

Basic Information :

Name : MOSTAFA MOHAMED SALAHELDIN ABDELKHALEK ELEWA

Title : lecturer

Education

Mostafa Mohamed Salah El Dein Born on October 1, 1991



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 :

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 . Acase 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 XSnBr3 (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 CdCrO3 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 Cs3Bi2I9-Based Perovskite Photovoltaic Cell: Impact of Various Design Parameters

A Comprehensive First-Principles Investigation of SnTiO3 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-xBrx lead-free double perovskites: Combined DFT and SCAPS Simulation