Ihsan Ullah Khalil

Assistant Professor

Pakistan Navy Engineering College

Email: ihsanullahkhalil@pnec.nust.edu.pk
Contact: 3332558288
LinkedIn: https://www.linkedin.com/in/iukhalil/

About

Dr. Ihsan Ullah Khalil is working as Assistant Professor in the Pakistan Navy Engineering College. Dr. Ihsan Ullah Khalil has a PhD in Electrical Engg.. Dr. Ihsan Ullah Khalil has published 28 research articles & conference papers having a citation count of 304, carried out 0 projects and filed 0 intellectual property.

Qualifications

PhD in Electrical Engg. 2018 - 2024
NUST, Islamabad , Pakistan

MS in Electrical Engg. 2015 - 2017
City University (PAK) , Pakistan

BE in Electronics 2007 - 2011
International Islamic University , Pakistan

Experience

Assistant Professor 2025- Present
Pakistan Navy Engineering College

Temporary Visiting Faculty 2023 - 2023
College of Electrical & Mechanical Engineering

Research Associate 2022 - 2024
NUST , NUST College of Electrical and Mechanical Engineering, NUST

Lecturer 2018 - 2022
Abasyn University , Abasyn University

Lab Engineer 2016 - 2018
Abasyn University , Abasyn University

USaid Project member 2016 - 2017
US Pakistan Energy Center , Abasyn University-UET Peshawar

Principal and Instructor 2011 - 2016
Muslim College of Technology, Peshawar , Muslim College of Technology, Peshawar

Research Articles

Deep learning based vision transformer approach for detecting overlapping PV faults using multi labeling 2025

Umais Khan Ihsan Ullah Khalil Matiullah Ahsan Sarim Farqaleet Khan

Measurement , Volume 256, Part E, Article Number 118537

Impact Factor: 5.600 | **Quartile:** 1
DOI: https://doi.org/10.1016/j.measurement.2025.118537

Comparative analysis of mathematical and simulation models for electric field generated beneath 400 kV overhead transmission lines 2025

Matiullah Ahsan Md Nor Ramdon Baharom Ihsan Ullah Khalil Zainab Zainal

Measurement , Volume:256

Impact Factor: 5.600 | **Quartile:** 1
DOI: https://doi.org/10.1016/j.measurement.2025.118566

Analysis of high-ampacity and low-sag conductors of 275 kV overhead transmission lines using reconductoring technique 2025

Matiullah Ahsan MD Nor Ramadon Baharom Ihsan Ullah Khalil Zainab Zainal

Electric Power Systems Research, Volume 246, Article Number 111719

Impact Factor: 3.300 | **Quartile:** 2

DOI: https://doi.org/10.1016/j.epsr.2025.111719

Simulation-based analysis of electric field characteristics under high-voltage double-circuit and quadrupole overhead transmission lines 2025

Matiullah Ahsan MD Nor Ramdon Baharom Ihsan Ullah Khalil Zainab zainal

Journal of Electrostatics, Volume 135, Article Number 104080

Impact Factor: 1.900 | **Quartile:** 2

DOI: https://doi.org/10.1016/j.elstat.2025.104080

A fuzzy reconfiguration approach for mitigating power losses in PV systems 2025

Ihsan Ullah Khalil Azhar Ul Haq Marium Jalal Mati Ullah Ahsan Usman Ghumman

Results in Engineering, Volume 25, Article Number 103965

Impact Factor: 6.000 | **Quartile:** 1 | **Citations:** 4

DOI: https://doi.org/10.1016/j.rineng.2025.103965

Improving electric field stress using grading ring devices for insulated cross-arm 2024

Matiullah Ahsan Md Nor Ramdon Baharom Zainab Zainal Ihsan Ullah Khalil Norain Sahari Ramy N.R. Ghaly

Results in Engineering, Volume 23, Article Number 102550

Impact Factor: 6.00 | **Quartile:** 1 | **Citations:** 2

DOI: https://doi.org/10.1016/j.rineng.2024.102550

Simulation based comparative analysis of electric field stress on insulated cross-arm 2024

Matiullah Ahsan Md Nor Ramdon Baharom Zainab Zainal Ihsan Ullah Khalil

Results in Engineering, Volume 23, Article Number 102394

Impact Factor: 6.000 | **Quartile:** 1 | **Citations:** 5

DOI: https://doi.org/10.1016/j.rineng.2024.102394

Measuring and simulation of magnetic field generated by high voltage overhead transmission lines 2024

Matiullah Ahsan Md Nor Ramdon Baharom Zainab Zainal Ihsan Ullah Khalil

Results in Engineering, Volume 23, Article Number 102688

Impact Factor: 6.000 | **Quartile:** 1 | **Citations:** 6

DOI: https://doi.org/10.1016/j.rineng.2024.102688

Parameters design optimization of grading ring based on electric field analysis through response surface methodology 2024

Matiullah Ahsan Md Nor Ramdon bin Baharom Zainab binti Zainal Ihsan Ullah Khalil

e-Prime - Advances in Electrical Engineering, Electronics and Energy, Volume 8, Article Number 100569

Impact Factor: N/A | **Citations:** 5

DOI: https://doi.org/10.1016/j.prime.2024.100569

Enhancing photovoltaic systems using Gaussian process regression for parameter identification and fault detection 2024

Aqdas Javaid Imran Shafi Ihsan Ullah Khalil Shazor Ahmad Mejdl Safran Sultan Alfarhood Imran Ashraf

Energy Reports , Volume 11, Pages 4485-4499

Impact Factor: 5.200 | **Quartile:** 2 | **Citations:** 6

DOI: https://doi.org/10.1016/j.egyr.2024.04.026

A modified chess knight reconfiguration approach for mitigating power losses in PV systems 2024

Ihsan Ullah Khalil Azhar Ul haq

Energy Reports , Volume:11, Page:2204-2219

Impact Factor: 5.2 | **Quartile:** 2 | **Citations:** 11

DOI: 10.1016/j.egyr.2024.01.066

A deep learning-based transformer model for photovoltaic fault forecasting and classification 2024

Ihsan Ullah Khalil Azhar Ul haq Naeem ul Islam

Electric Power Systems Research, Volume 228, Article Number 110063

Impact Factor: 3.9 | **Quartile:** 2 | **Citations:** 18

DOI: https://doi.org/10.1016/j.epsr.2023.110063

A novel procedure for photovoltaic fault forecasting 2024

Ihsan Ullah Khalil Naeem ul Islam Azhar Ul haq

Electric Power Systems Research, Volume 226, Article Number 109881

Impact Factor: 3.9 | **Quartile:** 2 | **Citations:** 9
DOI: https://doi.org/10.1016/j.epsr.2023.109881

High gain coupled inductor SEPIC based boost inverter using extended SPWM 2023
Haris Ataullah Taosif Iqbal Ihsan Ullah Khalil Taimoor Hassan Enas Ali Saad A. Mohamed Abdelwahab
Energy Reports , Volume 10, Pages 4013-4024
Impact Factor: 5.2 | **Quartile:** 2 | **Citations:** 3
DOI: https://doi.org/10.1016/j.egyr.2023.10.057

A Novel Row Index Mathematical Procedure for the Mitigation of PV Output Power Losses during Partial Shading Conditions 2023
Muhammad Zeeshan Naeem Ul Islam Faiz Ullah Ihsan Ullah Khalil Jaebyung Park
Symmetry , Volume 15(3), Article Number 768
Impact Factor: 2.940 | **Quartile:** 2 | **Citations:** 4
DOI: https://doi.org/10.3390/sym15030768

Analysis of the Dual Active Bridge-Based DC-DC Converter Topologies, High-Frequency Transformer, and Control Techniques 2022
Haris Ataullah Taosif Iqbal Ihsan Ullah Khalil Usman Ali Vojtech Blazek Lukas Prokop Nasim Ullah
Energies , Volume 15(23), Article Number 8944
Impact Factor: 3.252 | **Quartile:** 3 | **Citations:** 24
DOI: 10.3390/en15238944

Analysis and Verification of Leakage Inductance Calculation in DAB Converters Based on High-Frequency Toroidal Transformers under Different Design Scenarios 2022
Haris Ataullah Taosif Iqbal Ihsan Ullah Khalil Al-Sharef Mohammad Nasim Ullah Mohamed Emad Farrag
Energies , Volume 15(17), Article Number 6176
Impact Factor: 3.252 | **Quartile:** 2 | **Citations:** 5
DOI: https://doi.org/10.3390/en15176176

Unified Fuzzy Logic based Approach for Detection and Classification of PV Faults Using I-V trend line 2022
Taosif Iqbal Imran Hussain Ihsan Ullah Khalil Aqsa Islam Mati Ullah Ahsan Md. Shahariar Chowdhury Kuaanan Techato Nasim Ullah
Energies , Volume 15(14), Article Number 5106
Impact Factor: 3.252 | **Quartile:** 3 | **Citations:** 10
DOI: https://doi.org/10.3390/en15145106

A novel approach of overtaking maneuvering using modified RG method 2022
Usman Ghumman Hamid Jabbar Mohsin Islam Tiwana Kunwar Faraz Ihsan Ullah Khalil
PLoS One , Volume 17(1), Pages e0260455
Impact Factor: 3.240 | **Quartile:** 2 | **Citations:** 2
DOI: https://doi.org/10.1371/journal.pone.0260455

Feedback PID Controller-Based Closed-Loop Fast Charging of Lithium-Ion Batteries Using Constant-Temperature–Constant-Voltage Method 2021
Ayesha Kaleem Ihsan Ullah Khalil Sara Aslam Nasim Ullah Sattam Al Otaibi Merfat Algethami
Electronics , Volume 10, Article Number 2872
Impact Factor: 2.690 | **Quartile:** 3 | **Citations:** 15
DOI: https://doi.org/10.3390/electronics10222872

Solver-Based Mixed Integer Linear Programming (MILP) Based Novel Approach for Hydroelectric Power Generation Optimization 2020
Azhar-ul-Haq Aqib Perwaiz Jasvinder Kumar Ihsan Ullah Khalil Khalid Mehmood
IEEE Access , Volume 8, Pages 174880-174892
Impact Factor: 3.367 | **Quartile:** 2 | **Citations:** 11
DOI: 10.1109/ACCESS.2020.3024727

Comparative Analysis of Photovoltaic Faults and Performance Evaluation of Its Detection Techniques 2020
Azhar-ul-Haq Yousef Mahmoud Marium Jalal Muhammad Aamir Mati Ullah Ahsan Khalid Mehmood Ihsan Ullah Khalil
IEEE Access , Volume 8, Pages 26676-26698
Impact Factor: 3.367 | **Quartile:** 2 | **Citations:** 79
DOI: 10.1109/ACCESS.2020.2970531

A Unified Approach for Analysis of Faults in Different Configurations of PV Arrays and its Impact on Power Grid 2019
Saba Gul Marium Jalal Almas Anjum Azhar-ul-Haq Ihsan Ullah Khalil
Energies , Volume 13, Issue 1, Article Number 156

Impact Factor: 2.702 | **Quartile:** 3 | **Citations:** 27
DOI: https://doi.org/10.3390/en13010156

Cross-Border Power Trade and Grid Interconnection in SAARC Region: Technical Standardization and Power Pool Model 2019

Azhar-ul-Haq Muhammad Almas Anjum Mohammad Shahmeer Hassan Marium Jalal Shoaib Ahmad Ihsan Ullah Khalil Asad Waqar

IEEE Access , Volume 7 , Pages 178977-179001

Impact Factor: 3.745 | **Quartile:** 1 | **Citations:** 21
DOI: 10.1109/ACCESS.2019.2958407

Conference Proceedings

Optimized PV System Integrated Microgrid Configuration 2023

Azhar Ul haq Saad Ahmed Ihsan Ullah Khalil Marium Jalal

2023 IEEE 20th International Conference on Smart Communities: Improving Quality of Life using AI, Robotics and IoT (HONET) res.country(233,)

Citations: N/A
DOI: 10.1109/HONET59747.2023.10374941

Optimal Configuration of Microgrids with Increased Distributed Energy Resources 2022

Azhar Ul Haq SAAD AHMAD MARIUM JALAL Ihsan Ullah Khalil

19th International Conference on Sustainable Energy Technologies, res.country(224,)

Citations: N/A
DOI: https://wsset.org/istanbul-2022/

Editorial Activities

IEEE Latin America Transactions 2025
Reviewed Papers for Journals
Impact Factor: 1.3

Expert Systems With Applications 2025
Reviewed Papers for Journals
Impact Factor: 7.5

Computers & Electrical Engineering 2025
Reviewed Papers for Journals
Impact Factor: 0.4

IEEE Latin America Transactions 2025
Reviewed Papers for Journals
Impact Factor: 1.3

Energy Reports 2025
Reviewed Papers for Journals
Impact Factor: 4.7

Alexandria Engineering Journal 2025
Reviewed Papers for Journals
Impact Factor: 6.2

Electric Power Systems Research 2025
Reviewed Papers for Journals
Impact Factor: 3.9

Journal of Renewable and Sustainable Energy 2025
Reviewed Papers for Journals
Impact Factor: 1.9

Signal, image and video processing 2025
Reviewed Papers for Journals
Impact Factor: 2.0

Electrical Engineering 2024
Reviewed Papers for Journals
Impact Factor: 2.8

Electrical Engineering 2024
Reviewed Papers for Journals
Impact Factor: 1.6

Electrical Engineering 2024
Reviewed Papers for Journals
Impact Factor: 1.6

Electrical Engineering 2024
Reviewed Papers for Journals
Impact Factor: 1.6

Electrical Engineering 2024
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