe Institute of Technology
poster	2MoP.68	Surface Passivation of Wide-bandgap Perovskite Solar Cells Using Selective Reactivity-assisted Sacrificial Additive Coating	Koh Jaehyuk	Korea Advanced Institute of Science and Technology (KAIST)
poster	2MoP.69	Multifunctional Interfacial Layers for Reproducible and Efficient p-i-n Perovskite Solar Cells Yihao Wang	Yihao Wang	UNSW SPREE
poster	2MoP.70	Monolayer-modified PTAA facilitates the preparation of high-efficiency wide-bandgap perovskite solar cells and all-perovskite tandem cells with efficiencies exceeding 25%	Huan Bi	The University of Electro-Communications
Area3. Thin film compound semiconductor solar cells				
6-Nov-23				
		Topic	Name	AFFILIATION
poster	3MoP.1	Development of the CdSe:O layer prepared by sputtering process for CdTe-based solar cell	Xinlu Lin	Advanced Solar Power (Hangzhou) Inc.
poster	3MoP.2	The effect of substrate temperature on cadmium telluride films in high temperature vapor deposition process	Wenxiong Zhao	Institute of Electrical Engineering, Chinese Academy of Sciences
poster	3MoP.3	Organic Passivation of Deep Defects in Cu(In,Ga)Se2 Film	Xuan Chang	Hebei University
poster	3MoP.4	High Efficiency Cu2CdSnS4 Solar Cells Fabricated by	Jinhong Lin	ShenZhen University

		Optimized Sulfurization		
poster	3MoP.5	Kesterite Solar Cells on Transparent Electrodes	Chunxu Xiang	Nanjing University of Posts & Telecommunications
poster	3MoP.6	Engineering Germanium Nanolayer Stacking Position in Precursor of Flexible Kesterite-based Thin-Film Solar Cell	Hojun Choi	Chonnam National University
poster	3MoP.7	PEC water-splitting photocathode and thin-film solar cells based on kesterite materials and their properties according to the bandgap energy	Suyoung Jang	Chonnam National University
poster	3MoP.8	12.3% efficient low VOC loss pure sulfide kesterite solar cells from DMSO solution via cadmium alloying	Xiangyu Pan	Nanjing University of Posts & Telecommunications
poster	3MoP.9	Effect of DC Bias on MZO Window Layer for CdTe Solar cell	QiuchenWu	Institute of electrical engineering, Chinese academy of sciences
poster	3MoP.10	The Flexible CdTe Solar cell Prepared by Guided Vapor Deposition	QiuchenWu	Institute of electrical engineering, Chinese academy of sciences
poster	3MoP.11	Study on Bifacial CdTe Solar Cell with ZnTe:N/IWO Composite Transparent Back Electrode	Xin Zhang	Sichuan University
poster	3MoP.12	UV Spectroscopic Characterization of ZnO1-xSx Buffer Layer for Cu(In,Ga)Se2 Solar Cell	Kwok Cheuk Kai Gary	University of Tsukuba

poster	3MoP.13	Quinoxalineimide-based Y-type Acceptors Tuning Charge Behaviors Enable Highly Efficient Ternary Organic Photovoltaics	Jianpeng Xu	Southern University of Science and Technology
poster	3MoP.14	Post-Treatment of TiO2 Film Enables High-Quality Sb2Se3 Film Deposition for Solar Cell Applications	Lei Huang	University of Science and Technology of China
poster	3MoP.15	Thermal-Driven Point Defect Transformation in Antimony Selenosulfide Photovoltaic Materials	Junjie Yang	University of Science and Technology of China
poster	3MoP.16	Spiro-conjugation in Narrow-bandgap Nonfullerene Acceptors Enables Broader Spectral Response and Higher Detectivity for Near-infrared Organic Photodetectors	Lin Shao	South China University of Technology
poster	3MoP.17	Direct Hydrothermal Deposition of Antimony Triselenide Films for Efficient Planar Heterojunction Solar Cells	Yue Hu	University of Science and Technology of China
poster	3MoP.18	The influence of deposition conditions on the properties of the ZnTe:Cu back contact layer	Ruchun Li	Institute of Electrical Engineering, Chinese Academy of Sciences
poster	3MoP.20	Interfacial Engineering Towards Enhanced Photovoltaic Performance of Sb2Se3 Solar Cell	Qi Zhao	University of Science and Technology of China
poster	3MoP.21	A new copper complex for efficient chalcopyrite solar cells	Shuxia Wei	Nanjing University of Posts & Telecommunications
poster	3MoP.22	Exploring Potential of Kesterite Based Cu2ZnSn(S,Se)4 Devices Under Indoor Light Conditions	KARADE VIJAY CHANDRAKANT	Korea Institute of Energy Technology
poster	3MoP.23	Device Design for High-Efficient Cu(In,Ga)Se2 Solar Cells utilizing Bayesian Optimization	Takahito Nishimura	Tokyo Institute of Technology
poster	3MoP.24	Research on the growth and defect regulation mechanism of Sb2Se3 film for solar cells	Mingdong Chen	Shenzhen University

poster	3MoP.25	Modification of the back interface via In-doping technique achieving efficient flexible CZTSSe solar cells	Quanzhen Sun	Fuzhou University
Area5. Materials, cells and modules of crystalline Silicon PV				
6-Nov-23				
		Topic	Name	AFFILIATION
poster	5MoP.1	Study on the influence of micro-alkali texturing and micro-alkali polishing process on the passivation and contact performance of n-TOPCon solar cells	Chunlin Guo	Institute of Microelectronics of the Chinese Academy of Sciences
poster	5MoP.2	Evaluation of Perimeter Recombination in Lab-level Silicon Heterojunction Solar Cells by Quokka3 Simulator	Depeng Qiu	Jiangxi Academy of Sciences
poster	5MoP.3	Back EVA recycling from c-Si photovoltaic module without damaging solar cell via laser irradiation followed by mechanical peeling	LixiaoTong	University of Chinese Academy of Sciences
poster	5MoP.4	Beyond 25% efficient crystalline silicon heterojunction solar cells with hydrogenated amorphous silicon oxide stacked passivation layers for rear emitter	Lilian Wen	Institute of Electrical Engineering, The Chinese Academy of Sciences
poster	5MoP.5	Surface corrosion and deterioration mechanism of In2O3-based transparent conductive film under acetic acid stress	Yu Bai	Southwest Petroleum University
poster	5MoP.6	Anti-reflection and down-conversion composite functional films for high-efficiency solar cells	Shengxuan Wang	Zhejiang University
poster	5MoP.7	Fabrication and characterization of optical interference coatings for colored building-integrated photovoltaic applications	Chang Chuan You	Institute for Energy Technology
poster	5MoP.8	AFORS-HET numerical simulation of high efficiency heterojunction solar cells with 28.26% efficiency	Bingquan Liang	Nankai University
poster	5MoP.9	Study on the Effect of Temperature on Performance of Al2O3 Film Prepared by PEALD	Hongfang Wang	Yingli Energy Development Co., Ltd
poster	5MoP.10	Penetrative Twining in 288 mm-diameter Photovoltaic Czochralski Silicon	Xiang Lv	Zhejiang University
poster	5MoP.11	Superhydrophilicity Hollow Silica and Titania Nanospheres Composite Coating for Photovoltaic Modules	Sijia Jin	Zhejiang University
poster	5MoP.13	High Mobility Hafnium and Hydrogen Co-Doped Indium Oxide Transparent Conductive Films and	Jiacheng Shang	University of Chinese Academy of Sciences

		Application in High Efficiency Silicon Heterojunction Solar Cells		
poster	5MoP.14	Study on effect of electric injection regeneration on LID in B-doped PERC cells by combing JAYA algorithm with SDM model	Chen Yang	Sun Yat-sen University
poster	5MoP.15	Sn-doped indium oxide film prepared by reactive plasma deposition for high-efficiency silicon heterojunction solar cell	Yuqin Zhou	University of Chinese Academy of Sciences
poster	5MoP.16	Large-area MoOx/c-Si heterojunction solar cells with a back junction	Yuqin Zhou	University of Chinese Academy of Sciences
poster	5MoP.17	Aluminum and Molybdenum co-doped Zinc Oxide Films as Transparent Conductive Oxide for Silicon Solar Cells	Zhiyuan Xu	Nankai University
poster	5MoP.18	Silver-Lean Screen-Printed Contacts for Industrial Silicon Solar Cells	Yuchao Zhang	University of New South Wales
poster	5MoP.19	Impact of Defect Cluster Distribution on Solar Cell Performance in Cast Monocrystalline Silicon	Guixiu Li	Zhejiang University
poster	5MoP.20	Bayesian optimization of carrier selectivity of p-type silicon nano-crystal/silicon oxide compound layer	Kazushi Mizutani	Nagoya University
poster	5MoP.21	Improved Passivation of TOPCon Contacts by Thermal Annealing in A Water Vapor Atmosphere	Yu Yan	Nankai University
poster	5MoP.22	Aluminum Fluoride Electron-Selective Passivating Contacts for Crystalline Silicon Solar Cells	Kun Gao	Soochow University

poster	5MoP.23	Understanding the hydrogenation mechanisms based on water vapor atmosphere annealing in poly-Si/SiOx passivating contacts for Si solar cells by first-principles calculation	Jiakai Zhou	Nankai University
poster	5MoP.24	Effects of Extended Defects on Crystalline Silicon Solar Cells and an Oxidation Processing To Restore Damaged Silicon Wafer	Jinpei Liu	Lanzhou University
poster	5MoP.25	High-performance perovskite/silicon heterojunction solar cells enabled by industrially compatible postannealing	Sihua Zhong	Jiangsu Ocean University
poster	5MoP.26	Performance enhancement of silicon heterojunction solar cell based on luminescent down-shifting	Daxue Du	Shanghai jiao tong university
poster	5MoP.27	Effect of rear pyramid structures on industrial bifacial crystalline silicon solar cells	Daxue Du	Shanghai jiao tong university
poster	5MoP.28	Analysis of the influence of bi-facial silicon solar cell module efficiency-enhancement mechanism	Zhao Xiaowen	East China University of Science and Technology
poster	5MoP.29	Enhanced Surface Passivation of c-Si Surfaces Using Boron Oxide/Aluminum Oxide Stacks	Xinyu Wang	Soochow University
poster	5MoP.30	How Particle Sizes Affect Silver Leaching From C-Si Photovoltaic Solar Cells	Shuang Song	University of New South Wales
Area6. Performance and Reliability of PV modules				
6-Nov-23				
		Topic	Name	AFFILIATION

poster	6MoP.1	Modeling of coated glass aging effects on module Isc loss	Ben Huang	Canadian Solar Inc.
poster	6MoP.2	In-situ Microscopy Characterization of Light-induced Phase Segregation in Wide-Bandgap Perovskite Materials	Fangfang Cao	Ningbo Institute of Materials Technology and Engineering
poster	6MoP.3	Degradation analysis of the photovoltaic modules after 40-year-operation	Xuemei Hu	Gansu Natural Energy Research Institute
poster	6MoP.4	Day ahead Power Estimation of Residential PV using Random Forest and LSTM Neural Network	Sora Nasu	Tokyo University of Science
poster	6MoP.6	The application of atomic layer deposition on polyimide substrate for space photovoltaic modules	Chi Yan	East China University of Science and Technology
poster	6MoP.7	Effect of Cover Glass Morphology on the Potential-Induced Degradation of n-type Front-Emitter Crystalline Silicon Photovoltaic Modules	Keisuke Ohdaira	Japan Advanced Institute of Science and Technology
poster	6MoP.8	Enhancing the Water Vapor Barrier of Polyethylene Terephthalate for Photovoltaic Modules Backsheets	Chengyou Zhang	East China University of Science and Technology
poster	6MoP.9	Lifetime of PV Module in Tropical Climate using the Standard Testing Condition	Tanokkorn Chenvidhya	King Mongkut's University of Technology Thonburi
poster	6MoP.10	Study on properties of thermal cycle aging backsheet materia	Yanyun Yang	Yunnan Normal University

poster	6MoP.11	The Effect of Photovoltaic Ribbon Aging on the Electrical Performance of Photovoltaic Modules	Ping Feng	Yunnan Normal University
poster	6MoP.12	Influence of partial shading conditions on space solar array's electrical performance	Ning Yang	Yangtze Institute for Solar Technology
poster	6MoP.13	Expansion of Micro-cracks in Photovoltaic Modules under Outdoor Conditions	Li Feng	Bielefeld University of Applied Sciences and Arts
poster	6MoP.14	Protective Layer for improving the lifetime reliability of Silver Electrodes for Solar Cell	Suwoon Lee	Seoul National University of Science and Technology
poster	6MoP.15	The effects of Rear Reflection on the Efficiency Test of Bifacial Solar Cells	Chuangen Xu	East China University of Science and Technology
poster	6MoP.16	Indoor Light Harvesting Wide-bandgap Perovskite Solar Modules Exceeding 43% Efficiency	Qiaoyan Ma	Ji'nan University
poster	6MoP.17	Investigation of optoelectrical properties of encapsulation material of PV module	Ganghui Wei	Lanzhou University
poster	6MoP.18	Outdoor Monitoring and Performance Analysis of Bifacial and Single-Sided PV Modules in Variable Climatic Conditions	Jung-Hwan Park	Pusan National University
poster	6MoP.19	Comparative analysis of the power performance of the modules of TOPCon and HJT	Hui Li Han	XinYang Normal University
poster	6MoP.20	Addressing Sodium Ion-Related Degradation in SHJ Cells by the Application of Nano-Scale Barrier Layers	Xinyuan Wu	UNSW

Area8. Grid integration of PV system

6-Nov-23

		Topic	Name	AFFILIATION
poster	8MoP.1	Research on the Application of Mixed Reality Technology in Power System Planning and Design	Jing Liu	Institute of Electrical Engineering, Chinese Academy of Sciences
poster	8MoP.2	Hierarchical Approach for Comparing Direct Current Photovoltaic Power Plant Topology	Chen Huo	Institute of Electrical Engineering Chinese Academy of Sciences
poster	8MoP.3	New Photovoltaic Pumped EnergyStorage System and Economic Analysis--Dongchuan Photovoltaic Pump Station as an Example	Yiqiang Zhang	Yunnan Normal University
poster	8MoP.4	Critical System Strength Assessment of Photovoltaic Inverter Grid Integration	Fei Li	Hefei University of Technology
poster	8MoP.5	Control Algorithm for MPPT Based on Multiple Module Input	Yu Zhou	Institute of Electrical Engineering,Chinese Academy of Siencse
poster	8MoP.6	Fault Identification Method of Hot Spot Shape Feature Based on Random Forest	Lin Jiang	Hefei University of Technology
poster	8MoP.7	Research on parameter design method of 90kW-LLC photovoltaic medium voltage DC converter	Gesi Tang	Institute of Electrical Engineering Chinese Academy of Sciences
poster	8MoP.8	Design of Distributed Photovoltaic Electrolysis Hydrogen Production System	Yong Zhao	Institute of Electrical Engineering, Chinese Academy of Science
poster	8MoP.9	Study on frequency conversion and high voltage transmission based on photovoltaic water pump system	Longfei Wu	Yunnan Normal University
poster	8MoP.10	Voltage balance control of the DC/DC Converter in DC Series-parallel PV Collection System Based on Energy Storage System	Xinke Huang	Institute of Electrical Engineering, Chinese Academy of Sciences
poster	8MoP.11	Evaluation Method of Renewable Energy Technologies Development Considering Multiple Time-scale Changes and Complementarity	Weiwei Chen	Institute of Electrical Engineering, Chinese Academy of Sciences
poster	8MoP.12	Comprehensive Loss and Thermal Performance Analysis of Three-level T-type Grid-connected Converters	Liangliang Han	Hefei University of Technology
poster	8MoP.13	Research on DC/DC converter for hydrogen production from photovoltaic	Xiangfei Meng	Institute of Electrical Engineering Chinese Academy of Sciences
poster	8MoP.14	Insulation Design of Medium-Voltage and High-Frequency Transformer	Yubo Zhang	Institute of Electrical Engineering, Chinese Academy of Sciences

Area9. PV business model, policy and standard

6-Nov-23

		Topic	Name	AFFILIATION
poster	9MoP.1	Photovoltaic recycling enterprise standard research and recommendation report	Junyu Xu	PV Recycling Industry Development Center of PV Committee of China Green Supply Chain Alliance
poster	9MoP.2	The Effect of Temperature and Irradiation on the performance ratio of photovoltaic Modules	Kai He	Photovoltaic and Wind Power Systems Quality Test Center, Institute of Electrical Engi-neering Chinese Academy of Sciences
poster	9MoP.3	Energy Efficiency Calculation And Analysis of Photovoltaic Modules Under Climate Conditions	Kaixuan Zhou	Photovoltaic and Wind Power Systems Quality Test Center, Institute of Electrical Engineer-ing Chinese Academy of Sciences
poster	9MoP.4	Overview of the Recent policy for PV Power Generation	Yinghua Dong	National Key Laboratory of Renewable Energy Grid-Integration

Poster November 6, 2023

Area1. Advanced concepts and emerging materials for future PV power conversion

9-Nov-23

		Topic	Name	AFFILIATION
poster	1ThP.1	B-N Covalent Bond-based Non-fullerene Electron Acceptors for Efficient Organic Solar Cells	Zhengwei Hu	South China University of Technology
poster	1ThP.2	A new template prepared by lotion polymerization and organosilicon source using sol_ Optical and mechanical properties of HSNS films prepared by gel method	Yucen Xie	Yunnan Normal University
poster	1ThP.3	Secondary anti-solvent treatment for efficient 2D Dion-Jacobson perovskite solar cells	Lu Jin	Nankai University
poster	1ThP.4	Influence of two-step annealing process on a-IGZO/HfOx TFT devices	Jingwen Chen	Sungkyunkwan University
poster	1ThP.5	A simple fabrication of TiO2/PANI photo-supercapacitor for energy conversion and storage	Yanlong Lv	north China electric power university
poster	1ThP.6	1,4-Azaborine Based Unfused Non-fullerene Acceptors for Organic Solar Cells	Shihao Chen	South China University of Technology
poster	1ThP.7	PDMS Interface Modification Improves the	Yingchen Li	Nankai University

		efficiency and Stability of Perovskite Solar Cells		
poster	1ThP.8	An Engineering Strategy to Fabricate Semi-transparent Organic Solar Cells Based on Large Bandgap Materials as Second Donors or Acceptors	Minming Yan	Peking University Shenzhen Graduate School
poster	1ThP.9	High-energy-density supercapacitors based on high-areal-specific-capacity Ti3C2Tx and a redox-active organic-molecule hybrid electrode	Haoxiang Zhang	Dalian Institute of Chemical Physics, Chinese Academy of Sciences
poster	1ThP.10	Schottky Junction Solar Cell Using Graphene Directly Grown on Silicon at Low Temperature	SUDIP ADHIKARI	C's Techno Inc
poster	1ThP.11	Control of Size and Faceting of Emerging Tetrahedral π-SnS Particles	Du Xiangxin	Kyoto University
poster	1ThP.12	Solution-processed p-Si-Based Novel Heterojunction Solar Cells	Zining Fan	Lanzhou University
poster	1ThP.13	An electron-conductive, hole-blocking Titanium Nitride contact for solution-processed silicon-organic hybrid heterojunction solar cells	Chenxi Liu	Lanzhou University
poster	1ThP.14	Effects of Silver Electrode Interface on the Stability of Hybrid Heterojunction Solar Cells	Hao Liu	Lanzhou University

Area2. Perovskite and tandem solar cells and modules

9-Nov-23

		Topic	Name	AFFILIATION
poster	2ThP.1	Acetone-assisted precursor engineering enables low-temperature fabrication of CsPbI2Br perovskite for efficient solar cells	Weijian Tang	Sichuan University
poster	2ThP.2	Flexible all-perovskite tandem solar cells approaching 25% efficiency	Yurui Wang	nanjing university
poster	2ThP.3	Constructing a Tungsten Disulfide Modified Absorber For Boosting Photovoltaic Performance of Perovskite Solar Cells	Lin Fan	Jilin Normal University
poster	2ThP.4	Improved Performance of Bifacial Perovskite Photovoltaic Cells via Adjusting Photoelectric Characteristic in Rear Window Layers	Lin Fan	Jilin Normal University
poster	2ThP.5	Inhibiting Octahedral Tilting for Stable CsPbI2Br Solar Cells	Aili Wang	Yangzhou University
poster	2ThP.6	High-speed Deposition of Large-area Narrow-bandgap Perovskite Films for All-perovskite Tandem Solar Mini-modules	Jinglin Sun	Shanghai Jiao Tong University
poster	2ThP.7	Flexible aqueous supercapacitors for long cycle-life using electrode with multiple active C=S sites	Xinxin Xing	Dalian Institute of Chemical Physics
poster	2ThP.8	Designing Heterovalent Substitution with Antioxidant Attribute for High-Performance Sn-Pb Alloyed Perovskite Solar Cells	Zhen Chang	Dalian Institute of Chemical Physics

poster	2ThP.9	Self-Assembled Amphiphilic Monolayer for Efficient and Stable Wide-Bandgap Perovskite Solar Cells	Lu Liu	China National Nuclear Power Co., Ltd.
poster	2ThP.10	Surfactant engineering for perovskite solar cells and submodules	Kai Wang	Dalian Institute of Chemical Physics, Chinese Academy of Sciences
poster	2ThP.11	High-Performance Flexible All-Perovskite Tandem Solar Cells and Mini-Modules	Huagui Lai	Empa
poster	2ThP.12	MASCN Manipulated Intermediate Phase for High-Performance Blade-coated Inverted Wide-Bandgap Perovskite Solar Cells	Jianing Li	Nankai University
poster	2ThP.13	0D Additive for Flexible All-inorganic Perovskite Solar Cells to Go Beyond 60,000 Flexible Cycles	Huijing Liu	North China Electric Power University
poster	2ThP.14	Highly Efficient and Stable CsPbI3 Solar Cells Based on 2D and Quasi-2D Double Perovskite Passivation Layer	Huifang Han	North China Electric Power University
poster	2ThP.15	In situ formed inorganic lead oxysalts layer for surface passivation towards efficient and stable in CsPbI3 perovskite solar cells	Yao Fu	North China Electric Power University
poster	2ThP.16	Stabilization of FAPbI3 with multifunctional alkali-functionalized polymer	Chenxu Zhao	North China Electric Power University
poster	2ThP.17	The Synthesis Of Single Crystalline Methylammonium Lead Iodide And Its Degradation Under Moisture Conditions	Yasuhiko HAYASHI	Okayama University
poster	2ThP.18	Synergistic effect of pyridine salt additives for efficient and stable inverted wide-bandgap perovskite solar cells	Hua Zhao	Nankai University
poster	2ThP.19	Machine-Learning-Based Study of The Formation and Band Gap of Novel Perovskite Oxides	Yifan Hu	Sungkyunkwan University
poster	2ThP.20	Enhanced Performance of Flexible Perovskite Solar Cells with respect to MACl-SnO2 Electron Transport Layer	Ting Jiang	Sichuan University
poster	2ThP.21	In situ epitaxial growth of blocking structure in mixed-halide wide-bandgap perovskite for efficient photovoltaics	Zhuoxin Li	North China Electric Power University
poster	2ThP.22	Interface Modification for Efficient and Stable Inverted Inorganic Perovskite Solar Cells	Tianfei Xu	Shaanxi Normal University
poster	2ThP.23	Stable Perovskite Solar Cells Induced by Tuning Voids of Inorganic Layer in Two-step Method	Xiaoli Gong	Sichuan University
poster	2ThP.24	Plant-Derived L-Theanine for Ultraviolet/Ozone Resistant Perovskite Photovoltaics	Yong Li	Shaanxi Normal University
poster	2ThP.25	Amino-Acid-Type Alkylamine Additive for High-Performance Wide-Bandgap Perovskite Solar Cells	Ting Nie	Shaanxi Normal University
poster	2ThP.26	Decoupling the effects of defects on efficiency and stability through phosphonates in stable halide perovskite solar cells	Haibing Xie	Shenzhen University
poster	2ThP.27	Acidity Control of Interface for Improving Stability of All-perovskite Tandem Solar Cells	Jie Zhou	Shanghai Jiaotong University

poster	2ThP.28	Perovskite Solar Cells Using SiO2 as Anti-Solvent Additive for ModulatingThin Film Nucleation	Jionghua Wu	Fuzhou University
poster	2ThP.29	Dielectric Regulation via Polar Specie Modification Boosted the Performance of CsPbI3 Perovskite Solar Cells	Jingru Zhang	Shaanxi University of Science & Technology
poster	2ThP.30	Uniform Coverage Functional Layers Enable High-efficient Flexible Perovskite Solar Modules with an Outstanding Fill Factor	Yibo Xu	Changzhou University
poster	2ThP.31	A method to inhibit perovskite solution aging: Induced by perovskite microcrystals	Kaihuai Du	Changzhou University
poster	2ThP.32	Seed-assisted Cu-doped Chemical Bath Deposition for Preparing High-quality NiOx Hole Transport Layers in Perovskite Solar Cells	Yunxiao Liao	Changzhou University
poster	2ThP.33	Conjugated small molecule inhibiting intrinsic ion migration and enriching electron transfer channels for stable and efficient perovskite solar cells	Fei Han	Jiangxi Academy of Sciences
poster	2ThP.34	Highly Efficient Flexible Solar Cells on PET for Indoor Application via Halide Composition and Interfacial Design Optimization	Jie Xu	Centre for Hybrid and Organic Solar Energy, University of Rome Tor Vergata
poster	2ThP.35	Highly Conductive and Broadband Transparent Zr-Doped In2O3 as the Front Electrode for Monolithic Perovskite/Silicon Tandem Solar Cells	Wei Han	Institute of Photoelectronic Thin Film Devices and Technology, Renewable Energy Conversion and Storage Center, Solar Energy Research Center, Nankai University
poster	2ThP.36	Perovskite electroluminescent devices based on CsPbBrI and quasi two-dimensional structure thin film devices	Zirui Shi	Nankai University
poster	2ThP.37	Interface Control and Efficiency Enhancement of Mesoscopic and Planar Type Electron-Transporting Layer for All Inorganic Perovskite Solar Cells	Lyufei Xue	Waseda University
poster	2ThP.38	Chloride-Based Additive Engineering For Efficient And Stable Wide-Bandgap Perovskite Solar Cells	Xinyi Shen	University of Oxford
poster	2ThP.39	Utilizing Benzophenone as a Molecular Additive to Enhance the Performance and Stability of Inverted Perovskite Solar Cells	Xiaowei Xu	Southern University of Science and Technology
poster	2ThP.40	Facile Synthesis of Iron-Doped Cs3Bi2Br9 Perovskite Materials with Tunable Properties	Thiri Htun	Okayama University
poster	2ThP.41	Interface Engineering Increases the Open Circuit Voltage of Wide-Band Gap Perovskite Solar Cells	Yu Gan	Sichuan University
poster	2ThP.42	Surface modification treatment for the improvement of light illumination stability in Sn-Pb mixed perovskite solar cells	Yulu He	National Institute for Materials Science
poster	2ThP.43	Nanocrystalline Silicon-Oxygen Based Tunneling Recombination Junctions in Perovskite/Silicon	Yuxiang Li	Nankai University

		Heterojunction Tandem Solar Cells		
poster	2ThP.44	Cooperative Adsorption of Metal-Organic Complexes on CsPbI2Br Perovskite Surface for Photovoltaic Efficiency Exceeding 17%	Xu Wang	Inner Mongolia Erdos Electric Power and Metallurgy Group Company Limited
poster	2ThP.45	Surface chelation of cesium halide perovskite by dithiocarbamate for efficient and stable solar cells	Xu Wang	Inner Mongolia Erdos Electric Power and Metallurgy Group Company Limited
poster	2ThP.46	Novel Cathode Buffer Layer Ti-doped Assist efficient 1.65eV Wide Bandgap and 1.72eV Inorganic Perovskite Solar Cells	Ming Luo	Nankai University
poster	2ThP.47	Luminescence-based implied voltage imaging of tandem solar cells via bandpass filter method	Shuai Nie	University of New South Wales
poster	2ThP.48	Commonly Used Sequential Passivation for Lead-Free Tin Perovskite Solar Cells with High Efficiency	Zheng Zhang	Hebei University
poster	2ThP.49	Bar-coating Preparation of All-Inorganic Perovskite Layer over 700 nm Thickness and Improvement of Conversion Efficiency through Surfactant Addition	Kota Haseyama	Waseda University
poster	2ThP.50	Two-terminal perovskite/organic tandem solar cells with different metal recombination layers	Rongbo Wang	Nankai University
poster	2ThP.51	Efficient and Thermally Stable All-Perovskite Tandem Solar Cells Using All-FA Narrow-Bandgap Perovskite and Metal-oxide-based Tunnel Junction	Pu Wu	Nanjing University
poster	2ThP.52	Large Area Preparation and Performance Optimization of Inverted Planar Perovskite Solar Cells Based on Spray coating	Juntao Zhao	Nankai University
poster	2ThP.53	The degradation mechanism of perovskite solar cells under humid stability	Bingjie Zhu	Wuxi Institute of Inspection, Testing and Certification
poster	2ThP.54	Formamidine Formate as the Multifunctional Modulator at Buried Interface for Efficient FAPbI3 Perovskite Solar Cells	Ya Wang	Nankai University
poster	2ThP.55	21.7% efficient all-perovskite tandem solar modules	Ke Xiao	Nanjing University
poster	2ThP.56	Cerium-Doped Indium Oxide and Application in Semi-Transparent Perovskite Solar Cells	Limeng Zhang	University of Chinese Academy of Sciences
poster	2ThP.57	Suppressing the Photoinduced Halide Segregation in Wide-Bandgap Perovskite Solar Cells by Strain Relaxation	Hui Liu	Nankai university
poster	2ThP.58	Perovskite solar cells based on spiro-OMeTAD stabilised with an alkylthiol additive	Xu Liu	University of New South Wales
poster	2ThP.59	Observation of Charge-Carrier dynamics of Perovskite Solar Cells by the Time-Resolved Pattern-illumination Phase Microscopy	Tatsuki Ito	Chuo University
poster	2ThP.60	Surface Defects Management by In Situ Etching with Methanol for Efficient Inverted Inorganic Perovskite Solar Cells	Hongrui Sun	Nankai University

poster	2ThP.61	Tuning the chemistry of solution-less perovskite processes for PVK-silicon tandem cells	Gregory Wilson	CSIRO
poster	2ThP.62	The Role of Indium Tin Oxide in Interfacing Perovskite with Steel and Silicon Solar Cells	Jianghui Zheng	The University of Sydney
poster	2ThP.63	Molecular engineering of self-assembled monolayer hole selective layer for high bandgap perovskite and highly efficient and stable perovskite-silicon tandem solar cells	Guoliang Wang	The University of Sydney

Area3. Thin film compound semiconductor solar cells

9-Nov-23				
		Topic	Name	AFFILIATION
poster	3ThP.1	Analysis of Cu2ZnSn(S,Se)4 (CZTSSe) photovoltaic performance improvement with Ag doping position	Sang Woo Park	Chonnam National University
poster	3ThP.2	Effect of hydrogen partial pressures on the properties of Ga doped MZO film	Yufeng Zhang	INSTITUTE OF ELECTRICAL ENGINEERING,CHINESE ACADEMY OF SCIENCES
poster	3ThP.3	Back Contact Interface Modification in Carbon-based Antimony Chalcogenide Solar Cells	Guilin Chen	Fujian Normal University
poster	3ThP.4	Direct graphene grow on silicon for 6.9% efficient Graphene/Si Schottky solar cell	Rucheng Zhu	Nagoya Institute of Technology
poster	3ThP.5	Interface Band Engineering for High-efficiency Wide Bandgap Cu(In,Ga)Se2 Solar Cells	Wei Liu	Nankai University
poster	3ThP.6	Improved Carrier Collection Efficiency in CZTS Solar Cells Enabled by Li-enhanced Liquid-phase-assisted Grain Growth	Xiaojie Yuan	UNSW
poster	3ThP.7	High-efficiency flexible CZTSSe solar cells prepared by novel selenization process	Weihao Xie	Fuzhou University
poster	3ThP.8	Boosting open-circuit voltage in Sb2(S,Se)3 solar cells via additive-assisted hydrothermal deposition method	Yazi Wang	Korea Advanced Institute of Science and Technology (KAIST)
poster	3ThP.9	Optimizing bandgap gradient for Sb2(S,Se)3 solar cells: Toward 8% efficiency through a hybrid growth method	Seunghwan Ji	Korea Advanced Institute of Science and Technology (KAIST)
poster	3ThP.10	A Robust Hydrothermal Sulfuration Strategy toward Effective Defect Passivation Enabling 6.92% Efficiency Sb2S3 Solar Cells	Xiaoqi Peng	University of Science and Technology of China
poster	3ThP.11	Effect of DC Bias on MZO Window Layer for CdTe Solar cell	Qiuchen Wu	Institute of electrical engineering, Chinese academy of sciences

poster	3ThP.13	Research on Picosecond Laser Scribing Process For Flexible CdTe Thin-film Solar Cells With Cd2SnO4 As the Front Electrode	Kai Huang	CAS
poster	3ThP.14	Proton Radiation Resistance and Loss Mechanism of Kesterite Cu2ZnSn(S,Se)4 Solar Cells	Yun Zhao	Northwest Normal University
poster	3ThP.15	Preparation of a crack-free CZTSSe absorbers using Sn-rich composition engineering	Yang Mao	Nankai University
poster	3ThP.16	Loss Mechanism Analysis on High-Efficiency Kesterite Solar Cell Using Multi-Platform Electron Microscopy based Characterization techniques	Jialiang Huang	University of New South Wales
poster	3ThP.17	Efficiency enhancement of CZTSe solar cells based on in-situ K-doped precursor	Shengye Tao	Tsinghua University
poster	3ThP.18	Effects of sulfurization degree on the performances of CIGSSe absorber prepared by selenization/sulfurization annealing	Hanpeng Wang	Tsinghua University
poster	3ThP.19	Annealing Characteristics of MoOx Thin Films and Silicon/Compound Heterojunction Solar Cells	Bowen Ding	University of Chinese Academy of Sciences
poster	3ThP.20	Using advanced micro-to-atomic scale characterizations to explore the role of Ge in CZTSSe solar cells	Jialin Cong	UNSW
poster	3ThP.21	CZTS solar cells with bilayer electron selective contact	Xin Cui	UNSW
poster	3ThP.22	A K ions electrochemical post-treatment method for CIGS thin film solar cells	Wei Tang	Shenzhen Institute of Advanced Technology
poster	3ThP.23	Effect of Ga content on the structure and device performance of Cu(In,Ga)Se2 films	Xinye Yuan	Chinese Academy of Sciences
poster	3ThP.24	Study of single-graded CIGS thin film solar cells for bottom cell application in tandem solar cells.	Shen Yu	Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences

Area4. III-V compound semiconductor, concentrator and space technologies

9-Nov-23

		Topic	Name	AFFILIATION
poster	4ThP.1	Preparation and Performance Study of Six-Layer Gradient Anti-Reflection Coatings for GaAs Solar Cells	Hao Wu	Yunnan Normal University
poster	4ThP.2	An economical electroplating way to fabricate IMM GaAs solar cell	Xiaodong Li	Tianjin Hengdian Space Power Co.,Ltd
poster	4ThP.3	Transparent conductive adhesive (TCA) intermediate layers for tandem solar cells	Pengfei Zhang	UNSW, Sydney
poster	4ThP.4	ULTRA-THIN-TRIPLE-JUNCTION SPACE SOLAR CELL	Jianrui Tie	Tianjin Hengdian Space Power Co.,Ltd
poster	4ThP.5	Luminescence and Electrical Coupling in Upright metamorphic quad-junction Solar Cells	Hongliang Guo	Tianjin institute of Power Sources

poster	4ThP.6	Quality Evaluation of SiGe Films Grown on Silicon by Aluminum Induced Liquid Phase Epitaxy	Marwan Dhamrin	Osaka University
poster	4ThP.7	The Defects Characterization in GaInP Junction for High Efficiency Triple-junction Solar Cells	Shuo Liu	Fudan University
poster	4ThP.8	High-bandgap AlGaInP solar cells with double hetero-junction for improved efficiency	JianQing Liu	Uniwatt Technology CO., Ltd
poster	4ThP.9	Characteristic Analysis of Reverse Current Breakdown Resistance of Triple-junction InGaP2InGaAsGe solar cell	Wenjia Lv	State Key Laboratory of Space Power Sources, Shanghai Institute of Space Power-Sources
poster	4ThP.10	Revisiting Silicon Solar Cells for Space - Electron Irradiation of TOPCon Si Solar Cells	Guo Li	University of New South Wales
poster	4ThP.11	Proton irradiation resistance of Pseudo Glass Cover Sheet as a Packaging Material for Solar Cells	Xinchang Dong	Harbin Institute of Technology
poster	4ThP.12	Impact of Hollow Silica Nanoparticles Broadband Anti-Reflective Coatings on GaAs Solar Cells: Experimental and Simulation	Zhangyang Xu	Yunnan Normal University
poster	4ThP.13	Optoelectronic Performance Analysis of 14 MeV neutron irradiation on flexible GaInP/GaAs/InGaAs solar cells	Shuyi Zhang	Yunnan Normal University
poster	4ThP.14	Bonding III-V/Textured-Silicon Monolithic Flexible Tandem Devices	Xingliang Li	NanKai University
poster	4ThP.15	Improving the radiation resistance of flexible GaInP/GaAs solar cell by optimizing the thickness of intrinsic layers in GaAs subcell	Tingbao Wang	Yunnan Normal University

Area5. Materials, cells and modules of crystalline Silicon PV

9-Nov-23

		Topic	Name	AFFILIATION
poster	5ThP.1	Study on effect of dispersant on the screen-printing morphology of HJT solar cells metal electrodes	Xianyang Zhang	Institute of Electrical Engineering Chinese Academy of Sciences
poster	5ThP.2	Laser doping selective emitter with thin borosilicate glass layer for n-type TOPCon c-Si solar cells	Dong Ding	Shanghai Jiao Tong University
poster	5ThP.3	Boron-Aluminum Co-doping of N-type TOPCon Solar Cell Emitter by Spin-Coating	Jindi Wei	East China University of Science and Technology
poster	5ThP.4	Photoelectronic Properties Comparison of Ag and AgNW as Metal layer in TCO/Metal/TCO Thin Films	Yunhua Cai	Shenzhen Technology University
poster	5ThP.5	Feasibility of N-doped polysilicon deposited on TOPCon solar cells by Physical Vapor Deposition	Chun-Ping Lin	Industrial Technology Research Institute
poster	5ThP.6	Development of Low-Indium Transparent Conductive Oxide Thin Films with High Performance	Zhongyu Gao	Sun Yat-sen University

poster	5ThP.7	Phosphorus diffusion gettering of n-type wafers for silicon heterojunction application	Anastasia Hertanti Soeriyadi	University of Oxford
poster	5ThP.8	Temporary surface passivation of silicon wafer for the enhancement of the measured carrier lifetime	Mengmeng Chu	Sungkyunkwan University
poster	5ThP.9	Application of X-ray photoelectron spectrometer in the study of silicon surface interface	Xiaodong Zhu	Zhejiang University
poster	5ThP.10	Investigation of light soaking and subsequent dark degradation in silicon heterojunction solar cells with n-nc-Si:H or n-a-Si:H	ZhiYang Cui	Sun Yat-sen University
poster	5ThP.11	Simulations of p-type interdigital back contact solar cells based on electron-collecting n-type POLO contacts	Huanpei Huang	Shanghai Jiao Tong University
poster	5ThP.12	Improved interface microstructure between crystalline silicon and nanocrystalline silicon oxide window layer of silicon heterojunction solar cells	Yinuo Zhou	Shanghai Institute of Microsystem and Information Technology
poster	5ThP.13	Simulation of Silicon Heterojunction Back-Contact Solar Cell Based on 26.81% Record Efficiency	Genshun Wang	Sun Yat-sen University
poster	5ThP.14	Ga-doped ZnO rear transparent contact enables high efficiency silicon heterojunction solar cells	Zhu Yan	Chinese Academy of Sciences
poster	5ThP.15	Electrical and optical properties of aluminum-doped zinc oxide and its applications in crystalline silicon solar cells	Xiaoyun Su	Sun Yat-sen University
poster	5ThP.16	Roller-Assisted Bifacial Co-Diffusion for Crystalline Silicon Solar Cells	Ying Xu	Hebei University
poster	5ThP.17	Impacts of Silicon Thickness on Cell Efficiency and Sustainable Deployment for Terawatt Scale Silicon Solar Cell Production	Li Wang	UNSW
poster	5ThP.18	Surface passivation of polycrystalline Si films formed by FLA to Cat-CVD hydrogenated n-a-Si films for solar cell applications	Zheng Wang	Japan Advanced Institute of Science and Technology
poster	5ThP.19	Effect of post-annealing on MoOx films in contact with different passivation layers for carrier selective contact solar cells	Mengqi Hu	Institute of Electrical Engineering of the Chinese Academy of Sciences
poster	5ThP.20	Resonance Frequency of Silicon Solar Wafer and Python	GUOFENG YU	Shanghai Jiaotong University
poster	5ThP.21	Tunnel Oxide Passivated Contacts Using Sputtered Amorphous Silicon and Spin-On-Doping	Shasha Li	Tokyo Institute of Technology
poster	5ThP.22	Electrical loss analysis of SHJ solar cells based on amorphous and nanocrystalline carrier-selective layers: using dark and light J-V characteristics	SHRESTHA BHATTACHARYA	Indian Institute of Technology, Delhi
poster	5ThP.23	Structural Simulation of Back Contact Heterojunction Solar Cells	Yue An	Lanzhou University
poster	5ThP.24	Strategies for achieving excellent surface passivation performance on n-type silicon by	Shiyu Qu	Institute of Electrical Engineering

		ALD-deposited AlOx thin film		
poster	5ThP.25	An Improvement of Surface Anti-reflectance by Laser Directly Texturing and Post Treatment Applied in c-Si Solar Cell	Haobo Wang	East China University of Science and Technology
poster	5ThP.26	Improvement in the passivation quality of Cat-CVD i-a-Si by applying Bayesian optimization	Ryota Ohashi	Japan Adovanced Institute of Science and Technology
poster	5ThP.27	Compensating Cutting Losses by Passivation Solution for Industry Upgradation of TOPCon and SHJ Solar Cells	Wenheng Li	Hebei Key Lab of Optic-Electronic Information and Materials College of Physics Science and Technology Hebei University
poster	5ThP.28	Effectiveness of Al-induced Charged Oxide Inversion Layer on Pyramidal Textured Si Surfaces	Hiroki Nakajima	Japan Advanced Institute of Science and Technology (JAIST)
poster	5ThP.29	Hydrogen Passivation Enhancement by Nanocrystal Silicon Process in Heterojunction Cells	Chen-Wei Peng	Soochow University

Area6. Performance and Reliability of PV modules

9-Nov-23

		Topic	Name	AFFILIATION
poster	7ThP.1	Development and Application of SolarLite, a Design and Simulation Tool for Photovoltaic Power Plants Based on SAAS	Jianbo Bai	Hohai University
poster	7ThP.2	Photovoltaic system data analysis in various installation environments	Woogyun Shin	Korea Institute of Energy Research
poster	7ThP.3	Analysis of output characteristics of solar modules according to long-term reliability test	Youngchul Ju	Korea Institute of Energy Research
poster	7ThP.4	Parameter design of EMI filter for photovoltaic inverter considering noise source impedance	Mingjie Li	Hefei University of Technology
poster	7ThP.5	Research on Improved Phase-Locked Loop for DC Offset and Harmonic Interference	Xuzhi Wang	Hefei University of Technology
poster	7ThP.6	Optimization study of photovoltaic hydrogen production system architecture scheme	Jing Liu	Hefei University of Technology
poster	7ThP.7	Solar Irradiance Analysis of PV Module Surfaces in Complex Environments	Youkang Gong	Nankai University
poster	7ThP.8	Connection and operation modes of energy storage system in photovoltaic power station	Jianping Zhou	Gansu Natural Energy Research Institute
poster	7ThP.9	Forecast Error Analysis for Optimal Operation of PV Power Plants	Kurumi Itoi	Tokyo University of Science
poster	7ThP.10	Three-phase four-leg Inverter with Unbalanced Load Research on Fourth Leg Multiplexing Active Power Decoupling Technology	Shuo Zhang	Hefei University of Technology School
poster	7ThP.11	Evaluation of prediction models for forecasting photovoltaic power output	Caixia Li	unsw

poster	7ThP.12	Processing From 3d Point Cloud To Building Model For Photovoltaic System Design	Qian Jiang	Nankai University
poster	7ThP.13	Accelerated Aging of PV Cables -The Development of Methods Towards Combined-Accelerated Stress Testing	David C. MILLER	National Renewable Energy Laboratory
poster	7ThP.14	Photovoltaic Medium-Voltage DC Collection System Based on DC Collector	Feng An	1. Beijing Sifang Jibao Engineering Technology Co., Ltd.
poster	7ThP.15	Method for Minimizing the Glare of Photovoltaic Modules at Northeast Asia Airport	Chungil Kim	Seoul National University of Science and Technology
poster	7ThP.16	Fault Diagnosis Method for Photovoltaic Arrays Based on CEEMDAN-LSTM	Zenan Yang	Hohai University
poster	7ThP.17	Evaluation of Snow Losses in Two Bifacial PV Systems: Vertical Agrivoltaic and Ground-mounted Fixed-tilt	Silvia Ma Lu	Mälardalen University
poster	7ThP.18	An integrated performance evaluation method for grid-connected PV system based on historical production and operation data	Bowen Shi	Guangdong HuaJu Testing Technology Co., Ltd.