

Dr Akif Zia Khan

Assistant Professor

US-Pakistan Center for Advanced Studies in Energy

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About

Dr. Dr Akif Zia Khan is working as Assistant Professor in the US-Pakistan Center for Advanced Studies in Energy. Dr. Dr Akif Zia Khan has a PhD in Power Electronics. Dr. Dr Akif Zia Khan has published 23 research articles & conference papers having a citation count of 157, carried out 0 projects and filed 0 intellectual property.

Qualifications

PhD in Power Electronics Hong Kong Polytechnic University , Hong Kong	2017 - 2020
MS in Electric Power Systems And Its Automation North China Electric Power University , China	2011 - 2014
BE in Electrical Engineering NUST, Islamabad , Pakistan	2007 - 2011

Experience

Assistant Professor US-Pakistan Center for Advanced Studies in Energy	2021- Present
Assistant Professor US-Pakistan Center for Advanced Studies in Energy	2021 - 2021
Assistant Professor US-Pakistan Center for Advanced Studies in Energy	2020 - 2021
Lecturer US-Pakistan Center for Advanced Studies in Energy	2020 - 2020
Lecturer US-Pakistan Center for Advanced Studies in Energy	2014 - 2020
Lecturer US-Pakistan Center for Advanced Studies in Energy	2014 - 2014
Visiting Researcher Aalborg University, Denmark , Aalborg University, Aalborg, Denmark	2019 - 2019
Visiting Researcher Arizona State University , ASU, Tempe, U.S.A.	2016 - 2016
Internee MEPCO , MEPCO, Multan	2009 - 2009

Awards

PhD Studentship Grant

Recipient of Prestigious and Highly Competitive Hong Kong PhD Studentship Grant from Research Grants Council of Hong Kong.

Visiting Scholar Funding

Recipient of Competitive Scholarship from The Hong Kong Polytechnic University to Participate in Research Student Attachment Program at Aalborg University, Denmark.

Visiting Scholar Funding

Nominated as a Visiting Researcher by USPCAS-E, NUST to Participate in Power Systems Laboratory Training at Arizona State University, U.S.A

MS Studies Scholarship

Recipient of Full Scholarship for MS studies Sponsored by The China Scholarship Council (CSC), China and Higher Education Commission (HEC), Pakistan.

Recipient of Highly Competitive NUST Merit Based Scholarship for BE program.

Professional Memberships

PEC	Since 2011
IEEE	Since 2011

Research Articles

Enhancing sustainability in electric mobility: Exploring blockchain applications for secure EV charging and energy management

Muhammad Tayyab Rana Muhammad Numan Muhammad Yousif Tanveer Hussain Akif Zia Khan Xianxian Zhao

Computers & Electrical Engineering , Volume 119, Part A, Article Number 109503

Impact Factor: 4.000 | Quartile: 1 | Citations: 11

DOI: <https://doi.org/10.1016/j.compeleceng.2024.109503>

2024

Exploiting the Inherent Flexibility in Transmission Network for Optimal Scheduling, Wind Power Utilization, and Network Congestion Management

Akif Zia Khan Kashif Imran Muhammad Numan Mansoor Asif Sarmad Majeed Malik

IEEE Access , Volume 9, Pages 88746-88758

Impact Factor: 3.476 | Quartile: 2 | Citations: 22

DOI: [10.1109/ACCESS.2021.3090089](https://doi.org/10.1109/ACCESS.2021.3090089)

2021

A Multi-Structure, Multi-Mode Three-Phase Dual-Active-Bridge DC-DC Converter Targeting Wide-Range High-Efficiency Performance

Yiu Pang Chan Muhammad Yaqoob Ka Hong Loo Pooya Davari Frede Blaabjerg Akif Zia Khan

IEEE Transactions on Power Electronics , Volume 36, Issue 3, Pages 3078-3098

Impact Factor: 5.967 | Quartile: 1 | Citations: 10

DOI: [10.1109/TPEL.2020.3014900](https://doi.org/10.1109/TPEL.2020.3014900)

2021

A Three-Phase Dual-Active-Bridge DC-DC Converter with Reconfigurable Resonant Network for Efficient Wide Voltage Range Operation

Ka Hong Loo Akif Zia Khan

IEEE Transactions on Power Electronics , Volume 35, No. 2, Pages 1322-1339

Impact Factor: 6.153 | Quartile: 1 | Citations: 10

DOI: [DOI 10.1109/TPEL.2019.2920115](https://doi.org/10.1109/TPEL.2019.2920115)

2020

Design, Analysis, and Performance Characterization of Dual-Active-Bridge DC-DC Converter Utilizing Three-Phase Resonant Immittance Network

Ka Hong Loo Yuk Ming Lai Akif Zia Khan

IEEE Transactions on Power Electronics , Volume 34, No. 2, Pages 1159-1180

Impact Factor: 6.373 | Quartile: 1 | Citations: 10

DOI: [DOI 10.1109/TPEL.2018.2833744](https://doi.org/10.1109/TPEL.2018.2833744)

2019

Feasibility, emission and fuel requirement analysis of hybrid car versus solar electric car: a comparative study

Ibduallah Safdar Ali Raza Akif Zia Khan Ehsan Ali Ibadullah Safdar

International Journal of Environmental Science and Technology , Volume: 14, Issue: 8, Pages: 1807-1818

Impact Factor: 2.037 | Quartile: 3 | Citations: 13

DOI: [DOI: 10.1007/s13762-017-1332-0](https://doi.org/10.1007/s13762-017-1332-0)

2017

Smart Distribution Networks: A Review of Modern Distribution Concepts from a Planning Perspective

Syed Ali Abbas Kazmi Muhammad Khuram Shahzad Akif Zia Khan Dong Ryeol Shin

Energies , Volume 10, Issue 4, Article Number 501

Impact Factor: 2.676 | Quartile: 2 | Citations: 81

DOI: [10.3390/en10040501](https://doi.org/10.3390/en10040501)

2017

Conference Proceedings

Switched-Capacitor-Inductor-based Differential Power Converter for Solar PV Modules

Kamran Ali Khan Niazi Yongheng Yang Jinkui He Akif Zia Khan Dezso Sera

11th IEEE Energy Conversion Congress and Exposition (ECCE), res.country(233,)

Citations: N/A

DOI: [10.1109/ECCE.2019.8912615](https://doi.org/10.1109/ECCE.2019.8912615)

2019

A Reconfigurable Three-Phase Dual-Active-Bridge DC-DC Converter Designed for Wide Range High-Efficiency Operation

Akif Zia Khan Ka-Hong Loo

10th IEEE International Symposium on Power Electronics for Distributed Generation Systems (PEDG), res.country(48,)

Citations: N/A

DOI: [10.1109/PEDG.2019.8807776](https://doi.org/10.1109/PEDG.2019.8807776)

2019

A Three-Phase Dual Active Bridge DC-DC Immittance Converter <i>Akif Zia Khan Ka Hong Loo Yuk Ming Lai</i> <i>10th IEEE Energy Conversion Congress and Exposition (ECCE), res.country(233,)</i> Citations: N/A DOI: 10.1109/ECCE.2018.8558332	2018
A Comprehensive Overview of the Impact of Widespread Deployment of Electric Vehicles on the Power Grid <i>Akif Zia Khan Abdul Kashif Janjua Shayan Tariq Jan Zeeshan Nazir Ahmed</i> <i>IEEE International Conference on Smart Grid and Smart Cities (ICSGSC), res.country(197,)</i> Citations: N/A DOI: 10.1109/ICSGSC.2017.8038575	2017
A study on GaN based converters for the application of power conditioning of photovoltaic systems <i>Shayan Tariq Jan Akif Zia Khan Abdul Kashif Janjua Zeeshan Nazir Ahmad Naseem Iqbal</i> <i>International Conference on Electrical Engineering (ICEE), res.country(177,)</i> Citations: N/A DOI: 10.1109/ICEE.2017.7893438	2017
A Comprehensive Overview of the Architecture of Hybrid Electric Vehicles (HEV) <i>Akif Zia Khan</i> <i>19th IEEE International Multi-Topic Conference (INMIC), res.country(177,)</i> Citations: N/A DOI: 10.1109/INMIC.2016.7840143	2016
Performance evaluation of static Excitation System of Tarbela Power Station <i>Mudassar Nawaz Farhan Zulfiqar Muhammad Bilal Khan Akif Zia Khan</i> <i>International Conference on Computing, Electronic and Electrical Engineering (ICE Cube), res.country(177,)</i> Citations: N/A DOI: 10.1109/ICECUBE.2016.7495224	2016
Improving efficiency and reliability of protection system of tarbela power station <i>Mudassar Nawaz Farhan Zulfiqar Muhammad Bilal Khan Akif Zia Khan</i> <i>7th International Conference on Mechanical, Industrial and Manufacturing Technologies, res.country(247,)</i> Citations: N/A DOI: https://doi.org/10.1051/mateconf/20165404003	2016
Economic Planning of Network for Integration of Renewable: A Review <i>Hafiz Muhammad Bilal Akif Zia Khan</i> <i>2nd International Conference on Power Generation Systems and Renewable Energy Technologies, res.country(177,)</i> Citations: N/A DOI: 10.1109/PGSRET.2015.7312214	2015
Cost Effective Maximum Power Point Tracking of Photovoltaic Cell <i>Zeeshan Nazir Abdul Kashif Janjua Akif Zia Khan</i> <i>17th International Conference on Mathematical/Analytical Modelling and Computer Simulation, res.country(231,)</i> Citations: N/A DOI: DOI 10.1109/UKSim.2015.5	2015
Transformer Core Size Optimization using Genetic Algorithm <i>Abdul Kashif Janjua Sufyan Naeem Mughal Akif Zia Khan</i> <i>6th International Conference on Intelligent Systems, Modelling and Simulation, res.country(157,)</i> Citations: N/A DOI: 10.1109/ISMS.2015.33	2015
Transformer Failures, Causes and Impact <i>Shayan Tariq Jan Raheel Afzal Akif Zia Khan</i> <i>International Conference Data Mining, Civil and Mechanical Engineering, res.country(100,)</i> Citations: N/A DOI: http://dx.doi.org/10.15242/IIE.E0215039	2015
Improved ANN Based Impedance Estimator for Phase to Ground Faults in UHV Transmission Line <i>Z. Y. Xu Syed Furqan Rafique Akif Zia Khan</i> <i>IEEE International Conference on Intelligent Energy and Power Systems (IEPS), res.country(229,)</i> Citations: N/A	2014

DOI: 10.1109/IEPS.2014.6874161

Optimization of Economic Dispatch Problem Integrated with Stochastic Demand Side Response

2014

Ahsan Ashfaq Sun Ying Yun Akif Zia Khan

IEEE International Conference on Intelligent Energy and Power Systems (IEPS), res.country(229,)

Citations: N/A

DOI: 10.1109/IEPS.2014.6874162

Generation Expansion Planning Considering Externalities for Large Scale Integration of Renewable Energy

2014

Akif Zia Khan Sun Ying Yun Ahsan Ashfaq

IEEE International Conference on Intelligent Energy and Power Systems (IEPS), res.country(229,)

Citations: N/A

DOI: 10.1109/IEPS.2014.6874165

Optimization of Economic Load Dispatch Problem by Linear Programming Modified Methodology

2014

Ahsan Ashfaq Akif Zia Khan

2nd International Conference on Emerging Trends in Engineering and Technology (ICETET), res.country(231,)

Citations: N/A

DOI: <http://dx.doi.org/10.15242/IIE.E051451>

Editorial Activities

Reviewed Papers for Journals Impact Factor: 7.515	2021
Reviewed Papers for Journals Impact Factor: 5.84	2021
Reviewed Papers for Journals Impact Factor: 5.123	2021
Reviewed Papers for Journals Impact Factor: 5.44	2021
Reviewed Papers for Journals Impact Factor: 5.44	2021
Reviewed Papers for Journals Impact Factor: 7.515	2021
Reviewed Papers for Journals Impact Factor: 5.44	2021
Reviewed Papers for Journals Impact Factor: 5.44	2021
Reviewed Papers for Journals Impact Factor: 7.515	2020
Reviewed Papers for Journals Impact Factor: 5.444	2020
Reviewed Papers for Journals Impact Factor: 2.672	2020
Reviewed Papers for Journals Impact Factor: 7.137	2020
Reviewed Papers for Journals Impact Factor: 2.672	2019
Reviewed Papers for Journals Impact Factor: 7.515	2019
Reviewed Papers for Journals Impact Factor: 2.672	2019
Reviewed Papers for Journals Impact Factor: 5.444	2019