



The 6th International conference on Advanced Materials for Photonics, Sensing and Energy Applications (AMPSECA' 2024)

31 October - 01 November, 2024, Marrakech, Morocco

CONFERENCE PROGRAM



Conference Program

October 31, 2024			
08 :00 – 09 :00	Registration		
09 :00 – 09 :30	Opening Ceremony		
09 : 30 – 10 :00	Plenary 1: Prof. Prasad paras Addressing Global Energy Needs through Innovations in Nanochemistry, Microbial Synthesis, and Natural Nanomaterials Institute for Lasers, Photonics and Biophotonics Departments of Chemistry, Physics, Electrical Engineering and Medicine (United States)		
10 :00 – 10 :30	Plenary 2: Dr. Samir Rachdi Harnessing Advanced Materials and Photonics for Sustainable Energy and Decarbonization: The Role of IRESEN Acting General Manager of IRESEN - Research Institute for Solar Energy and New Energies		
10 :30 -11 :00	Coffee break		
11 : 00 – 11 :20	Keynote 1 Prof. Hamid Oughaddou Synthesis And Characterization Of Phosphorene ISMO-CNRS, Université de Paris-Sud. <i>Université de Cergy- Pontoise, France</i>	Keynote 2: Prof. Mouhaydine Tlemçani Smart Measurement Systems: The Scientific Approach and Entrepreneurial Challenges University of Evora, Portugal	Keynote 3: Prof. El-Kebir Hlil Investigation on electronic properties and sodium ion diffusion in $\text{Na}_4\text{Ni}_5(\text{P}_3\text{O}_{11})_2$ polyanionic compound for Na ion batteries <i>University of Grenoble, France</i>



11 : 25 – 11 :40	<p>El Aissaoui Fadoua</p> <p>Exploring the structural, electronic, magnetic, and optical properties of the new halide double perovskites Li_2RbVX_6 ($X=\text{Br}$ and F).</p> <p>University of Agadir</p>	<p>Choubi Manal</p> <p>Compensation behaviours and magnetocaloric effect of a mixed Spin-(3/2, 1) Ising model for 3D core-shell structure.</p> <p>University of Casablanca</p>	<p>Haddad Oumayma</p> <p>Growth and characterization of ZnO nanostructures for solar energy conversion</p> <p>University of Agadir</p>
11 : 40- 11 : 55	<p>Karim Hajar</p> <p>Ab initio investigations of Optoelectronic and Thermoelectric properties of $\text{Li}_2\text{BeXSe}_4$ ($X = \text{Ge}, \text{Si}, \text{Sn}$) Semiconductors</p> <p>University of Beni Mellal</p>	<p>Bibridne Youssef</p> <p>Experimental and numerical study on natural, synthetic and a hybrid reinforced composite</p> <p>University of Casablanca</p>	<p>Kaoutar Elgoumiri</p> <p>Performance enhancement of SnS based solar cell using the combination of DFT and SCAPS-1D simulation</p> <p>University of Agadir</p>
11 :55 – 12 :10	<p>Ouhenou Hakima</p> <p>Exploring Elpasolite Scintillators for Particle Detection Using DFT and TD-DFT</p> <p>University of Beni Mellal</p>	<p>El Ouardi Hassan</p> <p>Numerical Study Of a d-Shaped Plasmonic Optical Fiber Sensor With a Pyramidal Silver Grating Coated With a Thin Layer Of Titanium Oxide</p> <p>University of Casablanca</p>	<p>Nomeir Brahim</p> <p>Durable, transparent and superhydrophobic coating with temperature-controlled dual-scale roughness by self-assembled raspberry nanoparticles</p> <p>University of Rabat</p>
12 :10 – 12 :25	<p>Darkaoui El Mokhtar</p> <p>Exploring the Optical, Thermoelectric and their applications of MXenes materials</p>	<p>Ghizlane El Khttari</p> <p>Study Of The Optical Properties And Photothermal Capacity Of Gold</p>	<p>Abdel-Mouttalib Kaoutar</p> <p>Sustainable Integration of Recycled Polyester in Nonwoven Materials: Comparative Analysis and Environmental</p>



	University of Beni Mellal	Nanoparticles Embedded In Healthy And Cancerous Biological Tissue University of Casablanca	Benefits of Recycled Polyethylene Terephthalate (PET) University of El Jadida
12 :25 -12 : 40	Mes-Adi Hassane Strength behavior and mechanical characteristics of AlNi alloy University of Beni Mellal	Yao Konan Jean Armand Synthesis of TiO ₂ thin film by sol-gel via spin coating for photovoltaics applications: effect of annealing time on structural, optical and electrical properties University of Casablanca	Bouhamdi Mohammed Thermal and Optical Proprieties of Cd _x Te _{1-x} and Cd _{1-x} Mg _x Te using Photothermal methods University of El Jadida
12 :40 – 14 :00	Lunch		
14 :00 – 14 :30	Plenary 3: Prof. Abdelilah Benyoussef Materials-based Green Hydrogen Storage <i>Hassan II Academy of Sciences and Technology, Rabat, Morocco</i>		
14 :30 – 15 :00	Plenary 4: Prof. Lifeng Bian Synaptic device based on GaN nanowires for neuromorphic computing with ultralow power consumption <i>Frontier Institute Of Chip and System, Fudan University</i>		
15 00 – 15 :20	Keynote 4: Prof. Souad El Hajjaji Innovative Materials for Sustainable Water and Energy Solutions	Keynote 5: Prof. Che Weiwei	Keynote 6 : Prof. Jia-Wei Zhang



	<i>Faculty of Science, Mohammed V University of Rabat</i>	Hierarchical Lane-Changing Control for Vehicle Platoons in Prescribed Performance <i>School of Information Science and Engineering, Northeastern University</i>	A Wide Range Magnetic Field Measurement Approach Based on Fabry-Perot Interference Principle Xi'an university of technology China
15 :20 – 15 :35	Najim Abdessamad ZnS as a Buffer Layer/ETL for photovoltaic application University of Casablanca	Elghanaoui Souad Development And Validation Of a 3d Finite Element Model Of The Human Middle Ear Based On Medical Imaging University of El Jadida	Zang Bin Design and Application of Self-Powered System Based on Multi-Source Environmental Energy Shandong University
15 :35 – 15 :50	Lahcen Nait Aouzal Characterization of Sol-Gel Spin-Coated Copper Oxide (CuO) Thin Films: Optical and Structural Analysis University of El Jadida	Bouabdalli El Mahdi Exploration of Erbium's Influence on the Structural, Physical, Thermal, and Optical Characteristics of Silicophosphate Glasses for Photonics and Solar Cell Applications University of El Jadida	Xing Zhou Conversion of PET to active hydroxyl-terminated oligomers with 98.4% recycling efficiency and their potential application in functional composites Xián University of Technology
15 :50 – 16 :05	Ajoumal Mohamed Complex conductivity to investigate the electrochemical processes in all-solid-state	Rachidy Chaymaa	Wang Xiaofan Optimization of toxic sensor layout based on complex terrain



	lithium sulfur batteries at different depths of charge and discharge. University of El Jadida	Fabrication and Simulation of TiO ₂ Thin Films for Photovoltaic Applications: A Spin Coating Approach and DFT Analysis University of El Jadida	Xián University of Technology
16 :05 – 16 :30	Coffee break session (Poster I)		
16 :30 – 16 :45	Hamza Ennasri Development and Characterization of Chitosan-TiO ₂ base photocatalytic membrane for Water Treatment; Applications on Methylene Blue elimination. University of El Jadida	Khaled Mnaouer Exploration of Electromagnetic Resonance for Advanced CO ₂ Molecular Cracking: Towards a Revolution in Carbon Emission Management University of El Jadida	Lamkaouane Hind Semitransparent organic photovoltaic (ST-OPV) University of BenGuerir
16 :45 – 17 :00	El Abbassi Ahmed Magnetic Properties and Hysteresis Behaviors of a Cylindrical Ferrimagnetic Ising Nanowire System with a Core/Shell Structure University of El Jadida	Elomari Achraf Investigation of AgCuO ₂ Thin Films Electrodeposition as a Hole Transport Layer for Inverted Perovskite Solar Cells with Ammonia-Citrate Solution and SCAPS Simulation University of Kenitra	Souhila Chabane Non-Destructive Testing in the Ornamental Rocks Industry: Innovations, Applications, and Future Directions University of Evora



17 :00 – 17 :15	<p style="text-align: center;">Rich Mohamed</p> <p style="text-align: center;">Optimization of Earplug Positioning in a 2D Axisymmetric Model of the Auditory Canal for Maximum Acoustic Attenuation</p> <p style="text-align: center;">University of El Jadida</p>	<p style="text-align: center;">Diyagh Hafsa</p> <p style="text-align: center;">Zn₂ Doping Effects on Optoelectronic Properties and Defect Structures of CuO Thin Films Synthesized by M-SILAR</p> <p style="text-align: center;">University of Kenitra</p>	<p style="text-align: center;">Gomes Rui</p> <p style="text-align: center;">More extensive and accurate measurements with data-acquisition systems, supported in optimization techniques</p> <p style="text-align: center;">University of Evora</p>
17 :15 – 17 :30	<p style="text-align: center;">Laouid Amina</p> <p style="text-align: center;">Perovskite Solar Cells: Bridging Theory and Experiment for Enhanced Performance</p> <p style="text-align: center;">University of El Jadida</p>	<p style="text-align: center;">Haddouch Bilal</p> <p style="text-align: center;">The structural and surface changes of SiO₂ flint aggregate under thermal treatment</p> <p style="text-align: center;">University of Marrakech</p>	<p style="text-align: center;">El Boukili Aicha</p> <p style="text-align: center;">Unraveling the Structural, Magnetic, and Magnetocaloric Profiles of La_{0.6-x}Eu_xCa_{0.4}MnO₃ Manganites through Solid-State Synthesis method: The impact of different sintering temperatures</p> <p style="text-align: center;">University of El Jadida</p>
17 :30 – 17 :45	<p style="text-align: center;">El Bouanounou Mohamed</p> <p style="text-align: center;">Study of the Electronic, Optical, and Photovoltaic Properties of Lead-Free Double Perovskite Cs₂AgBiCl₆ through DFT Calculations</p> <p style="text-align: center;">University of El Jadida</p>	<p style="text-align: center;">El Hani Youssef</p> <p style="text-align: center;">Thermal Properties of Halide Perovskite Thin Films</p> <p style="text-align: center;">University of Pologne</p>	<p style="text-align: center;">Nouneh Khalid</p> <p style="text-align: center;">Controlled deposition of nanostructured hierarchical silver nanowire and ZnO thin films on macroporous geopolymer</p> <p style="text-align: center;">University of Kenitra</p>



17 :45 – 18 :00	<p style="text-align: center;">Mazouz Amine</p> <p style="text-align: center;">Effect of the hydrostatic pressure on the binding energy of shallow donor in a GaAs/Ga_{1-x}Al_xAs pillbox surrounded by Ga_{1-y}Al_yAs</p> <p style="text-align: center;">University of Fes</p>	<p style="text-align: center;">Benaadad Merieme</p> <p style="text-align: center;">First-Principles Investigation of Electronic and Optical Properties of Defect Chalcopyrites XAl₂Se₄ (X = Zn, Cd, Hg)</p> <p style="text-align: center;">University of Agadir</p>	<p style="text-align: center;">Maine Mohamed</p> <p style="text-align: center;">Experimental Assessment of an Electrical Energy Harvesting System to Enhance Performance in Terrestrial Vehicles</p> <p style="text-align: center;">University of Agadir</p>
18 :00 – 18 :45	Poster Session II		

November 01, 2024			
08 :30 – 09 :00	<p style="text-align: center;">Plenary 4: Prof. Abdelkader Kara</p> <p style="text-align: center;">A Journey into the Life of a Computational Materials Scientist</p> <p style="text-align: center;"><i>University of Central Florida, USA</i></p>		
09 :00 – 09 :30	<p style="text-align: center;">Plenary 5: Prof. Hendrick Patrick</p> <p style="text-align: center;">Low CO₂ hydrogen: analysis of the complete value chain</p> <p style="text-align: center;"><i>Brussels Polytechnic School, Free University of Brussels</i></p>		
09 :30 – 09 :50	<p style="text-align: center;">Keynote 7: Prof. Karima Lasri</p> <p style="text-align: center;">Lithium and manganese-rich transition metal oxide as cathode materials for lithium-ion batteries</p> <p style="text-align: center;"><i>Mohammed VI Polytechnic University, Morocco</i></p>	<p style="text-align: center;">Keynote 8: Prof. Youssef Naimi</p> <p style="text-align: center;">Green Hydrogen to promote the development of renewable energies</p> <p style="text-align: center;"><i>Hassan II University of Casablanca, Morocco</i></p>	<p style="text-align: center;">Keynote 9: Prof. YINGJIU Zhao</p> <p style="text-align: center;">Exploration of the construction of a New Power system with Coordinated Generation and Load</p> <p style="text-align: center;"><i>Huadian Heavy Industries Co.,Ltd</i></p>



9 :50 – 10 :30	Coffee break (session Poster III)		
10 :30 – 10 :45	<p style="text-align: center;">Karouiti Nadia</p> <p style="text-align: center;">Desalination of seawater using combined heat and power (CHP) reverse osmosis</p> <p style="text-align: center;">University of El Jadida</p>	<p style="text-align: center;">Belghiti Hamid</p> <p style="text-align: center;">Optimizing PV System Efficiency: A Variable k FOCV Technique for Enhanced MPPT</p> <p style="text-align: center;">University of El Jadida</p>	<p style="text-align: center;">Chahid El Ghaouti</p> <p style="text-align: center;">Utilizing Dielectric and Electrical Properties to Investigate Hexavalent Chromium Filtration via an Ultrafiltration Ceramic Membrane</p> <p style="text-align: center;">University of El Jadida</p>
10 : 45 – 11 :00	<p style="text-align: center;">Elkake Abdelhadi</p> <p style="text-align: center;">Energy-Efficient State of Charge Estimation of Lithium-Ion Batteries Using Grey Wolf Optimizer</p> <p style="text-align: center;">University of El Jadida</p>	<p style="text-align: center;">Ouqazzamar Radiya</p> <p style="text-align: center;">Optimizing the thermal efficiency of a solar furnace based on a Scheffler concentrator</p> <p style="text-align: center;">University of El Jadida</p>	<p style="text-align: center;">Safoui Rachid</p> <p style="text-align: center;">Theoretical and Experimental Study of a Solar-Powered Atmospheric Water Harvesting System with a Novel Composite Sorbent</p> <p style="text-align: center;">University of Agadir</p>
11 :00 – 11 :15	<p style="text-align: center;">El Macouti Nour El Haq</p> <p style="text-align: center;">Environmental Impact of the Closure and Management of the Oum R'bia River estuary in Azemmour, Morocco</p> <p style="text-align: center;">University of El Jadida</p>	<p style="text-align: center;">Maziane Youssef</p> <p style="text-align: center;">The effect of a vehicle suspension system on the evaluation of power harvesting using a numerical simulation method</p> <p style="text-align: center;">University of El Jadida</p>	<p style="text-align: center;">Chouchna Assia</p> <p style="text-align: center;">Theoretical investigation of optical and electronic properties of Ag₂(Sn, Si, Ge)S₃ for photovoltaic applications</p> <p style="text-align: center;">University of Agadir</p>



<p>11 :15 – 11 :30</p>	<p>Amiry Houssam</p> <p>IV Curve tracers technologies for PV generators characterization under real operating conditions: A Comprehensive review</p> <p>University of El Jadida</p>	<p>Sabor Aboubakre</p> <p>Predicting the performance of LaFeCoSi compound in a magnetic cooling</p> <p>University of El Jadida</p>	<p>Bouri Nabil</p> <p>Comparative study of lead free solar cells based on triple and graded absorber layers: numerical investigation.</p> <p>University of Kenitra</p>
<p>11 :30 – 11 :45</p>	<p>Bakkass Soukaina</p> <p>Improving the environmental performance of construction sites using an environmental management system ISO 14001: an overview</p> <p>University of El Jadida</p>	<p>Khouili Oussama</p> <p>Solar Radiation Prediction Using Support Vector Machines with Spearman Correlation Feature Selection</p> <p>University of El Jadida</p>	<p>El Mrini Youssef</p> <p>Cost-effective Sizing of Renewable Resources in Hybrid Energy Systems Using PSO and HOMER Pro</p> <p>University of Kenitra</p>
<p>11 :45 – 12 :00</p>	<p>Amer Lafhal</p> <p>Investigation of certain physical properties of CO₂MnGe Heusler: DFT calculation and Monte Carlo simulation</p> <p>University of El Jadida</p>	<p>Mouhiha Abdelhadi</p> <p>Study of the impact of defects at the CdS buffer layer/CIGS absorber interface on the performance of CIGS solar cells using combined SCAPS-1D simulation and impedance spectroscopy</p> <p>University of El Jadida</p>	<p>Bouabdalli El Mahdi</p> <p>Structural Analysis, Photoluminescent Behavior, and Judd-Ofelt Study of Red-Emitting Europium-Doped Strontium Phosphate Glasses for Photonic Applications</p> <p>University of El Jadida</p>



12 :00 – 12 :15	<p>Elouafi Mohamed</p> <p>Nonlinear control of the Single-Phase Grid-Connected Photovoltaic System</p> <p>University of El Jadida</p>	<p>Bryk Mustapha</p> <p>Study of the Optoelectronic Properties of a Thin-Film Photovoltaic Cell: CIGS Materials with Chalcopyrite Structure</p> <p>University of El Jadida</p>	<p>Lemnawar Amina</p> <p>Investigation of structural, electronic and optical properties of double perovskite Eu₂FeCrO₆: First principles calculations</p> <p>University of Kenitra</p>
12 :15 – 12 :30	<p>Elwardi Hajar</p> <p>Optimizing photovoltaic systems and solar energy production using artificial intelligence: a comprehensive review</p> <p>University of El Jadida</p>	<p>Bensemlali Meryem</p> <p>Innovative Synthesis of Nanocalcite from Phosphogypsum and Cesium Carbonate</p> <p>University of El Jadida</p>	<p>Oubari Abed</p> <p>Photovoltaic Power Efficiency Enhancement with an Anti-Dust Nano particles Coating and IoT-Based Automatic Solar Panel Cleaning System</p> <p>University of Kenitra</p>
12 :30 – 14 :30	Lunch		
14 :30 – 15 :00	<p>Plenary 6: Prof. Panos Argyrakis</p> <p>Inverse percolation and network models breakdown for the study of a tumor microenvironment</p> <p>University of Thessaloniki, Greece</p>		
15 :00 – 15 :15	<p>Tagnamas Zakaria</p> <p>Optimization of solar drying process using artificial intelligence models</p>	<p>Seddiq Sebbahi</p> <p>Modeling and Simulation of a 20 kW Alkaline Water Electrolysis (AWE) Micro-Pilot Unit as a Digital Twin for Solar-</p>	<p>Moushi Salma</p>



	University of Marrakech	Powered Green Hydrogen Production in Morocco IRESEN	Simulation of Multilayer Membrane Filtration Performance in Desalination Processes University of Casablanca
15 :15 - 15 :30	Sayeh Khadija Synthesis, characterization and application of new magnetic nanocomposite -photocatalyst for catalytic degradation of methyl blue: Siloxene@FeNi3 University of Marrakech	Elamraoui Aziz Numerical analyse of the D-M interaction effect on entanglement of two qubits in the Heisenberg XXZ chains University of Agadir	Bakassi Imane Modeling of collective motion of two-dimensional system with elastic interaction University of Casablanca
16 :30 - 16 :45	Bousseta Mohammed Thermoelectric Performance of P-N Junction Generators Using Cu ₂ SnS ₃ and ITO Thin Films Fabricated by RF Sputtering University of Marrakech	Zaki Mohamed Numerical analysis of Thulium-doped fiber lasers based on the temperature-dependent rate equation. University of Agadir	Akroud Touria Exploring Quantum Correlations Beyond Entanglement: A Study of LQU and LQFI in Qubit Networks University of Casablanca
16 :45 – 17 :00	Hassari Anas Enhancing Energy Efficiency through Optimized Renewable energy system University of Oujda	Chlikhy Youssef Enhancing adsorption mechanism of typical VOCs by Incorporation of Single-atom catalysts on MXene: A DFT study University of Casablanca	Aboulouard Abdelkhalk A comparative study on the photovoltaic performance of dye-sensitized solar cells using titanium dioxide nanoparticles



			<p>synthesized through flame spray pyrolysis and hydrothermal sol-gel methods</p> <p>University of Beni Mellal</p>
17 :00 – 17 :30	Coffee break (session Poster IV)		
17 :30 – 17 :45	<p>El Hamzaoui Fatima-Zahra</p> <p>SWOT Analysis of Photovoltaic Systems: Integrating Solar Energy into the Grid</p> <p>University of Casablanca</p>	<p>Mkhaitari Rachid</p> <p>Optimisation of green hydrogen production owered by diverse renewable energy assets</p> <p>University of Casablanca</p>	<p>Khawla EL HADRI1</p> <p>Summer comfort and passive cooling techniques by natural ventilation: A case study of university classrooms in Morocco</p> <p>University of Bengrir</p>
17 :45 – 18 :00	<p>Jamal Elmansour</p> <p>A COMPARISON BETWEEN NATURAL WATER AND SEAWATER AS FLUID FOR LOW-HEAD PUMPS AND PENSTOCK FOR PUMPED STORAGE</p> <p>University of El Jadida</p>	<p>Tanasehte Mohammed</p> <p>Modeling of storage energy and degradation Lithium-Ion Battery</p> <p>University of Casablanca</p>	<p>Lootfi Sana</p> <p>Efficiency Optimization of Double Perovskite Solar Cells Using BFCO and Cs₂BiAgI₆ Without Charge Transport Layers: A SCAPS-1D Simulation Study</p> <p>University of Casablanca</p>
18 :00 – 18 :15	<p>Ryas Taoufyq</p> <p>Application of cryoconcentration coupled to centrifugation for the treatment from olive oil mill wastewater</p>	<p>Alami Houssam</p> <p>Optimization of LNMO/GO/CdS/FTO-Based Heterojunction Solar Cells: A SCAPS-1D Simulation Study</p>	<p>Beh Mondjou</p> <p>Georges Constant Improving the performance of photovoltaic cells based on SLG/Mo/p-CZTS/n-CdS/ZnO:Al/Al</p>



	University of El Jadida	University of Casablanca	kesterite material for large-scale applications University of Casablanca
18 :15 – 18 :30	<p>Sellam Abdellah</p> <p>An ab-initio study of the adsorption of H₂O, NaCl, and salt water on graphene</p> <p>University of Grenoble</p>	<p>Kouakou Koffi</p> <p>Performance of three photovoltaic systems in five Côte d'Ivoire cities from south to north, based on a similar study in Rabat, Morocco</p> <p>University of Casablanca</p>	<p>Amine Derraa</p> <p>Development of a Monitoring and Control System for Airfield Ground Lighting Systems Utilizing Ethernet Network Communication</p> <p>University of Settat</p>
18 :30 – 18 :45	<p>Chakiri Siham</p> <p>Multi-loop control of a single-stage photovoltaic system connected to the single-phase grid using a Multi-level CHB in-verter and an L filter</p> <p>University of El Jadida</p>	<p>Zaim Salma</p> <p>Impact of Particulate Matter and Environmental Factors on Light Transmission Loss: Moroccan Case Study</p> <p>University of Rabat</p>	<p>Farajy Mohammed</p> <p>Evaluating the Impact of Layer Thickness on the Efficiency of Spiro-OMeTAD/CH₃NH₃SnI₃/ZnO Perovskite Solar Cells: A Combined Impedance Spectroscopy and SCAPS-1D Simulation Study</p> <p>University of El Jadida</p>
18 :45 – 19 :30	Closing Ceremony		



Poster Session I		
Code	AUTHOR	TITLE
P1	Aachari Alae	Synthesis and Structural Characterization of Novel Phosphorus-Based Compounds with Antimicrobial Potential
P2	Abali Abdelaziz	The effect of deposition time on the structural, electrical, and optical characteristics of thin CNCTS layers for photovoltaic cells
P3	Abdellatif Abkhair	A comprehensive review of wave energy converter technologies
P4	Abouais Ali	Growth and properties of ZnS-based crystals: an experimental and DFT calculations
P5	Abouais Ali	Optical and Thermal characterizations of Zn _{1-x} S _x Se mixed crystals
P6	Afak Hamza	Simulation and characterization perovskite solar cell based on MASnI ₃ using SCAPS-1D
P7	Afonso Daruez	Efficiency Enhancement in CsPbI ₃ -Based Perovskite Solar Cells
P8	Ahmed Md Sajib	Machine Learning Based Continuous Monitoring of Photovoltaic Systems Using Sentinel-1 & Sentinel-2
P9	Ahmed Md Tofael	Analyzing Hybrid PVT system through Low-Cost Embedded System
P10	Ait Ben Brahim Khalid	Nanoparticle-Enhanced Carbon Paste Electrode for the Detection of Paracetamol (Acetaminophen)
P11	Ait Lahcen Jaouad	Electrostatic field effects on fluid Flow through asymmetric graphene membranes
P12	Amallal Fatima	Numerical Investigation Of Photovoltaic System Integrated With Thermoelectric Generator And Phase Change Material Under Varied Operating Conditions



P13	Amou Marius Armand	Deposition of CZTS Thin Films Prepared by Sol-Gel via Dip-Coating for Photovoltaic Applications
P14	Assila Abdelmajid	Strain-Induced Modifications in Mg ₂ NiH ₄ : Implications for Hydrogen Storage Performance
P15	Atouailaa M. K.	Investigation of the Optical and Photovoltaic Properties of New Dyes for Dye-Sensitized Solar Cell Applications
P16	Attouch Mariam	Box-Behnken optimization of the coagulation process for the removal of bromocresol green dye using a novel coagulant
P17	Baiboud Mohamed	Design of a new 3D diluted magnetic semiconductor Ni-doped HgTe monolayer: Ab initio study
P18	Baoubih Saaida	Experimental Studies on SnO ₂ Thin Films Produced by Spray Method
P19	Baraket Abdoullatif	Electrochemical biosensor for NT-proBNP detection in human saliva: Heart Failure biomedical application
P20	Bechar Siham	Effect of relative humidity and type of packaging on physicochemical characteristics and polyphenol content of virgin olive oil
P21	Belaoufi Youssef	Production of Calcium Molybdate Nanoparticles
P22	Belkoufa Ikram	Optimization of Structural and Physical Properties of Mg ₂ NiH ₄ for Enhanced Hydrogen Storage Performance
P23	Bendany Mohamed	Designing a modified electrode based on cellulose acetate to electrochemical detection of Paracetamol
P24	Benomar Khadija	Study of the impact of climate change on natural resources
P25	Benradi Fatima	Efficiency of selective sorting of household waste in the city of Salé: Bettana and Hssain districts
P26	Bensemlali H.	Evaluation Of Heavy Metal Contamination Of Surface Sediments In The Oualidia Lagoon
P27	Bensemlali Meryem	Innovative Synthesis of Nanocalcite from Phosphogypsum and Cesium Carbonate



P28	Benyoussef Abdelilah	Materials-based Green Hydrogen Storage
P29	Benricha Hajar	Intelligent Energy management and coupling of renewable energies in the power grid
P30	Bghour Mustapha	Effects of vertical strain and Electric Field on electronic and optical properties in GeO ₂ /MoSi ₂ N ₄ VDW heterostructure: DFT calculations
P31	Boubakri Asma	Comparative analysis of properties of SnS thin film deposited by electrodeposition and sol-gel spin coating techniques
P32	Bouchra Belahrach	Optimization of Process Parameters for Methylene Blue Dye Removal Using \square Eriobotrya Japonica \square Grains via Box-Behnken Design Based on Response Surface Methodology
P33	Boughou Nisrine	Valorization of Treated Slaughterhouse Wastewater from Rabat in Agriculture Accumulation and Bioaccumulation of Heavy Metals
P34	Bouhouche Ichraq	Eco-conscious corrosion inhibitor synthesis via ultrasonic extraction: experimental study in HCl 1M and theoretical analysis using DFT and MC simulations
P35	Bouiti Khalid	Response surface methodology for optimizing corrosion inhibition: investigating the synergistic effect of Eriobotrya japonica extract and potassium iodide
P36	Bousdra Hamza	A coupled optical-electrical multi-physics investigation of the effect of InGaN/GaN multiple quantum well structure on the photovoltaic performance of solar cells
P37	Boussaq Chaimae	Developing Sustainable Construction Materials by Integrating Recycled Plastic Waste for Enhanced Building Energy Efficiency
P38	Chabane Souhila	Non-Destructive Testing in the Ornamental Rocks Industry: Innovations, Applications, and Future Directions



P39	Chafiki Abdelaaziz	Removal of Patent Blue V by a phosphocalcic apatite and natural phosphate
P40	Chakar Khadija	Comprehensive Investigation and Comparative Analysis of TiO ₂ and Al ₂ O ₃ Nanofluid Stability via UV-Vis Spectroscopy, pH Evaluation, and Electrical conductivity Assessments
Poster Session II		
Code	AUTHOR	TITLE
P1	Chakiri Siham	Advanced Backstepping control for shunt active power filter integrated with PV systems
P2	Charkaoui Halima	Breaking New Ground in Photovoltaics: Exploring Novel 2D Materials for High-Efficiency Solar Cells through DFT Calculations and SCAPS Simulations
P3	Cherkaoui Jaouad Nada	Power Generation Using Diverse Configurations of Micro Piezoelectric Generators
P4	Cherrat Ayoub	Advancing the Circular Economy: Valorization of Steel Industry Solid Waste for Environmental Sustainability
P5	Doubi Youssef	Highly oriented (111) Copper Oxide (CuO) layered through dip coating for gas sensor application
P6	Doughri Doha	Synthesis, characterization and properties of oxide materials: Electrical, magnetic and optical studies
P7	Douha Boulla	Improve energy performance and optimize the aerodynamic forces acting on the blades of a VAWT wind turbine
P8	Drissi Safia	The effect of varying annealing time on the structural and optical characteristics of co-electrodeposited Cu ₂ SnS ₃ thin films
P9	El Hafidi El Mokhtar	Sustainable Mortar Using Wastewater Sludge for Cement Replacement: Mechanical, Thermal, and Environmental Performance Evaluation
P10	El Haloui El Hassan	Valorisation of Industrial By-Products from Jorf Lasfar for Iron-Phosphate-Based Cathode Materials in Sodium-Ion Batteries: A Path towards Sustainable Energy



P11	El Hana Ahmed	Study of correlation and interface of fluid particles in a porous medium by Langevin-Darcy dynamics
P12	El Jouad Mohamed	UV light generation of europium doped zinc oxide thin films for optoelectronic applications
P13	El Joumri L.	Effects of Sugarcane Bagasse co-composted with Olive Mill Wastewater on Common Bean Growth
P14	El Karch Hamza Hamza	Advanced Nonlinear Control of Shunt Active Power Filter Connected to PV System via DC/DC Converter
P15	El Massi Said	Effect of NiO:Co thin film as buffer in the back contact of the CdTe solar cell
P16	El Mesbahi El Mostafa	Study of the effects of water magnetization on seed germination impedance spectroscopy analysis
P17	El Rharib Abdelkhalek	Evaluation of Lead-Free Halide Double Perovskite Materials $Rb_2Sn(Br_{1-x}I_x)_6$ for Optimizing Photovoltaic Device Performance in Solar Cell Design
P18	El Rharib Abdelkhalek	Numerical analysis and performance study of GaAs-based solar cell
P19	Elachhab Anass	Mitigating Temperature-Induced State of Charge Drift in Battery Estimation Using Machine Learning
P20	Elhatimi Wafaa	Effect of Alginate Intercalation on the Dielectric Properties of Layered Double Hydroxides Using Impedance Spectroscopy
P21	Elmelouky Abderrahmane	Impact of Water Magnetization Using Aqua 4D on Physico-Chemical Properties: Insights from Impedance Spectroscopy
P22	Elmountassir Abdelhamid	Construction using local biosourced materials: Alternative for better energy efficiency and a tool for local sustainable development.
P23	Elomari Achraf	Investigation of AgCuO ₂ Thin Films Electrodeposition as a Hole Transport Layer for Inverted Perovskite Solar Cells with Ammonia-Citrate Solution and SCAPS Simulation



P24	Ennabely Mohamed	Influence of the type of activating agent on the performance of an activated carbon electrode made from argan tree waste
P25	Es-Saadi Mouna	Assessment of a Field oriented induction machine control strategy using a new well balanced multi levels inverter
P26	Es-Saddik Mohammed	Finite element assessment using RVE model of elastic properties of calcium phosphates biocomposites
P27	Farkouch Elmahdi	Numerical Study Of Surface Plasmon Resonance Properties And Photo-Thermal Effect Of Silica/Gold/Graphene And Hollow/Gold/Graphene Core-Multishell Nanoparticles
P28	Fechtal Imad	Influence of Binding Energy Surface and Mass Variation on Sputtering Yield and Distribution of Ionic Energy Loss at Low Incident Energy
P29	Gadda N.	Investigation of Equilibrium and Kinetics in the Removal of Methylene Blue from Aqueous Solutions using Chamaerops humilis Fruit
P30	Gounzari Mohammed	Water desalination across nanoporous amorphous graphene
P31	Halloub Fatima	Valorization of fluorine and phosphorus through the design of fluorine-based phosphate cathode materials for affordable sodium-ion batteries
P32	Hamid Chaikhy	Assessment of field oriented asynchronous machine control strategy using a multilevel inverters
P33	Hammi Zineb	Extraction and Characterization of Cellulose Fibers from Date Pits for the Development of Electrodes for Hydrogen Production
P34	Hamza Ennasri	Development and Characterization of Chitosan-TiO ₂ base photocatalytic membrane for Water Treatment; Applications on Methylene Blue elimination.



P35	Hilmi Dalal	Complex conductivity to investigate the conduction mechanisms in Nano Composite (n-SnO ₂ /rGO) for H ₂ S gas sensor performance at room temperature
P36	Jeddi Mohamed Rida	Thermal Characterization of Sustainable Building Materials: Local Soil Reinforced with Powdered Apricot Nut Shells.
P37	Jihar Khadija	Steam-methane-reforming (SMR) for hydrogen production using Co-Ni/TiO ₂ nanocatalysts

Poster Session III		
Code	AUTHOR	TITLE
P1	Kanibou Oumaima	Comparative Analysis of Direct Normal Irradiance Models for Enhancing Active Daylighting Systems in Morocco
P2	Kanibou Oumaima	Comparative Analysis of Direct Normal Irradiance Models for Enhancing Active Daylighting Systems in Morocco
P3	Karim Manal	Fatigue and failure mechanism induced by mechanical strain and electrochemical cycling of Li intercalation and deintercalation in CF structural batteries.
P4	Karrouchi Mohammed	An applied study and evaluation of the environmental impact of the Start/Stop technology on air quality.
P5	Khadiri Abdelhamid	Theoretical predicting efficiencies of novel designed D-p-Aa-A triphenylamine-based dyes for DSSCs, the influence of incorporating an auxiliary electron-pulling group
P6	Korchi Meriem	Modeling of clogging phenomenon in nanofiltration membrane process
P7	Kouchtabi Mouhsine	Electrodeposition of a Ceramic Coating Based on Calcium Phosphate on a Metallic Substrate
P8	Koumaiti Mohammed Amine	A Framed Review about Green Hydrogen production: theoretical and experimental approaches, environmental impressions and role as a new way for efficient and sustainable environment



P9	Laadissi El Mehdi	New Dynamic and Real-Time Method for Battery Pack Cell Rearrangement
P10	Laasri Said	Development of advanced metallic hydrides for hydrogen storage and energy conversion
P11	Laaziz Zahira	Monte Carlo simulations of W and W-Cr-Y thin films bombarded with helium ions in DEMO
P12	Labrag Abdelaziz	First-Principles Investigations of Magnetic Properties in V-Doped CdX (X = S, Se, and Te) Compounds
P13	Lahrache Nabil	Corrosion inhibition of steel C38 in hydrochloric acid (1M) by a novel 1,2-bis (2-(1 H benzo (bisimidazol-2-yl) thio) ethoxy) ethane
P14	Lakhloufi Soraya	Electrochemical behavior and surface stability of dental zirconia ceramics in acidic environments
P15	Lebrini Noureddine	Development and Characterization of Metal Sulfide-Based Thin Films for Hydrogen Production
P16	Lougdali Meriem	Integration of 2D Phosphorene for Enhancing DSSC Performance and Outdoor Stability
P17	Louzazni Mohamed	Output Voltage Forecasting Approach of Lithium-Ion Batteries in Electric Vehicles
P18	Mallah Hafsa	Fatigue and Failure Mechanism Induced by Mechanical Strain and Electrochemical Cycling of Li Intercalation and Deintercalation in CF Structural Batteries
P19	Md Suruj Ali	Feasibility, Design, and Performance Analysis of Hybrid Microgrid System
P20	Meryeme Ajani	Optimization of the Thermal/Mechanical Properties of Concrete by the Use of Glass and Plastic Powders
P21	Mesbahi Oumaima	Photovoltaic Parameter Extraction Based on Measurement Interval Size
P22	Messous Mohamed Youssef	MCNP modelling of rare earth Aluminium Gallium Garnet as a scintillation detector



P23	Minoubi A.	Comparison Of The Impact Of Public Landfills On Soil: Case Study Of An Abandoned Landfill And An Operational Landfill
P24	Misski Bouabid	Optimizing KNN-Based Piezoelectric Ceramics Synthesis: A Comparative Study between WAB Milling and Agate Mortar Mixing for harvesting energy application
P25	Mortadi A.	Enhancing Perovskite Solar Cell Efficiency through Temperature Control and Dynamic Analysis using SCAPS-1D and Impedance Spectroscopy
P26	Mossaddek Meriem	Optimizing EV Charging : Hybrid DC Fast Charging Stations and Their Impact on Grid Efficiency and Battery Life
P27	Mostafa Elassfour	Effects of organic-inorganic additives on the slaking rate of lime in the preparation of hydroxyapatite by neutralization
P28	Moussaddaq Chouaib	Machine Learning for Predicting Fatigue Life of Concrete Under Cyclic Compression: A Comparative Evaluation of Regression Models
P29	Nabil El Ghyati	Optimizing the efficiency of CIGS thin-film solar cells through the use of simulation techniques involving SCAPS and impedance spectroscopy
P30	Nouri Youssef	Improvement of physical properties of Cu ₃ SnS ₄ thin films elaborated by sol gel method
P31	Omari Mohamed	Studies on the Corrosion Inhibition of Mild Steel in Molar Hydrochloric Acid Solution Using a Newly Developed Bisbenzoxazole Derivative: An Experimental and Theoretical Approach
P32	Omari Mohamed	Studies on the Corrosion Inhibition of Mild Steel in Molar Hydrochloric Acid Solution Using a Newly Developed Bisbenzoxazole Derivative: An Experimental and Theoretical Approach
P33	Ouaziz Houria	Experimental and Analytical Study of the Reliability of a CPVC Material Subjected to Tensile Tests



P34	Oubari Abed	Photovoltaic Power Efficiency Enhancement with an Anti-Dust Nano particles Coating and IoT-Based Automatic Solar Panel Cleaning System
P35	Oudrhiri Hassani Fahd	Plasma treatment of agave americana fibers
P36	Oujaa Fatima Ezzahra	High-Voltage Fluorophosphate-Based Cathode Material for Li-ion Batteries
P37	Oumoussa Hajar	Designing a modified electrode based on organic modified to electrochemical detection of sulfadiazine

Poster Session IV		
Code	AUTHOR	TITLE
P1	Ourbaa Mouhcine	Oxygen effect on the structural, optical and electrochemical properties of radio frequency sputtered SnO ₂ thin films for photocatalytic degradation of methylene blue
P2	Penpen Komgue Lucrece Barbara	3D Model Of The Human Ear Using The Finite Element Method For The Study Of Acoustic Performance Of Foam Earplugs
P3	Qoutbane Anass	Physicochemical And Bacteriological Quality Of The Maâmora Aquifer In Morocco
P4	Rashel Masud Rana	Modeling the faults of shadow effect over the photovoltaics using first order nonlinear differential equation
P5	Rebocho Pedro	Optimizing Solar Panel Parameters with an Enhanced Nelder-Mead Algorithm Applied to Single-Diode Model
P6	Redouane Eladnani	Inhibition de la corrosion de l'acier au carbone dans une solution d'acide chlorhydrique par l'huile essentielle de lavande : études électrochimiques, DFT et simulations Monte Carlo
P7	Rejdali Hajar	Enhanced Energy Harvesting with Piezoelectric Nanogenerators Based on Graphitic Carbon Nitride/Polyvinylidene Fluoride Composites



P8	Riad Ayoub	Enhanced Photovoltaic/Thermal Hybrid System with D-Shaped Tubing for Improved Heat Dissipation
P9	Roudi Chemaâ Mourad	Identification and quantification of Para-nitrophenol in aqueous solutions by liquid chromatography coupled with a spectrophotometer detector (HPLC/UV-Vis)
P10	Sadek Otmane	Study of the adsorption of the OH group on the Anatase (101) interface by Monte Carlo (MC) simulation.
P11	Sadki R.	Adsorptive removal of Methylene Blue, from aqueous solution using Tea Waste as a Low-Cost indigenous biosorbent: Mechanism of Adsorption, Equilibrium Study, Kinetics and Isotherms
P12	Sadni Fatima Ezzahra	A comparative study of organic fluids in the basic organic Rankine cycle for waste heat recovery: energy and exergy perspectives
P13	Said Jihane	DFT-Based Analysis of PCL-TiO ₂ Nanocomposites: Implications for Renewable Energy Systems
P14	Said Jihane	Simulation of PCL-TiO ₂ Interaction and Optoelectronic Properties using Density Functional Theory (DFT)
P15	Salama Mohammed	Magnetic properties of a mixed-spin ferrimagnetic system in a graphene bilayer
P16	Salym Imad	Effects of Bromine position on optoelectronic properties of FASiBrI ₂ perovskite for renewable energy devices
P17	Sanad Asmae	Optimization of Chromium (VI) adsorption by jujube stones from wastewater using a full factorial design
P18	Silkane Hassan	Impact of Photovoltaic Technologies on the Performance of Deep Learning Models
P19	Smairi Salma	The effect of experimental process on CdS thin layers properties nanostructured by Chemical Bath Deposition for optoelectronic application.
P20	Soukaina Karfaoui	A Review on the Utilization of Organic Wastes in Fired Clay Bricks: Advancements, Benefits, and Future Perspectives



P21	Soussi Ahmed	Combined Experimental and First-Principles Study of Al-Doped SnO ₂ : Electronic, Optical, structural, and morphological Properties for Photonic and Energy Applications
P22	Tabine Abdelhakim	Incorporating Pulse Current Effects into SOC Estimation: The FPSOC Method for Lithium-Ion Batteries Across Varied Temperature Conditions
P23	Tabine Abdelhakim	State of Charge Estimation for Lithium-Ion Battery Based on NARX Recurrent Neural Network
P24	Tair Melaid	Triaxial strain effect on hydrogen storage properties of KMgH ₃ perovskite hydride from first-principles calculations
P25	Tanasehte Mohammed	Modeling of storage energy and degradation Lithium-Ion Battery
P26	Taoufiq Mohamed	The optical, Morphological, and structural properties of ZnSe thin film deposited at various potentials by the electrodeposition technique
P27	Toubbali Hamoud	A Mini-Review on the effect of coumarins derivates donors insertion on the efficiency of dye sensitized solar cells (DSSC)
P28	Wang Xiaofan	Optimization of toxic sensor layout based on complex terrain
P29	Xing Zhou	Conversion of PET to active hydroxyl-terminated oligomers with 98.4% recycling efficiency and their potential application in functional composites
P30	Zaim Soumia	New approach based on the analysis of complex impedance and conductivity to investigate electrocoagulation efficiency for wastewater treatment.
P31	Zakaria Makir	Enhancing Spectral Modification for Solar Cell Applications
P32	Zayat Zahra	Life cycle analysis of recycled waste plastics



P33	Zimou Jamal	Investigation of Iron Doping Effects on the Structural, Optical, Magnetic, and Photocatalytic Properties of Spray-Deposited Cerium Oxide Thin Films
P34	Ziti Ahmed	Optimization of Conditions for Improving CZTS Thin Films by Sol Gel Method with Enhanced Optical Properties
P35	Zouine Ihssane	Advancements in Roadside Energy Harvesting Technologies



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