Zaki Uddin

Assistant Professor

College of Electrical & Mechanical Engineering

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Contact:



About

Dr. Zaki Uddin is working as Assistant Professor in the College of Electrical & Mechanical Engineering. Dr. Zaki Uddin has a PhD in Power Electronics, Wind Power Generation. Dr. Zaki Uddin has published 35 research articles & conference papers having a citation count of 452, carried out 0 projects and filed 0 intellectual property.

Qualifications

PhD in Power Electronics, Wind Power Generation Southeast University , China	2016 - 2020
MSc in Power System Stability UET Peshawar , Pakistan	2010 - 2014
BSc in Electrical Engineering UET Peshawar , Pakistan	2004 - 2008

Experience

Assistant Professor College of Electrical & Mechanical Engineering	2024- Present
Assistant Professor	2024 - 2024
College of Electrical & Mechanical Engineering	
Assistant Professor	2022 - 2024
College of Electrical & Mechanical Engineering	
Postdoctoral Fellow	2020 - 2021
Southeast University China, School of Electrical Engineering, Southeast University Nanjing, 210096, Jiangsu Province PR China	

2012 - 2016 Lecturer

Sarhad University of Science & Information Technology, Landi Akhun Ahmad, Adjacent Attock Petroleum, Ring Road (Kohat road-Hayatabad Link), Peshawar)

2010 - 2012 Lab-Engineer

Sarhad University of Science & Information Technology, Landi Akhun Ahmad, Adjacent Attock Petroleum, Ring Road (Kohat road-Hayatabad Link), Peshawar)

Research Articles

Fault diagnosis and localization in photovoltaic-fed cascaded half-bridge five-level inverter using residual network architecture

2025

Iqra Ashfaq Zaki Uddin Naeem Ul Islam Azhar Ul Haq Muhammad nouman Arif

Electrical Engineering, Pages 1-24 Impact Factor: 1.900 | Quartile: 3

DOI: https://doi.org/10.1007/s00202-025-03183-8

Impact of dead-time on resonance in doubly fed induction generator system under weak grid

2025

Zakiud Din Jianzhong Zhang Zheng Xu Yaqian Zhang Yipeng Song

CSEE Journal of Power and Energy Systems, Volume: 11, Issue: 3, Pages 1070-1079

Impact Factor: 5.900 | Quartile: 1 | Citations: 2 DOI: doi.10.17775/CSEEJPES.2021.00760

Knacks of marine predator heuristics for distributed energy source-based power systems harmonics estimation

2024

Nadeem Zaki Uddin	
Heliyon , Volume 10, Issue 15, Article Number e35776	
Impact Factor: 3.400 Quartile: 1 Citations: 9	
DOI: 10.1016/j.heliyon.2024.e35776	
Open switch fault diagnosis of cascaded H-bridge 5-level inverter using deep learning	2024
Muhmmad Nouman Arif Zaki Uddin Azhar Ul Haq Khalid Mehmood Cheema Ahmad H. Milyani Naeem ul Islam Iqra Ashfaq	
Frontiers in Energy Research, Volume 12, Article Number 1388273	
Impact Factor: 2.600 Quartile: 3	
DOI: https://doi.org/10.3389/fenrg.2024.1388273	
Rectification and converter control of the FPSLGs for energy storage applications	2024
Murad Ali Yu Haitao Saleh Mobayen Jiahui Zhang Anton Zhilenkov Zaki Uddin	
IET Renewable Power Generation, Pages 1-15	
Impact Factor: 2.600 Quartile: 2	
DOI: https://doi.org/10.1049/rpg2.12998	
Grid-interfaced photovoltaic system with enhanced resilient control schemes for low-voltage ride-	2024
through	
Asad Khan Muhammad Mansoor Khan Zaki Uddin Jiang Chuanwen Almoataz Y. Abdelaziz	
Electrical Engineering, Volume 106, Issue 1, Pages 773-792	
Impact Factor: 1.600 Quartile: 3 Citations: 8	
DOI: https://doi.org/10.1007/s00202-023-01994-1	
Integrated metasurface for efficient polarization conversion and high-gain, low-RCS EM radiation	2023
Saeed ur Rehman Hai Deng Muhammad Irshad Khan Naveed Ullah Zaki Uddin	
Optics Express, Volume 31, Issue 17, Pages 27880-27893	
Impact Factor: 3.8 Quartile: 2 Citations: 4	
DOI: https://doi.org/10.1364/OE.492751	
Anomaly data identification for wind farms based on composite machine learning	2022
Yongbin Wu Jianzhong Zhang Zaki Uddin Shubang Huang	
Journal of Renewable and Sustainable Energy, Volume 14, Issue 6, Article Number 063307	
Impact Factor: 2.500 Quartile: 4 Citations: 6	
DOI: https://doi.org/10.1063/5.0127640	
Voltage balancing control of hybrid MMC under over-modulation situations with optimal circulating	2022
current injection	
Yaqian Zhang Jianzhong Zhang Fujin Deng Zakiud Din	
International Journal of Electrical Power & Energy Systems, Volume 140, Article Number 108053	
Impact Factor: 5.2 Quartile: 1 Citations: 7	
DOI: https://doi.org/10.1016/j.ijepes.2022.108053	
High-Resistance Connection Diagnosis Considering Current Closed-Loop Effect for Permanent Magnet	2022
Machine	
Zheng Xu Zaki Uddin Yongjiang Jiang Khalid Mehmood Cheema Ahmad H Milyani	
Frontiers in Energy Research, Volume 10, Article Number 933246	
Impact Factor: 3.4 Quartile: 3 Citations: 4	
DOI: doi: 10.3389/fenrg.2022.933246	
Overmodulation Operation of Hybrid Modular Multilevel Converter With Reduced Energy Storage	2022
Requirement	
Jianzhong Zhang Yaqian Zhang Fujin Deng Zaki Uddin	
IEEE Journal of Emerging and Selected Topics in Power Electronics, Volume 10, Issue 3, Pages 2946-2958	
Impact Factor: 5.5 Quartile: 1 Citations: 11	

weak grid

Zaki Uddin Jianzhong Zhang Zheng Xu Yaqian Zhang Ahmad H. Milyani Khalid Mehmood Cheema Arshad Nawaz Yipeng Song
IET Renewable Power Generation, Volume 16, Issue 5, Pages 807-834

Impact Factor: 2.6 | Quartile: 4 | Citations: 20

2022

Recent development and future trends of resonance in doubly fed induction generator system under

DOI: https://doi.org/10.1049/rpg2.12378

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Fault diagnosis of high voltage circuit breaker based on multi-sensor information fusion with training weights	2022
Jianzhong Zhang Yongbin Wu Zheng Xu Zaki uddin Hao Chen Measurement, Volume 192, Article Number 110894	
Impact Factor: 5.6 Quartile: 1 Citations: 21 DOI: https://doi.org/10.1016/j.measurement.2022.110894	
Open switch fault diagnosis of cascade H-bridge multi-level inverter in distributed power generators by	2021
machine learning algorithms Murad Ali Zaki Uddin Evgeny Solomin Khalid Mehmood Cheema Ahmad H Milyani Zhiyuan Che Energy Reports , Volume 7, Pages 8929-8942	
Impact Factor: 4.937 Quartile: 2 Citations: 49 DOI: https://doi.org/10.1016/j.egyr.2021.11.058	
Lumped parameter model and electromagnetic performance analysis of a single-sided variable flux permanent magnet linear machine	2021
Basharat Ullah Faisal Khan Muhammad Qasim Bakhtiar Khan Ahmad H Milyani Khalid Mehmood Cheema Zaki uddin Energies, Volume 14, Issue 17, Article Number 5494	
Impact Factor: 3.252 Quartile: 3 Citations: 6 DOI: https://doi.org/10.3390/en14175494	
Detection and Discrimination of Incipient Stator Faults for Inverter-Fed Permanent Magnet Synchronous Machines	2021
Jianzhong Zhang Zheng Xu Jiayue Wang Jin Zhao Zaki Uddin Ming Cheng IEEE Transactions on Industrial Electronics, Volume 68, Issue 8, Pages 7505-7515	
Impact Factor: 8.162 Quartile: 1 Citations: 64 DOI: 10.1109/TIE.2020.3009563	
A multi-level gate driver for crosstalk suppression of silicon carbide MOSFETs in bridge arm Yaodong Zhu Yongsheng Huang Haifu Wu Zaki Uddin Jianzhong Zhang IEEE Access, Volume 9, Pages 100185-100196	2021
Impact Factor: 3.476 Quartile: 2 Citations: 9 DOI: DOI: 10.1109/ACCESS.2021.3096547	
Realization of fault ride through for doubly fed induction generator system with cascade converter Zaki uddin Jianzhong Zhang Zheng Xu Yaqian Zhang Jin Zhao International Transactions on Electrical Energy Systems, Volume 31, Issue 3, Article Number e12792	2021
Impact Factor: 2.639 Quartile: 3 Citations: 15 DOI: https://doi.org/10.1002/2050-7038.12792	
Low voltage and high voltage ride-through technologies for doubly fed induction generator system: Comprehensive review and future trends	2021
Zaki Uddin Jianzhong Zhang Zheng Xu Yaqian Zhang Jin Zhao	
IET Renewable Power Generation, Volume 15, Issue 3, Pages 614-630	
Impact Factor: 3.034 Quartile: 4 Citations: 47 DOI: https://doi.org/10.1049/rpg2.12047	
Circulating current suppression control for modular multilevel converters based on restricted self- redundant states prediction	2020
Xing Hu Jianzhong Zhang Fujin Deng Gui Chen Qiang Chen Zaki Uddin	
Journal of Power Electronics, Volume 20, Issue 5, Pages 1149-1161	
Impact Factor: 1.114 Quartile: 4 Citations: 1 DOI: https://doi.org/10.1007/s43236-020-00104-9	
Impact of phase locked loop with different types and control dynamics on resonance of DFIG system Zaki Uddin Jianzhong Zhang Hussain Bassi Muhyaddin Rawa Yipeng Song Energies, Volume 13, Issue 5, Article Number 1039	2020
Impact Factor: 3.004 Quartile: 3 Citations: 17 DOI: https://doi.org/10.3390/en13051039	
Active damping of resonances in DFIG system with cascade converter under weak grid Zaki Uddin Jianzhong Zhang Yaqian Zhang Zheng Xu Jin Zhao Yipeng Song International Transactions on Electrical Energy Systems, Volume 29, Issue 11, Article Number e12118	2019
Impact Factor: 1.692 Quartile: 3 Citations: 13	

Impact of grid impedance on LVRT Performance of DFIG system with rotor crowbar technology	2019
Zaki Uddin Jianzhong Zhang Yaodong Zhu Zheng Xu Ahmed El-Naggar IEEE Access , Volume 7, Pages 127999-128008	
Impact Factor: 3.745 Quartile: 1 Citations: 66	
DOI: DOI: 10.1109/ACCESS.2019.2938207	
Hybrid multilevel converters: Topologies, evolutions and verifications	2019
Zaki Uddin Jianzhong Zhang Shuai Xu Xing Hu	
Energies , Volume 12, Issue 4, Article Number 615	
Impact Factor: 2.702 Quartile: 3 Citations: 73 DOI: https://doi.org/10.3390/en12040615	
Conference Proceedings	
A Novel Feedforward Strategy for the Charge-Modulated LLC Resonant Converter	2025
Jie Chen Yong Wang Jian Wang Zaki Uddin	
2025 8th International Conference on Energy, Electrical and Power Engineering (CEEPE), res.country(48,) Citations: N/A	
DOI: 10.1109/CEEPE64987.2025.11033919	
Brushless Excitation Technolgies for Doubly Fed Induction Generator System: Survey of Solutions and	2025
Future Trends	
Zaki Uddin Jian Wang Jianzhong Zhang Xingyuan Song 2025 7th Asia Energy and Electrical Engineering Symposium (AEEES), res.country(48,)	
Citations: N/A DOI: 10.1109/AEEES64634.2025.11019524	
Data-driven Adaptive Robust Optimization of Self-Scheduling Problem of Multi-Energy Virtual Power Plant Under Uncertainties	2025
Jian Wang Zaki Uddin Run Cao Xingyuan Song Zibo Wu THE 2nd INTERNATIONAL CONFERENCE ON SMART GRIDS AND POWER SYSTEMS (ICSGPS 2025), res.country(48,)	
Citations: N/A DOI: 10.1088/1742-6596/3012/1/012035	
Impact of Different Parameters on Symmetry and Size of Single Step Anodization Nanopores in Porous	2024
Alumina Nahaala Naar Shah Haidar Zaki Uddin Jara Aahfaa	
Nabeela Noor Shah Haider Zaki Uddin Iqra Ashfaq 6th International Conference on Robotics and Automation in Industry, ICRAI 2024, res.country(177,)	
Citations: N/A	
DOI: 10.1109/ICRAI62391.2024.10893939	
Optimizing Wind Speed Estimation with Least Squares Generative Adversarial Networks: A Case Study	2024
of Pakistan Igra Ashfaq Hasan Zahid Zaki Uddin Fajr Naveed Aaisha Abid	
2024 International Conference on Robotics and Automation in Industry (ICRAI), res.country(177,)	
Citations: N/A DOI: 10.1109/ICRAI62391.2024.10894229	
Operation and Evaluation of Wind Power Generation System with Constant Frequency Double Rotor	2020
Generator Zakiud Din Dan Su Jianzhong Zhang Zheng Xu	
2020 7th International Conference on Electrical and Electronics Engineering (ICEEE), res.country(224,)	
Citations: N/A	
DOI: 10.1109/ICEEE49618.2020.9102611	
Phase angle compensation of virtual impedance for resonance mitigation in DFIG system under weak grid	2019
Zakiud Din Jianzhong Zhang Zheng Xu Yaqian Zhang	
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Citations: N/A	
DOI: 10.1049/cp.2019.0334	
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Citations: N/A	
DOI: 10.1109/ECCE.2019.8912183	
Desig and Implementation of High Frequency Power Supply with Constant Power Output for Plasma Applications	2018
Jin Zhao Jianzhong Zhang Zakiud Din Zhengguo Qian	
2018 IEEE Energy Conversion Congress and Exposition, ECCE 2018, res.country(233,)	
Citations: N/A DOI: 10.1109/ECCE.2018.8557948	
DOI: 10.1109/ECCE.2016.6337946	
Doubly Fed Induction Generator with Cascade Converter for Improving Dynamic Performances	2018
Zakiud Din Jianzhong Zhang Jin Zhao Yongjiang Jiang	
2018 IEEE Energy Conversion Congress and Exposition, ECCE 2018, res.country(233,)	
Citations: N/A	
DOI: 10.1109/ECCE.2018.8558069	
A Compound 10kV DVR System based on Solid State Transformer Structure	2018
Yaqian Zhang Jianzhong Zhang Xing Hu Zakiud Din	
2018 International Power Electronics Conference, IPEC-Niigata - ECCE Asia 2018, res.country(113,)	
Citations: N/A	
DOI: 10.23919/IPEC.2018.8507539	
Editorial Activities	
IEEE Transactions on Sustainable Energy	2025
Reviewed Papers for Journals	
Impact Factor: 10.0	
IEEE Transactions on Sustainable Energy	2025
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Impact Factor: 3.7	
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Reviewed Papers for Journals	
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Impact Factor: 3.4	
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IEEE Transactions on Power Electronics	2025
Reviewed Papers for Journals	
Impact Factor: 6.6	
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IEEE Transactions on Power Electronics	2025
Reviewed Papers for Journals	
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Impact Factor: 6.6	
IET Renewable Power Generation	2025
Reviewed Papers for Journals	
Impact Factor: 2.6	
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Reviewed Papers for Journals	

Impact	Factor:	6.7
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IEEE Transactions on Transportation Electrification Reviewed Papers for Journals Impact Factor: 0.7	2025
IEEE Access Reviewed Papers for Journals Impact Factor: 9.4	2025
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IEEE Access Reviewed Papers for Journals Impact Factor: 3.4	2025
Energies Reviewed Papers for Journals Impact Factor: 3.2	2025
IEEE Transactions on Transportation Electrification Reviewed Papers for Journals Impact Factor: 7	2024
Electrical Engineering Reviewed Papers for Journals Impact Factor: 1.6	2024
Electric Power Systems Research Reviewed Papers for Journals Impact Factor: 3.9	2024
Reviewed Papers for Journals Impact Factor: N/A	2024
IEEE Access Reviewed Papers for Journals Impact Factor: 3.9	2024
Engineering Applications of Artificial Intelligence Reviewed Papers for Journals Impact Factor: 8	2024
IEEE Access Reviewed Papers for Journals Impact Factor: 3.9	2024
Engineering Applications of Artificial Intelligence Reviewed Papers for Journals Impact Factor: 7.5	2024
Engineering Applications of Artificial Intelligence Reviewed Papers for Journals Impact Factor: 7.5	2024
IEEE Access Reviewed Papers for Journals Impact Factor: 3.4	2024
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IEEE Access Reviewed Papers for Journals Impact Factor: 3.9	2024
Sustainability	2024

Edited	Journal	Issue	/ Proce	edina /	Book

Impact Factor: 3.3

Reviewed Papers for Journals Impact Factor: 3.9	2024
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Engineering Applications of Artificial Intelligence Reviewed Papers for Journals Impact Factor: 7.5	2023
Electronics Reviewed Papers for Journals Impact Factor: 2.9	2023
Sustainability Reviewed Papers for Journals Impact Factor: 3.9	2023
Journal of Energy Storage Reviewed Papers for Journals Impact Factor: 9.4	2023
International Journal of Electrical Power & Energy Systems Reviewed Papers for Journals Impact Factor: 5.2	2023
IEEE Acces Reviewed Papers for Journals Impact Factor: 3.9	2023
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Engineering Applications of Artificial Intelligence Reviewed Papers for Journals Impact Factor: 8.0	2023
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Energies Reviewed Papers for Journals Impact Factor: 3.2	2023
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Sustainability Reviewed Papers for Journals Impact Factor: 3.9	2023
Mathematical Problems in Engineering Reviewed Papers for Journals Impact Factor: 1.430	2023
International Journal of Electrical Power & Energy Systems Reviewed Papers for Journals Impact Factor: 5.2	2023
International Transactions on Electrical Energy Systems Reviewed Papers for Journals Impact Factor: 2.3	2023

IEEE Access Reviewed Papers for Journals Impact Factor: 3.9	2023
Energies Reviewed Papers for Journals	2023
Impact Factor: 3.2 International Journal of Photoenergy	2023
Reviewed Papers for Journals Impact Factor: 3.2	
Energies Reviewed Papers for Journals Impact Factor: 3.2	2023
Energies Reviewed Papers for Journals	2023
Impact Factor: 3.2 International Transactions on Electrical Energy Systems Reviewed Papers for Journals	2023
Impact Factor: 2.3 IEEE Access	2023
Reviewed Papers for Journals Impact Factor: 3.9	
International Journal of Electrical Power & Energy Systems Reviewed Papers for Journals Impact Factor: 5.2	2023
Frontiers in Energy Research Reviewed Papers for Journals Impact Factor: 3.4	2023
International Journal of Electrical Power & Energy Systems Reviewed Papers for Journals Impact Factor: 5.2	2023
International Journal of Robust and Nonlinear Control Reviewed Papers for Journals Impact Factor: 3.9	2022
Energies Reviewed Papers for Journals Impact Factor: 3.2	2022
International Journal of Electrical Power & Energy Systems Reviewed Papers for Journals Impact Factor: 5.2	2022
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International Journal of Electrical Power & Energy Systems Reviewed Papers for Journals Impact Factor: 5.2	2022
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