

3-5 JULY 24

Middle East Technical University
Culture and Convention Center
Ankara, TÜRKİYE

	4th International	Conference on	Photovottaic	Science and	recnnologies
--	-------------------	---------------	--------------	-------------	--------------

Poster ID	Abstract ID	Advanced Characterization Techniques for Solar Cells and Modules	
1	6435	A Classification and Review of Photovoltaic Models	Nabila Elbeheiry
2	3592	Advanced Characterization of Poly-Si Thin Film Solar Cells Deposited by E-Beam Evaporation Using Machine Learning	Şeymanur Selver
93	1005	Application of Copper Iodide Inorganic Hole Transport Layer in Perovskite Solar Cells	Azam Khorasani
94	7424	Exploring the Catalytic Potential of Silver-Doped Zinc Oxide in Photocatalytic Degradation of Waste Dyes	Mohammad Sutaif
P5	5209	Influence of Deposition Electrolyte Concentration on the Characterization of Molybdenum Sulfide Thin Film via Electrodeposition For Solar Cell Applications	Iskandar Dzulkarnain
Poster ID	Abstract ID	Advanced Techniques in Crystalline Photovoltaic Solar Cells	
96	7436	A Roadmap and Feasibility Study on GW-Scale PV Manufacturing in Türkiye	Hande Karakan Cankul
P7	8043	Determination of the Passivation Effect of Organic Nonafluorobutane Sulfonic Acid on Crystalline Silicon	Cem Maden
28	5315	Developing stable and long life irradiance sensor	Elşen Aydın
9	6677	Effect of Deposition Temperature, Power Density, SiH4 Flow Rate and PH3 Doping Concentration on the Nanocrystal Growth in n-Type Amorphous Silicon Layer	Milad Ghasemi
210	2617	Effect of Hydrogen Content on Conductivity in Hydrogenated Indium Oxide as Transparent Conductive Oxides	Ozan Aydın
P11	3727	Overview of mandatory and optional additives in wet chemical process steps in manufacturing for industrial TOPCon solar cells	Damian Brunner
P12	9872	High Quality P-TOPcon with Ex-Situ Doping on Flat Silicon Surfaces for Bottom Cells in Tandem Solar Cells	Yiğit Mert Kaplan
P13	9875	Investigation of Laser-Induced Lifetime and Implied Voc Deterioration on Passivated Flat and Textured Silicon Surfaces During the Laser Ablation Process	Melisa Korkmaz Arslan
Poster ID	Abstract ID	Emerging Solar Cells: Innovations and Stability Enhancements	
P14	7292	2D Phosphorene Integration for Enhanced DSSC Performance and Outdoor Stability	Meriem Lougdali
215	9965	A Strategy for Improving Perovskite Film Characteristics through MACI Vapor Annealing	Youngmin Kim
P16	3531	Angle-Independent Diffractive Optical Elements for Enhanced Solar Cell Efficiency: Fabrication via Stereolithography 3D Printing	Parisa Naghinazhadahmadi
P17	9736	Co-Evaporation and Flash Evaporation Techniques Production Method Comparison for Semitransparent Lead Free MABil Perovskite Absorber	Gokhan Yılmaz
P18	9713	Development Of Metal Oxides Using High-rate Atmospheric Pressure Spatial Atomic Layer Deposition For Highly Efficient And Stable Perovskite And Tandem Applications	Jons Bolding
P19	6795	Diketopyrrolopyrrole (DPP)-based Polymeric Passivators: The Rising Star in Perovskite Solar Cells (PSCs) to Overcome Stability-Related Barriers	Aliekber Karabağ
P20	7024	Effects of Fe-Doping On the Structural and Optical Properties of Lead-Free All-Inorganic Cs2AgInCl6 Double Perovskite Particles	Aybüke Şenol
P21	3827	Enhancing Ambient Stability of Formamidinium-Cesium Lead Halide Perovskite Solar Cells Fabricated under Air Ambient Conditions	Binita Boro
22	1959	Enhancing Stability of Perovskite Solar Cells through RbI Passivation	Amir Zarean Afshord
23	4492	Glove Box-Free Deposition for Enhanced Performance of Planar CH3NH3Pbl3 Solar Cells Using Sol-Gel Synthesized ZnO Nanoparticles	Buse Koçak
24	8405	Influence of Microalgae Addition on the Performance of Perovskite Solar Cells	Tuğba Demirbay
P25	2778	Investigating Passivation Effects in Inverted Planar Perovskite Solar Cells via Thiol Treatment	Nilay Ağaçkesen
26	7259	Investigation Of Lead-Free Material For Perovskite Solar Cells As Absorber Layer Using Oghmanano And Taguchi Method	Ahmad Muhajer Abdul Aziz
27	1035	Maximizing the Photovoltaic Performance of Planar Perovskite Solar Cells with Indium-Chloride Toluene-Based Antisolvent Washing	Sevval Öztürk
28	1191	Mg-Doped ZnO Nanoparticles: Dual Application in Aqua Media Dye Photocatalysis and Dye-Sensitized Solar Cells	Mohammad Sutaif
P29	9869	Optical, Structural and Morphological Properties of CdS Thin Films Produced by CBD Method	Aykut Küçükbaş
P30	4334	Optimization of FTO/ZnS/MASnl3/CZTS Perovskite Solar Cells through Numerical Analysis Using SCAPS-1D	Mohamed Amine Benatallah
231	1212	PAN, LICIO4 and TEABF4-based Composite Polymer Electrolytes for Supercapacitors	Damla Şahin
P32	6639	Performance Evaluation of Mxene-based Flexible Substrate for Perovskite Solar Cell Applications: A Comparative Study with ITO	Gülşah Yılmaz
P33	9158	Performance of Mixed Cation Wide Bandgap Perovskite-based Solar Cells Under Different Indoor Light Sources	Snehangshu Mishra
P34	3144	Perovskite Thin Film Production and Optimization Studies With Alkyl/Arylammonium Salts Containing Fluorinated And Non-Fluorinate Ligands	Semra Koçyiğit
P35	3755	Power Generation from Perovskite Architectural Elements	Elshan Asadi
236	7312	Reliable and Comprehensive I–V Characteristic of Emerging PV Devices	Hatice İlhan
237	8803	Nematic and Complemensive: — Consideration of Linguistics Continuing in Proceedings of the Continuing Continui	Gökhan Yılmaz
238	8545	Semitransparent Organic Photovoltaic (ST-OPV)	Lamkaouane Hind
939	2323	Solvent Engineering of Hole Transport Layer for Improved Efficiency and Stability in Perovskite Solar Cells	Adem Mutlu
P40	1237	Sortening of the interpret cycle in improve a tracerity and atomic in its reversities of Novel Conjugated Structures and Their Use in Perovskite Solar Cells  Synthesis of Novel Conjugated Structures and Their Use in Perovskite Solar Cells	Selma Gülnaz Öztok
P41	2337	Synthesis of TiB2 and TiB2@Co Nanocomposite Structures Developed as Electrode Materials and Supercapacitor Applications	Hatice Arici Kahyaoglu
P42	2697	Two-Step Sequential Vapor-Solution Hybrid Deposition of Uniform and Stable Perovskite Films Assisted by Slot-Die Coating Intended for Commercial Large-Area Photovoltaic Applications	Ahmed Javed
P43	9984	Understanding the Mechanism of Organic Additive to Fabricate Stable Co-evaporated CsPb13 Perovskite Solar Cells	Sangwon Lee



3-5 JULY **24** 

Middle East Technical University Culture and Convention Center Ankara, TÜRKİYE

Poster ID	Abstract ID	Innovative PV Module Technologies & Performance and Reliability Testing for PV Modules	
P44	3682	Advanced Solar Panel Design with Enhanced Color Conversion for Optimal Crop Yield and Quality	Ümran Dilmaç
P45	5623	Assessment of a Pioneering Solar PV System Facilitating the Coexistence of Agricultural and Power Generation	Chien-Chun Hsieh
P46	8370	Automatic Detection and Classification of Defects in PV Modules Using Electroluminescence Imaging: Artificial Intelligence Approaches	Nurgül Polat
P47	1324	Characterization of Zinc-Indium-Tin Oxide Thin Films Deposited by Sputtering Technique	Elif Peksu
P48	7656	Design and Simulation Studies of PERC and TOPCon Solar Panels	Nil Bağrıaçık
P49	8153	Effects of Pollution on Solar Panels and Solution Suggestions	Berat Yıldırım
P50	3992	Semi-transparent Cu(In,Ga)Se2 Solar Cells for Window Applications	Nuno Rodrigues
P51	8979	The Effect of Rectifier Materials on Photovoltaic Devices	İkram Orak
P52	1662	Water-Harvesting and Self-Cleaning Anti-Reflective Coating for Agri-PV Applications	Sezen Öykü Kınacı
P53	9978	Optimizing Photovoltaic Module Efficiency with Photonic Crystal Multilayer Passive Cooling via Setfos Software	Alihan Kumtepe
P54	9980	Blocking the PID: The Power of Chemically Tempered Glass	Beyza Durusoy
Poster ID	Abstract ID	Novel Absorber Materials and Transport Layers in Solar Cells	
P55	5776	Compositional Analysis of the Carbon-Rich Fine-Grain Layer in Solution-Processed CZTSSe Films	Ahmed Javed
P56	1879	Drastic Influence of Substituent Position on Orientation of 2D Layers Enables Efficient and Stable 3D/2D Perovskite Solar Cells	Figen Varlıoğlu Yaylalı
P57	1553	Exploring the Potential of MgZnO Thin Films as a Sustainable Alternative to CdS Buffer Layer in CZTSSe Solar Cell	Prabeesh Punathil
P58	9585	Fabrication of Semi-transparent Third Generation CZTS Solar Cells Via ZnO Nanorods Synthesized on Graphene Layers	Elif Peksu
P59	7155	High Potential of Solution-Processed TiOx as Electron-Selective Passivating Contact for Silicon Solar Cell	Naser Beyraghi
Poster ID	Abstract ID	Power Electronics for PV Systems & Socioeconomic Aspects of Solar PV Applications & PV-integrated Hybrid Energy Systems	
P60	3028	Control of MPPT Boost Converter for a 5-KW Hybrid Inverter	Muharrem Baran
P61	9912	Insights to Citizen-Participatory Volunteerism and SDG 7: Energy, Volunteering and Non-Governmental Organizations in Türkiye	Kaan Samet Çil
P62	6381	Investigating Hybrid Energy Systems Integrated with Photovoltaics	Hanieh Sadat Jameie
P63	3638	Optimizing Machine Learning Models for Photovoltaic Arc Fault Detection	Sawsan Shukri
P64	7463	Socio-Economic Aspects of Solar Energy: Social Acceptance and Economic Impacts	Pehlül Okumuşoğlu
Poster ID	Abstract ID	Solar Energy Resource and Solar PV Input Assessment	
P65	1582	A Novel Framework towards Transitioning into Positive Energy Districts on Neighborhood Scale	Onur Taylan
P66	1382	Cost-Effective Off-Grid PV Systems for Sana'a: A Techno-Economic Study	Mohammad Sutaif
P67	2439	Optimizing Solar PV Site Selection: A Comprehensive Review	Mohammad Sutaif
P68	9341	Optimum BESS Sizing and Utilization using Rule-Based Control Approach for Buildings with Photovoltaics	Nurhan Aydınalp
P69	8902	Solar Power for a Sustainable Future: Assessing Solar Resource Availability and PV System Performance for Building Decarbonization in Türkiye	Ahadollah Azami