

Basic Information :

Name : MOSTAFA MOHAMED SALAHELDIN ABDELKHALEK ELEWA

Title : lecturer

Mostafa Mohamed Salah El Dein
Born on October 1, 1991



Education:

Certificate	Major	University	Year
PhD			2023
Masters			2019
Bachelor			2013

Teaching Experience:

Name Of Organization	Position	From Date	To Date
FUE	Lecturer	01/10/2013	Current

Researches / Publications :

Optimization techniques for power conversion efficiency boosting in lead-free Cs ₂ SnI ₄ Br ₂ -based perovskite solar cell
Design and Simulation of All-Inorganic Wide Bandgap CsPbI ₃ Br ₂ Solar Cells for Indoor Photovoltaic Applications
Simulation-guided design of ETL-Free and HTL-Free all-polymer solar cells: Front and back work function engineering
Designing an SOI Interleaver Using Genetic Algorithm
Comprehensive TCAD simulation and optimization of lead-free AgBiI ₄ solar cells: Migration from single cell to high-performance indoor photovoltaic modules
Simulation and Optimization of Highly Efficacious Polymer Solar Cell
Investigation of the Impact of Different Materials on the Efficiency of Lead-free Perovskite Solar Cell
TCAD-Based Design and Optimization of Flexible Organic/Si Tandem Solar Cells
Efficient Perovskite Multi-Junction Cell with Twin-Layered Absorber
Design PV-fed LED streetlight using Soft-Switching bidirectional DC-DC converter with optimal flux control
Optimizing Transport Carrier Free All-Polymer Solar Cells for Indoor Applications: TCAD Simulation under White LED Illumination
Investigation of HTL-free perovskite solar cell under LED illumination: interplay between energy bandgap and absorber optimization
Proposal and design of organic/CIGS tandem solar cell: Unveiling optoelectronic approaches for enhanced photovoltaic performance
Improved nonlinear model predictive control with inequality constraints using particle filtering for nonlinear and highly coupled dynamical systems
Integration of bridge health monitoring system with augmented reality application developed using 3D game engine . A Case Study
Optoelectronic Device Modeling and Simulation of Selenium-Based Solar Cells under LED Illumination
An Investigation of the Inverted Structure of A PBDB-T/PZT:C1-Based Polymer Solar Cell
Advancements in adsorption based carbon dioxide capture technologies- A comprehensive review
Numerical Analysis of Carbon-Based Perovskite Tandem Solar Cells: Pathways Towards High Efficiency and Stability
A Novel Approach for Hand-written Digit Classification Using Deep Learning

Excellent Thermoelectric Performance in KBaTh (Th = Sb, Bi) Based Half-Heusler Compounds and Design of Actuator for Efficient and Sustainable Energy Harvesting Applications
Developing an Integrated Soft-Switching Bidirectional DC/DC Converter for Solar-Powered LED Street Lighting
Theoretical insights into the structural, optoelectronic, thermoelectric, and thermodynamic behavior of novel quaternary LiZrCoX (X = Ge, Sn) compounds based on first-principles study
Studies on Optoelectronic and Transport Properties of XSnBr ₃ (X = Rb/Cs): A DFT Insight
Adaptive Fast-Terminal Neuro-Sliding Mode Control for Robot Manipulators with Unknown Dynamics and Disturbances
Similarity Index of the STFT-based Health Diagnosis of Variable Speed Rotating Machines
Concurrent Design of Alloy Compositions of CZTSSe and CdZnS Using SCAPS Simulation: Potential Routes to Overcoming VOC Deficit
First Principle Study on Structural, Thermoelectric, and Magnetic Properties of Cubic CdCrO ₃ Perovskites: A Comprehensive Analysis
A Cache-Enabled Device-to-Device Approach Based on Deep Learning
Efficient DCNN-LSTM Model for Fault Diagnosis of Raw Vibration Signals: Applications to Variable Speed Rotating Machines and Diverse Fault Depths Datasets
Development of a New Zeta Formula and Its Role in Riemann Hypothesis and Quantum Physics
An Evolutionarily Based Type-2 Fuzzy-PID for Multi-Machine Power System Stabilization
Investigation of Polymer/Si Thin Film Tandem Solar Cell Using TCAD Numerical Simulation
Electronic Properties, Linear and Nonlinear Performance of KAgCh (Ch = S, Se) Compounds: A First-Principles Study
Analytical Design of Optimal Model Predictive Control and Its Application in Small-Scale Helicopters
First-Principles Studies on the Physical Properties of the Half Heusler RbNbCd and RbNbZn Compounds: A Promising Material for Thermoelectric Applications
A New Self-Tuning Deep Neuro-Sliding Mode Control for Multi-Machine Power System Stabilizer
A Comprehensive Review on Recent Advancements in Absorption-Based Post Combustion Carbon Capture Technologies to Obtain a Sustainable Energy Sector with Clean Environment
Metal Oxide Nanosheet: Synthesis Approaches and Applications in Energy Storage Devices (Batteries, Fuel Cells, and Supercapacitors)
Numerical Simulation and Optimization of Inorganic Lead-Free Cs ₃ Bi ₂ I ₉ -Based Perovskite Photovoltaic Cell: Impact of Various Design Parameters
A Comprehensive First-Principles Investigation of SnTiO ₃ Perovskite for Optoelectronic and Thermoelectric Applications
Device Modeling of Efficient PBDB-T:PZT-Based All-Polymer Solar Cell: Role of Band Alignment
Investigation of High-Efficiency and Stable Carbon-Perovskite/Silicon and Carbon-Perovskite/CIGS-GeTe Tandem Solar Cells
Design and Simulation of ETL-Free Perovskite/Si Tandem Cell With 33% Efficiency
Simulation of High open-circuit voltage Perovskite/CIGS-GeTe tandem cell
Investigation of Electron Transport Material-Free Perovskite/CIGS Tandem Solar Cell
Analysis of an Efficient ZnO/GeTe Solar Cell Using SCAPS-1D
High-Efficiency Electron Transport Layer-Free Perovskite/GeTe Tandem Solar Cell: Numerical Simulation
On the Investigation of Interface Defects of Solar Cells: Lead-Based vs Lead-Free Perovskite
High Efficiency Tandem Perovskite/CIGS Solar Cell
A comprehensive simulation study of hybrid halide perovskite solar cell with copper oxide as HTM
A comparative study of different ETMs in perovskite solar cell with inorganic copper iodide as HTM
Design PV-fed LED streetlight using Soft-Switching bidirectional DC-DC converter with optimal flux control
Optimizing Transport Carrier Free All-Polymer Solar Cells for Indoor Applications: TCAD Simulation under White LED Illumination
TCAD-Based Design and Optimization of Flexible Organic/Si Tandem Solar Cells

Exploring the optoelectronic properties and solar cell performance of Cs₂SnI₆-xBr_x lead-free double perovskites: Combined DFT and SCAPS Simulation

Designing an SOI Interleaver Using Genetic Algorithm

Simulation-guided design of ETL-Free and HTL-Free all-polymer solar cells: Front and back work function engineering

Design and Simulation of All-Inorganic Wide Bandgap CsPbI₃Br₂ Solar Cells for Indoor Photovoltaic Applications

Optimization techniques for power conversion efficiency boosting in lead-free Cs₂SnI₄Br₂-based perovskite solar cell