

Taosif Iqbal

Associate Professor

College of Electrical & Mechanical Engineering

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About

Dr. Taosif Iqbal is working as Associate Professor in the College of Electrical & Mechanical Engineering. Dr. Taosif Iqbal has a PhD in Power Engineering and Engineering Thermophysics . Dr. Taosif Iqbal has published 23 research articles & conference papers having a citation count of 115, carried out 3 projects and filed 2 intellectual property.

Qualifications

PhD in Power Engineering and Engineering Thermophysics Xi'an Jiaotong University , China	2015 - 2019
MS in Automation and Control Ivanovo State University of Chemistry and Technology , Russian Federation	2001 - 2009
BE in Automational of Technological Processes Ivanovo State University of Chemistry and Technology , Russian Federation	1996 - 2001

Experience

Associate Professor College of Electrical & Mechanical Engineering	2025- Present
Assistant Professor College of Electrical & Mechanical Engineering	2009 - 2009
Lecturer College of Electrical & Mechanical Engineering	2006 - 2009
Assistant Project Manager University Main Office (UMO)	2005 - 2006

Awards

Professional Memberships

Research Projects

National Projects

Integrated Renewable Storage Active Buildings (IRSAB) Funding Agency: HEC Amount: PKR 13,129,000.00 Status: Approved_inprocess	2022
Compensating Variability of Solar Photovoltaic Systems Funding Agency: HEC Amount: PKR 19,914,000.00 Status: Completed	2021
Run-of-River (zero-head) Hydropower Generation Unit: Product development, manufacturing and installation of hydropower generation systems of 48 kW Funding Agency: Pakistan Science Foundation Amount: PKR 19,484,660.00 Status: Completed	2021

International Projects

Research Articles

Multi-dimensional $Ti_3C_2T_x$-MWCNTs-BiFeO₃ ternary nanocomposites electrode for enhanced energy storage in asymmetric supercapacitors <i>Sana Zainab Saifullah Awan Danish Hussain Syed Rizwan Hussain Taosif Iqbal Muhammad Azeem</i> <i>Journal of Energy Storage</i> , Volume 126, Article Number 116947 Impact Factor: 8.900 Quartile: 1 DOI: https://doi.org/10.1016/j.est.2025.116947	2025
Exploring Electrolyte Specific Effects on Multisheets 2-dimensional $Ti_3C_2T_x$-BiFeO₃ Nanocomposites Electrodes for High-Performance Supercapacitors Applications <i>Sana Zainab Saifullah Awan Danish Hussain Syed Rizwan Hussain Taosif Iqbal Sajal Fraz</i> <i>Scientific Reports</i> , Accepted Impact Factor: 3.800 Quartile: 1 DOI: 10.1038/s41598-025-90171-4	2025
Sensorless induction motor drive using coupled inductor based three phase inverters for solar pumping applications <i>Shafqat Abbas Taosif Iqbal</i> <i>Results in Engineering</i> , Volume:26, Article Number 105300 Impact Factor: 6.000 Quartile: 1 DOI: https://doi.org/10.1016/j.rineng.2025.105300	2025
Power Quality Optimization in Dual Active Bridge Converters <i>Abdul Shakoor Azhar Ul Haq Taosif Iqbal</i> <i>IEEE Access</i> , Volume 11, Pages 138788-138798 Impact Factor: 3.9 Quartile: 2 Citations: 2 DOI: 10.1109/ACCESS.2023.3339554	2023
High gain coupled inductor SEPIC based boost inverter using extended SPWM <i>Haris Ataullah Taosif Iqbal Ihsan Ullah Khalil Taimoor Hassan Enas Ali Saad A. Mohamed Abdelwahab</i> <i>Energy Reports</i> , Volume 10, Pages 4013-4024 Impact Factor: 5.2 Quartile: 2 Citations: 3 DOI: https://doi.org/10.1016/j.egy.2023.10.057	2023
Renewable Energy Maximization for Pelagic Islands Network of Microgrids Through Battery Swapping Using Deep Reinforcement Learning <i>Taosif Iqbal Muhammad Asim Amin Ahmed Suleman Muhammad Waseem Saddam Aziz Muhammad Talib Faiz Lubaid Zulfiqar Ahmed Mohammed Saleh</i> <i>IEEE Access</i> , Volume 11, Pages 86196-86213 Impact Factor: 3.9 Quartile: 2 Citations: 15 DOI: 10.1109/ACCESS.2023.3302895	2023
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:** 8
DOI: <https://doi.org/10.3390/en15145106>

Mechanical response of nickel-based anodes in solid oxide fuel cells during carbon deposition using reaction molecular dynamics

2020

Taosif Iqbal Lu Hai Bin Zhang Shuzhi Xiongwen Zhang Li Guojun
International Communications in Heat and Mass Transfer, Volume 117, Article Number 104787

Impact Factor: 5.683 | **Quartile:** 1 | **Citations:** 10
DOI: <https://doi.org/10.1016/j.icheatmasstransfer.2020.104787>

Coupled inductor based diode assisted boost inverter for achieving high gain

2019

Taosif Iqbal Shah Zaman Haibin Lu Xiongwen Zhang Siew-Chong Tan Guojun Li
IET Power Electronics , Volume 12, Issue 3, Pages 410-420

Impact Factor: 2.672 | **Quartile:** 2 | **Citations:** 9
DOI: 10.1049/iet-pel.2018.5449

Small Signal Modelling and Control of Solid Oxide Fuel Cell Based Coupled Inductor Boost Inverter

2019

Taosif Iqbal Yaqian Wang Haibin Lu Xiongwen Zhang Siew Hwa Chan
International Journal of Hydrogen Energy , -

Impact Factor: 4.939 | **Quartile:** 2 | **Citations:** 7
DOI: <https://doi.org/10.1016/j.ijhydene.2019.01.289>

Cyber-Physical System Modeling and Simulation of Power-Heat-Gas Multi-Energy Conversion for Reversible Solid Oxide Fuel Cell 电/热/气多能转换的可逆固体氧化物燃料电池信息物理融合建模与仿真

2018

Taosif Iqbal Wang Yaqian Ren Na XU Zonglei Hua Xiuwen Ding Tao Bie Zhaohong Zhang Xiongwen
Power System Technology , Volume 42, Issue 11, Pages 3535-3542

Impact Factor: N/A | **Citations:** 7
DOI: 10.13335/j.1000-3673.pst.2018.1008

Molecular dynamics simulations of the coke formation progress on the nickel-based anode of solid oxide fuel cells

2018

Taosif Iqbal Dong Hua Xiongwen Zhang Guojun Li Di Zhang Haibin Lu
International Communications in Heat and Mass Transfer, Volume 91, Pages 40-47

Impact Factor: 4.127 | **Quartile:** 1 | **Citations:** 25
DOI: 10.1016/j.icheatmasstransfer.2017.11.009

- Design and Analysis of an Efficient ESPWM Based Induction Motor Drive** 2023
Shafqat Abbas Usman Ali Taosif Iqbal
2023 25th International Multi Topic Conference, INMIC 2023 - Proceedings, res.country(177,)
Citations: N/A
DOI: 10.1109/INMIC60434.2023.10465969
- The Development and Evaluation of a High-Frequency Toroidal Transformer for Solid-State Transformer Applications †** 2023
Abdul Shakoor Azhar Ul Haq Taosif Iqbal
Third International Conference on Advances in Mechanical Engineering 2023, res.country(177,)
Citations: N/A
DOI: <https://doi.org/10.3390/engproc2023045011>
- Conceptual design of a sodium borohydride fueled power supply system for low power load devices** 2018
Taosif Iqbal Xiuwen Hua Dan Chai Xiongwen Zhang
Hydrogen Power Theoretical and Engineering Solutions International Symposium, res.country(197,)
Citations: N/A
DOI: N/A
- Control system implementation of On-demand Hydrogen Generation for PEM fuel cell** 2018
Taosif Iqbal Yaqian Wang Haibin Lu Xiongwen Zhang Siew Hwa Chan
Hydrogen Power Theoretical and Engineering Solutions International Symposium, res.country(197,)
Citations: N/A
DOI: N/A
- Numerical Study on Thermo-electric Performance of Cross-flow Planar Solid Oxide Fuel Cell** 2018
Taosif Iqbal Haibin Lu Changcheng Xie Xiuwen Hua Xiongwen Zhang Guojun Li1 Di Zhang
ASME 2018 12th International Conference on Energy Sustainability, res.country(233,)
Citations: N/A
DOI: 10.1115/ES2018-7351
- Power Sharing through Droop Control for Parallel Inverters with Line impedance Effect** 2016
Taosif Iqbal Akhtar Hussain Javed Muhammad Asim Amin Nauman Ali
4th International Conference on Energy, Environment and Sustainable Development 2016 (EESD 2016), res.country(177,)
Citations: N/A
DOI: https://www.researchgate.net/publication/310489146_Power_Sharing_through_Droop_Control_for_Parallel_Inverters_with_Line_impedance_Effect
- Switch Reluctance Motor Drive Based on Fuzzy Logic** 2009
Khawaja Aetesam Nazir Abeer Sadiq Taosif Iqbal A. Ali Qazalbash
44th International Universities Power Engineering Conference held from 01-04 Sep 2009 in UK, res.country(231,)
Citations: N/A
DOI: N/A
- Depth Measurement and 3-D Reconstruction of Multilayered Surfaces by Binocular Stereo Vision with Parallel Axis Symmetry Using Fuzzy** 2007
Sharjeel Anwar Shoab Ahmad Khan Taosif Iqbal Zubair Shafiq Abdul Moeed
World Congress on Engineering and Computer Science 2007 WCECS 2007, res.country(233,)
Citations: N/A
DOI: http://www.iaeng.org/publication/WCECS2007/WCECS2007_pp1046-1050.pdf
- Design and Implementation of a Micro Controller Based Maximum Power Point Tracking Fuzzy Solar Charge Controller** 2007
Arfakhshand Ali Qazalbash Taosif Iqbal Muhammad Zubair Shafiq
9th IASTED International Conference on Power and Energy Systems, res.country(233,)
Citations: N/A
DOI: null

Intellectual Property

Copyrights

Patents

Industrial Designs

Isolated Multilevel Inverter	2024
Status: Filed	
Universal Dual Active Bridge Converter	2024
Status: Filed	

Trademarks