7.1.2 Affordable and Clean Energy: FWCI

During the academic year 2022- 2023, IU published a number of papers according to SDG7. The following are the citation per paper:

"Artificial Intelligent Control of Energy Management PV System"
Authors: T. Al Smadi, A. Handam, K.S. Gaeid, A. Al-Smadi, Y. Al-Husban
Journal: Results in Control and Optimization, 2024
Summary: This study presents an artificial intelligence-based control system for managing photovoltaic energy, aiming to optimize energy consumption and storage in residential applications.

Citations: 34
Link: ScienceDirect

"Residential Solar Energy Storage System: State of the Art, Recent Applications, Trends, and Development"
Authors: Y. Al-Husban, M. Al-Ghriybah, A. Handam, T. Al Smadi
Journal: Journal of Southwest Jiaotong University, 2022

Citations: 15
Link: Journal of Southwest Jiaotong University

"Optimization of the Residential Solar Energy Consumption Using the Taguchi Technique and Box-Behnken Design: A Case Study for Jordan"
Authors: Y. Al-Husban, M. Al-Ghriybah, K.S. Gaeid, T. Al Smadi, A. Handam
Journal: International Journal on Energy Conversion, 2023

Citations: 13
Link: International Journal on Energy Conversion

"The Study of Aerodynamics and Productivity of the Savonius Rotor with Supplementary Blades"
Authors: M. Al-Ghriybah, I.I. Hdaib, Z. Al-Omari, Y. Al-Husban

Citations: 5
Journal: International Journal of Renewable Energy Research-IJRER

"Using 2-Bladed Savonius Rotor to Harvest Highway Wind Energy at Airport: A Case Study"
Authors: M. Al-Ghriybah, I.I. Hdaib, A. Adam Lagum
Journal: Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, 2024

Citations: 4
Link: Taylor & Francis Online

"Enhancing the stability and efficiency of carbon-based perovskite solar cells"
Authors: Anjan Kumar, M. I. Sayyed,bc Anmar Ghanim Taki, Vanessa Valverdee and Eduardo Hernándeze
Journal: Nanoscale Advances, 2024

Citations: 1
Link: Nanoscale Advances

"Current Status and Future Investment Potential in Renewable Energy in Jordan: An Overview"
Authors: G. Abu-Rumman, A.I. Khdair, S.I. Khdair
Journal: Heliyon, 2020

Citations: 189
Link: Heliyon

"Prediction of Electrical Power Consumption in Jordan"
Authors: K. Mansour, M.A.S. Al-Hussban, Y.Y. Al-Husban, Y. Al-Lahham
Journal: 22nd International Arab Conference on Information Technology (ACIT), 2021
Summary: This study presents a model for predicting electrical power consumption in Jordan, aiding in energy planning and management.

Citations: 3
Link: IEEE Xplore

"Graphene Quantum Dots and Edge-Functionalized GQDs as Hole Transport Materials in Perovskite Solar Cells for Producing Renewable Energy: A DFT and TD-DFT Study"
Authors: A. Kumar, M.I. Sayyed, D. Punina, E. Naranjo, E. Jácome, M.K. Abdulameer, H.J. Albazoni, Z. Shariatinia

Citations: 3
Journal: RSC Advances, 2023