

Tariq Mairaj

Defence Faculty
Pakistan Navy Engineering College

Email:
Contact:



About

Dr. Tariq Mairaj is working as Defence Faculty in the Pakistan Navy Engineering College. Dr. Tariq Mairaj has published 31 research articles & conference papers having a citation count of 222, carried out 5 projects and filed 0 intellectual property.

Qualifications

Experience

Defence Faculty	2022- Present
Pakistan Navy Engineering College	
Defence Faculty	2012 - 2022
Pakistan Navy Engineering College	

Research Projects

National Projects

Algorithm Development & Improved RF Front end for Global Navigation Satellite System's (GNSS) Signals Augmentation	2023
Funding Agency: M/s TRAMIC, PAK	
Amount: PKR 44,227,000.00	
Status: Approved_inprocess	
Prediction of Remaining Useful Life (RUL) of Aerial Bundled Cables (ABC) in Coastal Areas	2017
Funding Agency: IGNITE	
Amount: PKR 9,392,460.00	
Status: Approved_inprocess	
Prototype Development of Electronic Gas Flow Meter	2019
Funding Agency: NUST	
Amount: PKR 300,000.00	
Status: Approved_inprocess	
Development of Flaw Diagnosis / Dimensioning /Prognostics Algorithms for the Improvement of In-country Aerospace nondestructive Testing (NTD) Capabilities	2013
Funding Agency: IGNITE	
Amount: PKR 10,000,000.00	
Status: Completed	
Structural Health Monitoring of Bridge Structures using Wireless Sensor Networks	2015
Funding Agency: HEC	
Amount: PKR 7,465,000.00	
Status: Completed	

International Projects

Research Articles

Particle Filter-Based Fault Prognosis of Live XLPE Insulated Aerial Bundled Cables Installed at Coastal Regions Using Historical Infrared Thermography Data	2025
Moez Ul Hassan Tariq Mairaj Waleed Bin Yousuf Syed Aqueel shah	
Journal of Nondestructive Evaluation, Volume 44, Article Number 23	
Impact Factor: 2.600 Quartile: 2	
DOI: https://doi.org/10.1007/s10921-024-01152-y	

Degradation prognostics of aerial bundled cables based on multi-sensor data fusion Moez Ul Hassan Tariq Mairaj Taimoor Zafar Waleed Bin Yousuf Syed Aqueel shah <i>Nondestructive Testing and Evaluation</i> , Pages:19 Impact Factor: 2.6 Quartile: 2 Citations: 6 DOI: 10.1080/10589759.2024.2323703	2024
Low profile high gain RHCP antenna for L-Band and S-Band using rectangular ring metasurface with backlobe suppression Bilal Muhammad Khan Tariq Mairj Sundas Farooq Khan <i>Plos One</i> , Volume 19(2), Article Number e0297957 Impact Factor: 2.9 Quartile: 1 Citations: 3 DOI: 10.1371/journal.pone.0297957	2024
Remaining Useful Life Prediction of Aerial Bundled Cables in Coastal Areas Using Thermal and Corrosion Degradation Models Waleed Bin Yousuf Tariq Mairaj Khan Syed Muhammad Talha Tariq Moez Ul Hassan Syed Aqueel shah <i>IEEE Transactions on Power Delivery</i> , Volume: 37, Issue: 4, Page(s): 2543-2550 Impact Factor: 4.131 Quartile: 1 Citations: 10 DOI: 10.1109/TPWRD.2021.3112081	2022
A phase-shifterless experimental scheme for power combination of two magnetrons utilizing a single RF power amplifier Muhammad Atayyab Shahid Tariq Mairaj Muhammad Qamar-Ul-Hassan Muhammad Waseem Khaliq Syed Wahab Zarin Muhammad Mubashar Ashraf <i>Microwave and Optical Technology Letters</i> , Volume 64, Issue 7, Pages 1192-1196 Impact Factor: 1.311 Quartile: 4 Citations: 2 DOI: https://doi.org/10.1002/mop.33269	2022
Radiomics Based Bayesian Inversion Method for Prediction of Cancer and Pathological Stage Hina Shakir Tariq Mairaj Haroon Rasheed Yiming Deng <i>IEEE Journal of Translational Engineering in Health and Medicine</i> , Volume 9, Article Number 4300208 Impact Factor: 2.890 Quartile: 3 Citations: 8 DOI: 10.1109/JTEHM.2021.3108390	2021
Degradation Rate Prediction of Bridges Using Historical Vibration Data Syed Humair Ali Tariq Mairaj Muhammad Atayyab Shahid Waleed bin Yousuf <i>Journal of Testing and Evaluation</i> , Volume 50, Issue 1, Pages 1-17 Impact Factor: 1.333 Quartile: 3 Citations: 1 DOI: 10.1520/JTE20200666	2021
Evaluation of Heat Treatment Effect on the Tensile Strength of Mild Steel Welded Joints Using Ultrasonic Testing Syed Aqueel shah Abid Shah Ghazanfar Ali Tariq Mairaj Rasool Khan Muhammad Imran Salman Nisar <i>Russian Journal of Nondestructive Testing</i> , Volume 57, No. 6, Pages 455-464 Impact Factor: 0.674 Quartile: 4 Citations: 3 DOI: https://doi.org/10.1134/S1061830921060024	2021
Assessment and Characterization of Welded Mild Steel (E-6013) Using Ultrasonic Testing and Hilbert Huang Transform M. Ghazanfar Ali Muhammad Imran Salman Nisar Abid Shah Ayesha Khalid Tariq Mairaj Rasool Khan Syed Aqueel shah <i>Russian Journal of Nondestructive Testing</i> , Volume 57, No. 5, Pages 401-407 Impact Factor: 0.674 Quartile: 4 Citations: 3 DOI: 10.1134/S106183092105003X	2021
Degradation assessment of in-service aerial bundled cables in coastal areas leading to prognosis using infrared thermography Moez ul Hassan Syed Talha Tariq Tariq Mairaj Sumayya Abbas Muhammad Atayyab Shahid Faisal Amir <i>IET Generation, Transmission and Distribution</i> , Volume 15, Issue 8, Pages 1348-1356 Impact Factor: 2.503 Quartile: 3 Citations: 6 DOI: 10.1049/gtd2.12106	2021
Aero structure damage growth prediction using age-based state transition models. Waleed Bin Yousuf Tariq Mairaj Rasool Khan Syed Aqueel shah Waleed Bin Yousuf <i>Engineering Failure Analysis</i> , Volume 122, Article Number 105186 Impact Factor: 3.634 Quartile: 2 Citations: 5 DOI: https://doi.org/10.1016/j.engfailanal.2020.105186	2021

Novel FBP based sparse-view CT reconstruction scheme using self-shaping spatial filter based morphological operations and scaled reprojections <i>Tariq Mairaj Syed Muhammad Umar Talha Waleed Bin Yousuf</i> <i>Biomedical Signal Processing and Control</i> , Volume 64, Article Number 102323 Impact Factor: 5.076 Quartile: 2 Citations: 2 DOI: https://doi.org/10.1016/j.bspc.2020.102323	2021
Region-Based Segmentation and Wiener Pilot-Based Novel Amoeba Denoising Scheme for CT Imaging <i>Syed Muhammad Umar Talha Tariq Mairaj Rasool Khan Waleed Bin Yousuf Jawwad Ali Zahed Syed Muhammad Umar Talha Waleed Bin Yousuf Jawwad Ali Zahed</i> <i>Scanning</i> , Volume 2020, Article ID 6172046, 12 pages Impact Factor: 1.932 Quartile: 3 Citations: 4 DOI: https://doi.org/10.1155/2020/6172046	2020
Prognosis study of live aerial bundled cables in coastal areas using historical super-heterodyne ultrasonic listening data <i>Tariq Mairaj Rasool Khan Taimoor Zafar Anzar Alam Waleed Bin Yousuf Muhammad Atayyab Shahid Fuzail Hashmi</i> <i>Electrical Power Systems Research</i> , Volume 189, Article Number 106591 Impact Factor: 3.414 Quartile: 2 Citations: 6 DOI: https://doi.org/10.1016/j.epsr.2020.106591	2020
Novel Multifrequency Eddy Current NDT Signal Inversion Scheme for Aerostructures <i>Omer Zia Siddiqui Tariq Mairaj Rasool Khan</i> <i>Journal of Testing and Evaluation</i> , Volume 48, Issue 4, Impact Factor: 1.264 Quartile: 3 Citations: 1 DOI: https://doi.org/10.1520/JTE20170289	2020
Radiomic feature selection for lung cancer classifiers <i>Tariq Mairaj Rasool Khan Hina Shakir Haroon Rasheed</i> <i>Journal of Intelligent & Fuzzy Systems</i> , Volume 39, Issue 10, Pages 5847-5855 Impact Factor: 0 Citations: 9 DOI: 10.3233/JIFS-179672	2020
Novel Health Diagnostics schemes analyzing corona discharge of operational Aerial Bundled Cables in coastal regions <i>Muhammad Atayyab Shahid Tariq Mairaj Rasool Khan Taimoor Zafar Fuzail Hashmi Faisal Amir</i> <i>IEEE Transactions on Power Delivery</i> , 1-1 Impact Factor: 4.131 Quartile: 1 Citations: 11 DOI: 10.1109/TPWRD.2020.2974751	2020
Radiomics based likelihood functions for cancer diagnosis <i>Hina Shakir Yiming Deng Haroon Rasheed Tariq Mairaj Rasool Khan Hina Shakir Yiming Deng Haroon Rasheed</i> <i>Scientific Reports</i> , Volume 9, Article Number 9501 Impact Factor: 3.998 Quartile: 1 Citations: 27 DOI: DOI: 10.1038/s41598-019-45053-x	2019
Auxiliary Particle Filter-Based Multisensor Data Fusion for Quantification of Corrosion in Aerostructures <i>Syed Taufeeq Ahmad Tariq Mairaj Rasool Khan Waleed Bin Yousuf</i> <i>Journal of Testing and Evaluation</i> , Volume 49, Impact Factor: 0.877 Quartile: 4 Citations: 4 DOI: https://doi.org/10.1520/JTE20180705	2019
Wireless Sensor Network-Based Structural Health Monitoring of Bridges Using Advanced Signal Processing Techniques <i>Syed Humair Ali Tariq Mairaj Rasool Khan Murad Abdullah Muhammad Zaid</i> <i>Journal of Testing and Evaluation</i> , - Impact Factor: 0.877 Quartile: 4 Citations: 5 DOI: 10.1520/JTE20180849	2019
Comparison of different life distribution schemes for prediction of crack propagation in an aircraft wing <i>Moez-ul-Hassan Fabiha Danish Waleed Bin Yousuf Tariq Mairaj Rasool Khan</i> <i>Engineering Failure Analysis</i> , Volume 96, Pages 241-254 Impact Factor: 2.203 Quartile: 2 Citations: 15 DOI: https://doi.org/10.1016/j.engfailanal.2018.10.010	2019

Postweld Heat Treatment Characterization of Mild Steel (E6013) Welded Areas Using Wavelet Transform of Ultrasonic Testing Signals <i>Saeed Khalid Tariq Mairaj Rasool Khan Amna Maqsood Saad A. Warraich</i> <i>Journal of Testing and Evaluation</i> , Volume:46, Issue:5, Pages: 2274-2280 Impact Factor: 0.711 Quartile: 4 Citations: 3 DOI: DOI:10.1520/JTE20160315	2018
3-D segmentation of lung nodules using hybrid level sets <i>Hina Shakir Tariq Mairaj Rasool Khan Haroon Rasheed</i> <i>Computers in Biology and Medicine</i> , Vol.96, Pages 214-226 Impact Factor: 2.286 Quartile: 2 Citations: 20 DOI: doi:10.1016/j.combiomed.2018.03.015	2018
Effect of carbon fiber winding layer on torsional characteristics of filament wound composite shafts <i>Mateen Tariq Salman Nisar Syed Aqueel shah Tariq Mairaj Sohaib Akbar Muhammad Ali Khan Sohaib Zia Khan</i> <i>Journal of the Brazilian Society of Mechanical Sciences and Engineering</i> , NULL Impact Factor: 1.743 Quartile: 3 Citations: 15 DOI: https://link.springer.com/article/10.1007/s40430-018-1099-3	2018
Determinants of Overhauling Failures: Evidence from OEM Intensive Maritime Capital Projects <i>Muhammad Imran Nadeem Kureshi Tariq Mairaj Salman Nisar Syed Aqueel shah</i> <i>Industrial Engineering & Management</i> , Volume 7, Issue 3, Pages 1-8 Impact Factor: 0 DOI: 10.4172/2169-0316.1000260	2018
Practical Implementation and Analytical Evaluation of Ad-hoc Networking Projects to Build a MANET based Collaborative System <i>Ashfaq Ahmad Malik Athar Mahboob Tariq Mairaj Rasool Khan</i> <i>Ad-Hoc and Sensor Wireless Networks</i> , Vol. 38, Issue 1-4, Pages 227-261 Impact Factor: 0.753 Quartile: 4 DOI: -	2017
Response of Gaussian-modulated guided wave in aluminum: An analytical, numerical, and experimental study <i>Sohaib Zia Khan Muhammad Ali Khan Muhammad Tariq Kamran A Khan Tariq Mairaj Rasool Khan Taha Ali</i> <i>Proceedings of the Institution of Mechanical Engineers Part C-Journal of Mechanical Engineering Science</i> , Volume: 231, Issue: 16, Pages: 3057-3065, Special Issue: SI Impact Factor: 0.996 Quartile: 4 Citations: 5 DOI: DOI:10.1177/0954406216681594	2017
Prognostic Algorithms for Flaw Growth Prediction in an Aircraft Wing <i>Waleed Bin Yousuf Tariq Mairaj Rasool Khan Taha Ali</i> <i>IEEE Transactions on Reliability</i> , Volume: 66, Issue: 2, Pages: 478-486 Impact Factor: 2.79 Quartile: 1 Citations: 25 DOI: DOI:10.1109/TR.2017.2676722	2017
Assessment of material properties of AISI 316L stainless steel using non-destructive testing <i>Sohaib Zia Khan Tariq M. Khan Yasir F. Joya Muhammad A. Khan Sarah Ahmed Syed Aqueel shah Sohaib Zia Khan Yasir F. Joya Muhammad A. Khan Sarah Ahmed</i> <i>Nondestructive Testing and Evaluation</i> , Volume 31. Issue 4. Pages 360-370 Impact Factor: 0.804 Quartile: 3 Citations: 23 DOI: 10.1080/10589759.2015.1121265	2016
Evaluation of OLSR Protocol Implementations using Analytical Hierarchical Process (AHP) <i>Ashfaq Ahmad Malik Tariq Mairaj Rasool Khan Athar Mahboob</i> <i>International Journal of Advanced Computer Science and Applications</i> , Volume: 7, Issue:11, Pages 338-344 Impact Factor: - DOI: -	2016

Feasibility Study of Circularly Polarized, Low Profile, Metasurface enhanced Antenna Array for SATCOM

2024

Sundas Farooq Khan Bilal Muhammad Khan Tariq Mairj
IEEE International Symposium on Phased Array Systems and Technologies, res.country(233,)

Citations: N/A

DOI: Accepted 10.1371/journal.pone.0297957