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About

Dr. Abdul Ghafoor is working as Professor in the Military College of Signals. Dr. Abdul Ghafoor has a PhD in Control Systems. Dr. Abdul Ghafoor has published 127 research articles & conference papers having a citation count of 1561, carried out 0 projects and filed 0 intellectual property.

Qualifications

PhD in Control Systems University of Western Australia , Australia	2003 - 2007
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Experience

Professor Military College of Signals	2024- Present
Defence Faculty Military College of Signals	2008 - 2024
Prof/Assoc Prof/ Asst Prof/Lec MCS NUST , MCS	1999 - 2022

Research Articles

Unveiling underwater structures: pyramid saliency detection via homomorphic filtering <i>Maria Kanwal Muhammad Mohsin Riaz Abdul Ghafoor</i> <i>Multimedia Tools and Applications</i> , Volume 83, Pages 72727–72744 Impact Factor: 3.000 Quartile: 2 Citations: 10 DOI: 10.1007/s11042-024-18474-8	2024
Adaptive successive cancellation list decoding for Polar-coded Probabilistic amplitude shaping <i>Danish Ilyas Rongke Liu Abdul Ghafoor</i> <i>IEEE Communications Letters</i> , Volume 28, Issue 12, Pages 2705-2708 Impact Factor: 3.700 Quartile: 2 DOI: 10.1109/LCOMM.2024.3426520	2024
Content-based face image retrieval using quaternion based local diagonal extreme value pattern <i>Komal Nain Sukhia Muhammad Mohsin Riaz Benish Amin Abdul Ghafoor</i> <i>Multimedia Tools and Applications</i> , Volume 83, Pages 65737-65752 Impact Factor: 3.000 Quartile: 2 DOI: 10.1007/s11042-023-15234-y	2024
Towards sweetness classification of orange cultivars using short-wave NIR spectroscopy <i>Ayesha Zeb Waqar Shahid Qureshi Abdul Ghafoor Aman Ullah Malik Muhammad Imran Alina Mirza Mohsin Islam Tiwana Eisa Alanazi</i> <i>Scientific Reports</i> , Volume 13, Issue 1, Article Number 325 Impact Factor: 4.996 Quartile: 2 Citations: 17 DOI: https://doi.org/10.1038/s41598-022-27297-2	2023
Multi-modal text recognition and encryption in scanned document images <i>Maemoona Farooq Abdul Ghafoor Muhammad Mohsin Riaz</i> <i>Journal of Supercomputing</i> , Pages 1-21 Impact Factor: 2.557 Quartile: 2 Citations: 2 DOI: https://doi.org/10.1007/s11227-022-04912-7	2022
Saliency-based fabric defect detection via bag-of-words model <i>Maria Kanwal Muhammad Mohsin Riaz Syed Sohaib Ali Abdul Ghafoor</i>	2022

<i>Signal Image and Video Processing</i>, Pages 1-7 Impact Factor: 1.583 Quartile: 4 Citations: 18 DOI: https://doi.org/10.1007/s11760-022-02379-w	
Privacy preserving content based image retrieval <i>Maemoona Farooq M. Mohsin Riaz Abdul Ghafoor Fawad Khan</i> <i>Multimedia Tools and Applications</i>, Pages 1-24 Impact Factor: 3.6 Quartile: 2 Citations: 8 DOI: https://doi.org/10.1007/s11042-023-17168-x	2022
Efficient Region of Interest Encryption Based on a New Chaotic Map <i>Maemoona Kayani Muhammad Mohsin Riaz Abdul Ghafoor</i> <i>International Journal of Bifurcation and Chaos</i>, Vol. 32, No. 12, ID:2250175 Impact Factor: 2.450 Quartile: 2 Citations: 4 DOI: 10.1142/S0218127422501759	2022
Transforming remote sensing images to textual descriptions <i>Usman Zia M. Mohsin Riaz Abdul Ghafoor</i> <i>International Journal of Applied Earth Observation and Geoinformation</i>, Volume 108, Article Number 102741 Impact Factor: 7.672 Quartile: 1 Citations: 30 DOI: 10.1016/j.jag.2022.102741	2022
Fusing color, depth and histogram maps for saliency detection <i>Abdul Ghafoor Maria Kanwal Mohsin Riaz Syed Shoaib Ali</i> <i>Multimedia Tools and Applications</i>, Pages 1-11 Impact Factor: 2.757 Quartile: 2 Citations: 12 DOI: https://doi.org/10.1007/s11042-022-12165-y	2022
Stability Preserving Model Reduction Technique for 1-D and 2-D Systems With Error Bounds <i>Muhammad Imran Abdul Ghafoor Muhammad Imran</i> <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i>, Volume 69, Issue 3, Pages 1084-1088 Impact Factor: 3.292 Quartile: 2 Citations: 13 DOI: 10.1109/TCSII.2021.3092557	2022
Content-Based Image Retrieval Using Angles Across Scales <i>Komal Nain Sukhia Syed Sohaib Ali M. Mohsin Riaz Abdul Ghafoor Benish Amin</i> <i>IEEE Geoscience and Remote Sensing Letters</i>, Volume 19, Article Number 5512005 Impact Factor: 5.343 Quartile: 1 Citations: 6 DOI: 10.1109/LGRS.2021.3131340	2022
Underwater Image Enhancement Using Laplace Decomposition <i>Muhammad Mohsin Riaz Syed Sohaib Ali Attiq Ahmad Mehwish Iqbal Abdul Ghafoor</i> <i>IEEE Geoscience and Remote Sensing Letters</i>, Volume 19, Article Number 1500105 Impact Factor: 5.343 Quartile: 1 Citations: 27 DOI: 10.1109/LGRS.2020.3021134	2021
Medical image fusion using non subsampled contourlet transform and iterative joint filter <i>Abdul ghafoor Asim Dilawar Bakhshi Nuwayrah Jawaid Saghir M Munawwar Iqbal Ch</i> <i>Multimedia Tools and Applications</i>, Pages 1-15 Impact Factor: 2.577 Quartile: 2 Citations: 10 DOI: https://doi.org/10.1007/s11042-021-11753-8	2021
Shift-invariant discrete wavelet transform-based sparse fusion of medical images <i>Naima Altaf Abdul Ghafoor M. Munawwar Iqbal Ch M. Mohsin Riaz Nuwayrah Jawaid Saghir</i> <i>Signal, Image and Video Processing</i>, Pages 1-9 Impact Factor: 2.157 Quartile: 3 Citations: 2 DOI: https://doi.org/10.1007/s11760-021-01998-z	2021
Resource allocation for energy efficiency optimization in uplink–downlink decoupled 5G heterogeneous networks <i>Humayun Zubair Khan Mudassar Ali Imran Rashid Abdul Ghafoor Muhammad Naeem Adnan Ahmed Khan Adil Masood Saddiqui</i> <i>International Journal of Communication System</i>, Pages 1-23, Article Number e4925 Impact Factor: 1.882 Quartile: 3 Citations: 16 DOI: https://doi.org/10.1002/dac.4925	2021

Is this melon sweet? A quantitative classification for near-infrared spectroscopy <i>Ayesha Zeb Waqar Shahid Qureshi Abdul Ghafoor Amanullah Malik Muhammad Imran Javaid Iqbal Eisa Alanazi</i> <i>Infrared Physics and Technology</i>, Volume 114, Article Number 103645 Impact Factor: 2.997 Quartile: 2 Citations: 23 DOI: https://doi.org/10.1016/j.infrared.2021.103645	2021
Transformation of 2D Roesser into Causal Recursive Separable Denominator Model and Decomposition into 1D Systems <i>Muhammad Imran Abdul Ghafoor Muhammad Imran</i> <i>Circuits, Systems, and Signal Processing</i>, Pages 1-12 Impact Factor: 2.311 Quartile: 3 Citations: 10 DOI: https://doi.org/10.1007/s00034-020-01642-0	2021
Out of focus Multi-Spectral Image De-blurring using Texture Extraction and Modified Fourier Transform <i>Mehwish Iqbal Muhammad Mohsin Riaz Abdul Ghafoor Attiq Ahmad Syed Sohaib Ali</i> <i>Multimedia Tools and Applications</i>, Pages 1-14 Impact Factor: 2.577 Quartile: 2 Citations: 2 DOI: https://doi.org/10.1007/s11042-020-10232-w	2021
Illumination Normalization of Face Images using Layers Extraction and Histogram Processing <i>Mehwish Iqbal Muhammad Mohsin Riaz Abdul Ghafoor Attiq Ahmad</i> <i>Arabian Journal of Science and Engineering</i>, Pages 1-10 Impact Factor: 2.807 Quartile: 2 Citations: 3 DOI: https://doi.org/10.1007/s13369-020-05142-w	2021
Fuzzy based iterative matting technique for underwater images <i>Benish Amin M Mohsin Riaz Abdul Ghafoor</i> <i>IET Image Processing</i>, Pages 1-9 Impact Factor: 2.373 Quartile: 3 Citations: 1 DOI: https://doi.org/10.1049/ipr2.12032	2020
Coherence Optimized Channel Estimation for Mm-Wave Massive MIMO <i>Faisal Akram Dr Imran Rashid Dr Abdul Ghafoor Dr Adil Masood Siddiqui</i> <i>Radioengineering</i>, Volume:29, Issue:4, Page:625-635 Impact Factor: 0.951 Quartile: 4 Citations: 1 DOI: 10.13164/re.2020.0625	2020
Kernel Estimation and Optimization for Image De-blurring using Mask Construction and Super-Resolution <i>Mehwish Iqbal Muhammad Mohsin Riaz Abdul Ghafoor Attiq Ahmad</i> <i>Multimedia Tools and Applications</i>, Pages 1-12 Impact Factor: 2.757 Quartile: 2 Citations: 4 DOI: https://doi.org/10.1007/s11042-020-09762-0	2020
A vessel segmentation technique for retinal images <i>Mehwish Iqbal Muhammad Mohsin Riaz Abdul Ghafoor Attiq Ahmed</i> <i>International Journal of Imaging Systems and Technology</i>, Pages 1-8 Impact Factor: 2.000 Quartile: 3 Citations: 3 DOI: https://doi.org/10.1002/ima.22500	2020
Content-based remote sensing image retrieval using multi-scale local ternary pattern <i>Komal Nain Sukhia Muhammad Mohsin Riaz Abdul Ghafoor Syed Sohaib Ali</i> <i>Digital Signal Processing</i>, Volume 104, Article Number 102765 Impact Factor: 3.381 Quartile: 2 Citations: 30 DOI: https://doi.org/10.1016/j.dsp.2020.102765	2020
Image Recoloring Using Specular Decomposition and In-painting <i>Mehwish Iqbal Muhammad Mohsin Riaz Abdul Ghafoor Mehish Iqbal Muhammad Mohsin Riaz Attiq Ahmad</i> <i>Imaging Science Journal</i>, Volume 68, Issue 3, Pages 188-194 Impact Factor: 1.023 Quartile: 4 Citations: 7 DOI: http://doi.org/10.1080/13682199.2020.1783088	2020
Automatic aircraft extraction using video matting and frame registration <i>Benish Amin Muhammad Mohsin Riaz Abdul Ghafoor</i> <i>IET Image Processing</i>, Volume: 14, Issue: 8, Pages 1628-1635	2020

Impact Factor: 2.373 Quartile: 3 Citations: 5 DOI: 10.1049/iet-ipr.2019.0067	
A multifocus image fusion using highlevel DWT components and guided filter <i>Naima Altaf M. Munawwar Iqbal Ch Mohsin Riaz Abdul Ghafoor Syed Sohaib Ali</i> <i>Multimedia Tools and Applications</i> , Vol:79, Pages:12817-12828 Impact Factor: 2.757 Quartile: 2 Citations: 22 DOI: 10.1007/s11042-020-08661-8	2020
Color and white balancing in low-light image enhancement <i>Abdul Ghafoor Syed Sohaib Ali Muhammad Mohsin Riaz Mehwish Iqbal Attiq Ahmed</i> <i>Optik</i> , Volume 209, Article Number 164260 Impact Factor: 2.443 Quartile: 2 Citations: 23 DOI: https://doi.org/10.1016/j.ijleo.2020.164260	2020
Automatic shadow detection and removal using image matting <i>Benish Amin Muhammad Mohsin Riaz Abdul Ghafoor</i> <i>Signal Processing</i> , Volume 170, Article Number 107415 Impact Factor: 4.662 Quartile: 1 Citations: 16 DOI: https://doi.org/10.1016/j.sigpro.2019.107415	2020
Automatic Image Matting of Synthetic Aperture Radar Target Chips <i>Benish Amin Muhammad Mohsin Riaz Abdul Ghafoor</i> <i>Radioengineering</i> , Volume 29, No.1, Pages 228-234 Impact Factor: 0.951 Quartile: 4 Citations: 2 DOI: 10.13164/re.2020.0228	2020
Image attention retargeting using defocus map and bilateral filter <i>Maria Kanwal Muhammad Mohsin Riaz Syed Sohaib Ali Abdul Ghafoor</i> <i>Multimedia Tools and Applications</i> , Pages 1-11 Impact Factor: 2.757 Quartile: 2 Citations: 10 DOI: https://doi.org/10.1007/s11042-020-08813-w	2020
Pulse rate extraction based on local-area motion magnification <i>Maamoon Kayani Muhammad Mohsin Riaz Abdul Ghafoor Naima Altaf</i> <i>Measurement</i> , Volume 152, Article Number 107290 Impact Factor: 3.927 Quartile: 1 Citations: 3 DOI: 10.1016/j.measurement.2019.107290	2020
Frequency Limited Model Reduction Techniques for Discrete-Time Systems <i>Hamid Imtiaz Toor Muhammad Imran Abdul Ghafoor Deepak Kumar Victor Sreeram Abdul Rauf</i> <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , Volume: 67, Issue: 2, Pages 345-349 Impact Factor: 3.292 Quartile: 2 Citations: 13 DOI: 10.1109/TCSII.2019.2909122	2020
Topic sensitive image descriptions <i>Usman Zia M. Mohsin Riaz Abdul Ghafoor Syed Sohaib Ali</i> <i>Neural Computing and Applications</i> , Pages 1-9 Impact Factor: 4.774 Quartile: 1 Citations: 6 DOI: https://doi.org/10.1007/s00521-019-04587-x	2019
Automated acute lymphoblastic leukaemia detection system using microscopic images <i>Komal Nain Sukhia Abdul Ghafoor Muhammad Mohsin Riaz Naima Altaf</i> <i>IET Image Processing</i> , Volume: 13, Issue: 13, Pages 2548-2553 Impact Factor: 1.995 Quartile: 3 Citations: 17 DOI: 10.1049/iet-ipr.2018.5471	2019
Frequency Limited Gramian Based Structure Preserving Model Order Reduction for Discrete-time Second Order System <i>Khawaja Shafiq Haider Abdul Ghafoor Muhammad Imran Fahad Mumtaz Malik</i> <i>International Journal of Control</i> , Volume 92, Issue 11, Pages 2608-2619 Impact Factor: 2.780 Quartile: 2 Citations: 5 DOI: 10.1080/00207179.2018.1454605	2019
Underwater visibility restoration using dehazing, contrast enhancement and filtering <i>Abdul Ghafoor Alina Majeed Chaudhry M. Mohsin Riaz</i>	2019

<i>Multimedia Tools and Applications</i> , Volume 78, No.19, Pages 28179-28187	
Impact Factor: 2.313 Quartile: 2 Citations: 12	
DOI: https://doi.org/10.1007/s11042-019-07922-5	
Content-based blur image retrieval using quaternion approach and frequency adder LBP	2019
<i>Komal Nain Sukhia M. Mohsin Riaz Abdul Ghafoor</i>	
<i>Multidimensional Systems and Signal Processing</i> , Volume 30, Issue 4, Pages 2167-2183	
Impact Factor: 1.810 Quartile: 2 Citations: 3	
DOI: 10.1007/s11045-019-00643-w	
Weighted image fusion using cross bilateral filter and non-subsampled contourlet transform	2019
<i>M. Munawwar Iqbal Ch M. Mohsin Riaz Naima Altaf Abdul Ghafoor Attiq Ahmad</i>	
<i>Multidimensional Systems and Signal Processing</i> , , Volume: 30, Pages:2199–2210	
Impact Factor: 1.810 Quartile: 2 Citations: 13	
DOI: 10.1007/s11045-019-00646-7	
Content-based histopathological image retrieval using multi-scale and multi channel decoder based LTP	2019
<i>Komal Nain Sukhia Abdul Ghafoor Naima Altaf M.M. Riaz S.S. Ali</i>	
<i>Biomedical Signal Processing and Control</i> , Volume 54, Article Number 101582	
Impact Factor: 3.137 Quartile: 2 Citations: 14	
DOI: 10.1016/j.bspc.2019.101582	
Magnetic resonance and computed tomography image fusion using saliency map and cross bilateral filter	2019
<i>Naima Altaf M. Munawwar Iqbal M. Mohsin Riaz Muhammad Attique Sadiq Abdul Ghafoor</i>	
<i>Signal, Image and Video Processing</i> , Volume:13, Pages:1157-1164	
Impact Factor: 1.794 Quartile: 3 Citations: 8	
DOI: 10.1007/s11760-019-01459-8	
White balancing, quad-tree decomposition, and L1 minimization-based single-image dehazing	2019
<i>Abdul Ghafoor Attiq Ahmed Mehwish Iqbal Muhammad Mohsin Riaz</i>	
<i>Journal of Electronic Imaging</i> , Volume 28, Issue 4, Article Number 043015	
Impact Factor: 0.884 Quartile: 4 Citations: 1	
DOI: 10.1117/1.JEI.28.4.043015	
Content-Based Retinal Image Retrieval	2019
<i>Abdul Ghafoor Komal Nain Sukhia Muhammad Mohsin Riaz</i>	
<i>IET Image Processing</i> , Volume 13, Issue 9, Pages 1525–1534	
Impact Factor: 1.995 Quartile: 3 Citations: 6	
DOI: 10.1049/iet-ipr.2018.6371	
Direction, Velocity, Merging Probabilities and Shape Descriptors for Crowd Behavior Analysis	2019
<i>Abdul Ghafoor Rakhshenda Javid M. Mohsin Riaz Naveed Iqbal Rao</i>	
<i>IEEE Access</i> , Volume 7, Pages 102561-102568	
Impact Factor: 3.745 Quartile: 1 Citations: 5	
DOI: 10.1109/ACCESS.2019.2929242	
Fast Convergence Algorithms for Coherence Optimization of Rank-1 Grassmannian Codebooks	2019
<i>Faisal Akram Imran Rashid Abdul Ghafoor Adil Masood Siddique</i>	
<i>Radioengineering</i> , Volume 29, Issue 2, Pages 456-463	
Impact Factor: 1.076 Quartile: 4 Citations: 1	
DOI: 10.13164/re.2019.0456	
Time limited Gramians-based model order reduction for second-order form systems	2019
<i>Shafiq Haider Abdul Ghafoor Muhammad Imran Fahad Mumtaz Malik</i>	
<i>Transactions of the Institute of Measurement and Control</i> , Volume 41, Issue 8,	
Impact Factor: 1.649 Quartile: 3 Citations: 16	
DOI: 10.1177/0142331218798893	
A hybrid defocused region segmentation approach using image matting	2019
<i>Benish Amin Muhammad Mohsin Riaz Benish Amin Muhammad Mohsin Riaz Abdul Ghafoor</i>	
<i>Multidimensional Systems and Signal Processing</i> , Volume 30, Pages 561–569	
Impact Factor: 1.810 Quartile: 2 Citations: 6	
DOI: https://doi.org/10.1007/s11045-018-0570-8	

Time/frequency-limited positive-real truncated balanced realizations <i>Muwahida Liaquat Muhammad Imran Abdul Ghafoor Umair Zulfiqar</i> <i>IMA Journal of Mathematical Control and Information</i> , Pages 1-18 Impact Factor: 1.00 Quartile: 3 Citations: 16 DOI: 10.1093/imamci/dny039	2018
Frequency weighted passivity preserving model reduction technique <i>Muhammad Imran Abdul Ghafoor</i> <i>IMA Journal of Mathematical Control and Information</i> , Volume 35, Issue 3, Pages 837–844 Impact Factor: 1.000 Quartile: 3 Citations: 5 DOI: 10.1093/imamci/dnx001	2018
Super-resolution based on self-example learning and guided filtering <i>Alina Majeed Chaudhry M Mohsin Riaz Abdul Ghafoor</i> <i>Signal, Image and Video Processing</i> , Volume: 13 Issue: 2 Pages: 237-244 Impact Factor: 1.894 Quartile: 3 Citations: 3 DOI: 10.1007/s11760-018-1350-5	2018
Poisson Denoising for Astronomical Images <i>Fahad Shamshad M. Mohsin Riaz Abdul Ghafoor</i> <i>Advances in Astronomy</i> , Volume 2018, Article ID 2417939, 7 pages Impact Factor: 2.542 Quartile: 2 Citations: 1 DOI: 10.1155/2018/2417939	2018
A Framework for Outdoor RGB Image Enhancement and Dehazing <i>Alina Majeed Chaudhry Muhammad Mohsin Riaz Abdul Ghafoor</i> <i>IEEE Geoscience and Remote Sensing Letters</i> , Volume: 15 Issue: 6 Pages: 932-936 Impact Factor: 3.534 Quartile: 1 Citations: 35 DOI: 10.1109/LGRS.2018.2814016	2018
Attack resistant watermarking technique based on fast curvelet transform and Robust Principal Component Analysis <i>Ramsha Ahmed Muhammad Mohsin Riaz Abdul Ghafoor</i> <i>Multimedia Tools and Applications</i> , Volume 77, Pages 9443–9453 Impact Factor: 2.101 Quartile: 2 Citations: 10 DOI: https://doi.org/10.1007/s11042-017-5128-5	2018
Saliency detection using contrast enhancement and texture smoothing operations <i>Rabbia Annum M. Mohsin Riaz Abdul Ghafoor</i> <i>Signal, Image and Video Processing</i> , Volume 12, Pages 505–511 Impact Factor: 1.894 Quartile: 3 Citations: 14 DOI: https://doi.org/10.1007/s11760-017-1186-4	2018
Frequency Interval Gramians Based Structure Preserving Model Order Reduction for Second Order Systems <i>Dr. Muhammad Imran Dr. Fahad Mumtaz Malik Abdul Ghafoor Shafiq Haider</i> <i>Asian Journal of Control</i> , Volume 20(2), Pages 790-801 Impact Factor: 2.005 Quartile: 3 Citations: 16 DOI: https://doi.org/10.1002/asjc.1598	2018
Frequency Limited Model Reduction Techniques with Error Bounds <i>Abdul Ghafoor Muhammad Imran Muhammad Imran</i> <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , NULL Impact Factor: 3.250 Quartile: 2 Citations: 36 DOI: 10.1109/TCSII.2017.2703117	2018
Overlapping White Blood Cells Detection based on Watershed Transform and Circle Fitting <i>M. Mohsin Riaz Abdul Ghafoor Naima Altaf Komal Nain Sukhia</i> <i>Radioengineering</i> , Volume 26, No. 4, Pages 1177-1181 Impact Factor: 1.048 Quartile: 4 Citations: 8 DOI: 10.13164/re.2017.1177	2017
Fuzzification supported spectrum decision framework for cognitive radio networks <i>Ahmad Naeem Akhtar Abdul Ghafoor Adnan Rashdi Fahim Arif</i> <i>Transactions on Emerging Telecommunications Technologies</i> , Volume: 28, Issue:12, Article Number:e3229, Published: Dec 2017	2017

Impact Factor: 1.610 Quartile: 3 Citations: 4 DOI: 10.1002/ett.3229	
Passivity Preserving Frequency Weighted Model Order Reduction Technique <i>Abdul Ghafoor Muhammad Imran</i> <i>Circuits, Systems, and Signal Processing</i> , Volume 36, Pages 4388–4400 Impact Factor: 1.998 Quartile: 2 Citations: 11 DOI: DOI:10.1007/s00034-017-0540-7	2017
Peak to average power ratio based spatial spectrum sensing for cognitive radio systems <i>Muhammad Shahid Iqbal Sajjad Hussain AbdulGhafoor</i> <i>Computers & Electrical Engineering</i> , Volume 63, Pages 30-40 Impact Factor: 1.747 Quartile: 2 Citations: 3 DOI: https://doi.org/10.1016/j.compeleceng.2017.09.005	2017
A New Frequency Limited Interval Gramians based Model Order Reduction Technique <i>Muwahida Liaquat Umair Zulfiqar Muhammad Imran Abdul Ghafoor</i> <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , Volume: 64 Issue: 6 Pages: 680-684 Impact Factor: 2.450 Quartile: 2 Citations: 20 DOI: 10.1109/TCSII.2016.2599111	2017
Model Reduction of Large Scale Descriptor Systems Using Time Limited Gramians <i>Abdul Ghafoor Muhammad Imran Fahad Mumtaz Malik Khawaja Shafiq Haider</i> <i>Asian Journal of Control</i> , Volume: 19, Issue: 3, Pages: 1217-1227 Impact Factor: 1.528 Quartile: 3 Citations: 27 DOI: 10.1002/asjc.1444	2017
Weighted fusion of MRI and PET images based on fractal dimension <i>Umer Javed M. Mohsin Riaz Abdul Ghafoor Tanveer Ahmed Cheema</i> <i>Multidimensional Systems and Signal Processing</i> , Volume 28, Issue 2, Pages 679-690 Impact Factor: 2.088 Quartile: 2 Citations: 7 DOI: doi:10.1007/s11045-015-0367-y	2017
An Efficient Eulerian Video Magnification Technique for Micro-biology Applications <i>M. Mohsin Riaz Abdul Ghafoor Naima Altaf Maemoona Kyani</i> <i>Radioengineering</i> , Vol:2017, Issue: 01, Pages:316-322 Impact Factor: 1.048 Quartile: 4 Citations: 5 DOI: 10.13164/re.2017.0316	2017
Fusion of multi-focus images with registration inaccuracies <i>Attiq Ahmad Sahar Ahmad Hasnat Khurshid M. Mohsin Riaz Abdul Ghafoor Syed Muhammad Tahir Zaidi</i> <i>Signal, Image and Video Processing</i> , Volume 11, Issue 3, Pages 463-470 Impact Factor: 1.643 Quartile: 3 Citations: 5 DOI: doi:10.1007/s11760-016-0982-6	2017
A Database Assisted Quality of Service and Pricing Based Spectrum Allocation Framework for TV White Spaces <i>Zaid Ilyas Abdul Ghafoor Sajjad Hussain</i> <i>Wireless Personal Communications</i> , Volume 92, Issue 4, Pages 1493-1509 Impact Factor: 1.2 Quartile: 4 Citations: 4 DOI: doi:10.1007/s11277-016-3617-x	2017
Takagi–Sugeno Fuzzy System and MTF-based Panchromatic Sharpening <i>Abdul Ghafoor Syed Sohaib Ali Muhammad Mohsin Riaz Umer Javed M. U. Arif M. W. Baig</i> <i>Soft Computing</i> , Volume 20, No.12, Pages 4695-4708 Impact Factor: 2.472 Quartile: 2 Citations: 4 DOI: https://doi.org/10.1007/s00500-014-1526-z	2016
Image Contrast Enhancement Using Weighted Transformation Function <i>Abdul Ghafoor Muhammad Mohsin Riaz Asma Jabeen Naima Altaf</i> <i>IEEE Sensors Journal</i> , Volume: 16, Issue: 20, Page(s): 7534-7536 Impact Factor: 2.512 Quartile: 1 Citations: 18 DOI: 10.1109/JSEN.2016.2600483	2016
Cooperative subcarrier sensing using antenna diversity based weighted virtual sub clustering <i>Bushra Mughal Sajjad Hussain Abdul Ghafoor</i>	2016

<i>China Communications</i> , Volume 13, Issue 10, Pages 44-57	
Impact Factor: 0.903 Quartile: 4 Citations: 5	
DOI: doi:10.1109/CC.2016.7732011	
Cluster-Based Cooperative Subcarrier Sensing Using Antenna Diversity-Based Weighted Data Fusion	2016
<i>Bushra Mughal Sajjad Hussain Abdul Ghafoor</i>	
<i>Arabian Journal for Science and Engineering</i> , Volume 41, Issue 9, Pages 3425–3439	
Impact Factor: 0.865 Quartile: 3 Citations: 2	
DOI: DOI:10.1007/s13369-015-1973-6	
Cross-Gramian based frequency-weighted model order reduction technique	2016
<i>U. Zulfiqar Muhammad Imran U. Zulfiqar Abdul Ghafoor</i>	
<i>Electronics Letters</i> , Volume 52, Issue 16, Page 1376	
Impact Factor: 1.155 Quartile: 3 Citations: 4	
DOI: 10.1049/el.2016.1777	
Noise Resistant Fusion for Multi-Exposure Sensors	2016
<i>Attiq Ahmad Muhammad Mohsin Riaz Abdul Ghafoor Syed Muhammad Tahir Zaidi Muhammad Mohsin Riaz</i>	
<i>IEEE Sensors Journal</i> , Volume: 16, Issue: 13, Pages 5123-5124	
Impact Factor: 2.512 Quartile: 1 Citations: 10	
DOI: 10.1109/JSEN.2016.2556715	
Model reduction of generalized non-singular systems using limited frequency interval Gramians	2016
<i>Muhammad Imran Abdul Ghafoor</i>	
<i>IMA Journal of Mathematical Control and Information</i> , Volume 33, Issue 2, Pages 333-347	
Impact Factor: 1.273 Quartile: 2 Citations: 4	
DOI: 10.1093/imamci/dnu045	
Image Dehazing Using Quadtree Decomposition and Entropy-Based Contextual Regularization	2016
<i>Nasir Baig M. Mohsin Riaz Abdul Ghafoor Adil Masood Siddiqui</i>	
<i>IEEE Signal Processing Letters</i> , Volume: 23, Issue: 6, Pages 853-857	
Impact Factor: 2.528 Quartile: 2 Citations: 46	
DOI: DOI:10.1109/LSP.2016.2559805	
Bayesian compressive sensing framework for spectrum reconstruction in Rayleigh fading channels	2016
<i>Abdul Ghafoor Nadia Iqbal Asad Mahmood Sajjad Hussain</i>	
<i>Turkish Journal of Electrical Engineering and Computer Sciences</i> , Volume 24, No. 4, Pages 3240-3252	
Impact Factor: 0.578 Quartile: 4	
DOI: 10.3906/elk-1405-198	
SAR image segmentation based on active contours with fuzzy logic	2016
<i>Umer Javed Muhammad Mohsin Riaz Abdul Ghafoor Tanveer Ahmed Cheema</i>	
<i>IEEE Transactions on Aerospace and Electronic Systems</i> , Volume 52, Issue 1, Pages 181-188	
Impact Factor: 1.975 Quartile: 1 Citations: 30	
DOI: DOI:10.1109/TAES.2015.120817	
Guided Filter and IHS-Based Pan-Sharpening	2016
<i>Amina Jameel Muhammad Mohsin Riaz Abdul Ghafoor</i>	
<i>IEEE Sensors Journal</i> , Volume 16, Issue 1, Pages 192-194	
Impact Factor: 2.512 Quartile: 1 Citations: 27	
DOI: DOI:10.1109/JSEN.2015.2477857	
Wavelet and Guided Filter based Multifocus Fusion for Noisy Images	2015
<i>Amina Jameel Abdul Ghafoor Muhammad Mohsin Riaz</i>	
<i>Optik - International Journal for Light and Electron Optics</i> , Volume 126, Issue 23, Pages 3920-3923	
Impact Factor: 0.742 Quartile: 4 Citations: 12	
DOI: doi:10.1016/j.ijleo.2015.07.173	
A Frequency Limited Interval Gramians-Based Model Reduction Technique with Error Bounds	2015
<i>Muhammad Imran Abdul Ghafoor</i>	
<i>Circuits, Systems and Signal Processing</i> , Volume 34, Pages 3505–3519	
Impact Factor: 1.178 Quartile: 3 Citations: 33	
DOI: DOI:10.1007/s00034-015-0031-7	
An Improved Infrared/Visible Fusion for Astronomical Images	2015

<i>Attiq Ahmad Syed Muhammad Tahir Zaidi Muhammad Mohsin Riaz Abdul Ghafoor</i> <i>Advances in Astronomy</i>, Volume 2015, Article ID 203872, 8 pages Impact Factor: 0.811 Quartile: 4 Citations: 7 DOI: 10.1155/2015/203872	
All in focus fusion using guided filter <i>Amina Jameel Abdul Ghafoor Muhammad Mohsin Riaz</i> <i>Multidimensional Systems and Signal Processing</i>, Volume 26, Issue 3, Pages 879-889 Impact Factor: 1.436 Quartile: 2 Citations: 6 DOI: DOI:10.1007/s11045-014-0302-7	2015
Limited frequency interval Gramian-based model reduction for generalised non-singular discrete time systems <i>Muhammad Imran Victor Sreeram Abdul Ghafoor</i> <i>IET Control Theory and Applications</i>, Volume 9, Issue 9, Pages 1356-1363 Impact Factor: 1.957 Quartile: 1 Citations: 4 DOI: 10.1049/iet-cta.2014.0635	2015
Hierarchical balancing approach for frequency-weighted model reduction <i>Abdul Ghafoor Muhammad Imran</i> <i>Electronics Letters</i>, Volume 51, Issue 10, Pages 763-764 Impact Factor: 0.854 Quartile: 3 Citations: 2 DOI: doi:10.1049/el.2015.0345	2015
Peak to average power ratio reduction in NC-OFDM systems <i>Abdul Ghafoor Saadia Tabassum Sajjad Hussain</i> <i>Journal of Electrical Engineering</i>, Volume 66, Issue 3, Pages 154-158 Impact Factor: 0.407 Quartile: 4 Citations: 4 DOI: DOI: 10.2478/jee-2015-0024,	2015
Brief Communication: Contrast-stretching-and histogram-smoothness-based synthetic aperture radar image enhancement for flood map generation <i>Abdul Ghafoor F. Nazir Muhammad Mohsin Riaz Fahim Arif</i> <i>Natural Hazards and Earth System Sciences</i>, Volume 15, No. 2, Pages 273-276 Impact Factor: 2.277 Quartile: 1 Citations: 3 DOI: doi:10.5194/nhess-15-273-2015	2015
Model reduction of descriptor systems using frequency limited Gramians <i>Muhammad Imran Abdul Ghafoor</i> <i>Journal of the Franklin Institute</i>, Volume 352, Issue 1, Pages 33-51 Impact Factor: 2.327 Quartile: 1 Citations: 33 DOI: doi: 10.1016/j.jfranklin.2014.10.013	2015
Comments on Model-Order Reduction Using Variational Balanced Truncation With Spectral Shaping <i>Wan Mariam Wan Muda Victor Sreeram Minh B. Ha Abdul Ghafoor</i> <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i>, Volume 62, No. 1, Pages 333-335 Impact Factor: 2.393 Quartile: 1 Citations: 5 DOI: 10.1109/TCSI.2014.2347235	2015
Dual-tree complex wavelet transform and SVD based medical image resolution enhancement <i>Muhammad Zafar Iqbal Abdul Ghafoor Muhammad Mohsin Riaz Umar Khalid Muhammad Zafar Iqbal Adil Masood Siddiqui Muhammad Mohsin Riaz Umar Khalid</i> <i>Signal Processing</i>, Volume 105, Pages 430-437 Impact Factor: 3.470 Quartile: 1 Citations: 47 DOI: https://doi.org/10.1016/j.sigpro.2014.05.011	2014
A frequency weighted model order reduction technique and error bounds <i>Muhammad Imran Abdul Ghafoor Victor Sreeram</i> <i>Automatica</i>, Volume 50, Issue 12, Pages 3304-3309 Impact Factor: 3.02 Quartile: 1 Citations: 51 DOI: https://doi.org/10.1016/j.automatica.2014.10.062	2014
Stability Preserving Model Reduction Technique and Error Bounds Using Frequency-Limited Gramians for Discrete-Time Systems <i>Muhammad Imran Abdul Ghafoor</i>	2014

<i>IEEE Transactions on Circuits and Systems II</i>, Volume 61, Issue 9, Pages 716-720 Impact Factor: 1.234 Quartile: 3 Citations: 33 DOI: 10.1109/TCSII.2014.2346688		
Load Balanced Routing for Lifetime Maximization in Mobile Wireless Sensor Networks <i>Saifullah Khalid Ashraf Masood Faisal Bashir Hussain Haider Abbas Abdul Ghafoor</i> <i>International Journal of Distributed Sensor Networks</i>, Volume 2014, Article ID 979086, 12 pages Impact Factor: 0.665 Quartile: 4 Citations: 7 DOI: https://doi.org/10.1155%2F2014%2F979086		2014
Adaptive Compressive Fusion for Visible/IR Sensors <i>Abdul Ghafoor Mohsin Riaz Amina Jamil</i> <i>IEEE Sensors Journal</i>, Vol:14, Issue: 7, pp:2230-2231, Impact Factor: 1.762 Quartile: 2 Citations: 17 DOI: 10.1109/JSEN.2014.2320721		2014
An Effective Model for Indirect Trust Computation in Pervasive Computing Environment <i>Naima Altaf Abdul Ghafoor Usman Zia Mukhtar Hussain</i> <i>Wireless Personal Communications</i>, Volume: 75 Issue: 3 Pages: 1689-1713 Special Issue: SI Impact Factor: 0.653 Quartile: 4 Citations: 5 DOI: 10.1007/s11277-013-1299-1		2014
Frequency weighted model order reduction technique and error bounds for discrete time systems <i>Muhammad Imran Abdul Ghafoor Victor Sreeram</i> <i>Mathematical Problems in Engineering</i>, Volume 2014, Article Number 498453 Impact Factor: 0.762 Quartile: 3 Citations: 16 DOI: http://dx.doi.org/10.1155/2014/498453		2014
Improved guided image fusion for magnetic resonance and computed tomography imaging <i>Abdul Ghafoor Mohsin Riaz Amina Jamil</i> <i>The Scientific World Journal</i>, Volume 2014, Article number 695752 Impact Factor: N/A Citations: 14 DOI: 10.1155/2014/695752		2014
Flood detection/monitoring using adjustable histogram equalization technique <i>Abdul Ghafoor Faheem Arif Mohsin Riaz Fakhera Nazir</i> <i>The Scientific World Journal</i>, Volume 2014, Article number 809636 Impact Factor: N/A Citations: 10 DOI: 10.1155/2014/809636		2014
Fuzzy logic and additive wavelet-based panchromatic sharpening <i>Abdul Ghafoor Syed Sohaib Ali Muhammad Mohsin Riaz</i> <i>IEEE Geoscience and Remote Sensing Letters</i>, Volume:11, Issue:1, Page:357-360 Impact Factor: 2.095 Quartile: 1 Citations: 9 DOI: 10.1109/LGRS.2013.2258321		2014
A mechanism for detecting dishonest recommendation in indirect trust computation <i>Naima Altaf Abdul Ghafoor Usman Zia</i> <i>EURASIP Journal on Wireless Communications and Networking</i>, Article Number: 189 Impact Factor: 0.805 Quartile: 3 Citations: 32 DOI: 10.1186/1687-1499-2013-189		2013
Satellite image resolution enhancement using dual-tree complex wavelet transform and nonlocal means <i>Abdul Ghafoor Muhammad Zafar Iqbal Adil Masood Siddiqui</i> <i>IEEE Geoscience and Remote Sensing Letters</i>, Volume 10, No. 3, Pages 451-455 Impact Factor: 1.809 Quartile: 2 Citations: 92 DOI: 10.1109/LGRS.2012.2208616		2013
Image segmentation using multilevel graph cuts and graph development using fuzzy rule-based system <i>Abdul Ghafoor Adil Masood Siddiqui Muhammad Rizwan Khokhar</i> <i>IET Image Process</i>, Volume 7, Issue 3, Pages 201-211 Impact Factor: 0.676 Quartile: 3 Citations: 46 DOI: 10.1049/iet-ipr.2012.0082		2013

Graph Cuts based Image Segmentation using Fuzzy Rule Based System <i>Muhammad Rizwan Khokhar Adil Masood Siddiqui Abdul Ghafoor</i> <i>Radioengineering</i> , Volume 21, Issue 4, Pages 1236-1245 Impact Factor: 0.687 Quartile: 3 Citations: 46 DOI: https://doi.org/10.1049/iet-ipr.2012.0082	2012
Analysis of Joint Multiband Sensing-Time M-QAM Signal Detection in Cognitive Radios <i>Sana Tariq Abdul Ghafoor Salma Zainab Farooq</i> <i>Electronics and Telecommunications Research Institute (ETRI) Journal</i> , Volume: 34, Issue: 6, Pages: 892-899 Impact Factor: 0.742 Quartile: 3 Citations: 5 DOI: https://doi.org/10.4218/etrij.12.1812.0043	2012
Information Theoretic Criterion based Clutter Reduction for ground Penetrating Radar <i>Muhammad Mohsin Riaz Abdul Ghafoor Muhammad Mohsin Riaz</i> <i>Progress In Electromagnetics Research B</i> , Volume 45, Pages 147-164 Impact Factor: 0 DOI: -	2012
Through Wall Image Enhancement Based on Singular Value Decomposition <i>Muhammad Mohsin Riaz Abdul Ghafoor</i> <i>International Journal of Antennas and Propagation</i> , Volume 2012 , Article ID 961829, 20 pages Impact Factor: 0.683 Quartile: 3 Citations: 28 DOI: http://dx.doi.org/10.1155/2012/961829	2012
Mixed convective heat and mass transfer on a peristaltic flow of a non-Newtonian fluid in a vertical asymmetric channel <i>Safia Akram Abdul Ghafoor S. Nadeem</i> <i>Heat Transfer - Asian Research</i> , Volume 4, issue 7 Impact Factor: 0 Citations: 16 DOI: https://onlinelibrary.wiley.com/doi/full/10.1002/htj.21020	2012
Fuzzy Logic and Singular Value Decomposition based Through Wall Image Enhancement <i>Abdul Ghafoor Mohsin Riaz</i> <i>Fuzzy Logic and Singular Value Decomposition based Through Wall Image Enhancement</i> , Fuzzy Logic and Singular Value Decomposition based Through Wall Image Enhancement Impact Factor: 0.687 Quartile: 3 DOI: http://hdl.handle.net/11012/37098	2012
Modeling interaction using trust and recommendation in ubiquitous computing environment <i>Abdul Ghafoor Naima Altaf Mukhtar Hussain</i> <i>EURASIP Journal on Wireless Communications and Networking</i> , Vol. 119, Pages 13 Impact Factor: 0.540 Quartile: 4 Citations: 17 DOI: 10.1186/1687-1499-2012-119	2012
Principle component analysis and fuzzy logic based through wall image enhance-ment <i>Abdul Ghafoor Mohsin Riaz</i> <i>Progress In Electromagnetics Research</i> , Volume:127, Page:461-478 Impact Factor: N/A Citations: 20 DOI: 10.2528/PIER12012702	2012
A new method for the model reduction technique via a limited frequency interval impulse response Gramian <i>Abdul Ghafoor ShafishuhazaSahlan Victor Sreeram</i> <i>Mathematical and Computer Modelling</i> , Volume:55, Issue:3-4, Page:1034-1040 Impact Factor: 1.420 Quartile: 1 Citations: 11 DOI: 10.1016/j.mcm.2011.09.028	2012
Consequences of Nanofluid on Peristaltic Flow in an Asymmetric Channel <i>Safia Akram S. Nadeem Abdul Ghafoor Changhoon Lee</i> <i>International journal of Basic and Computer Sciences IJBAS/IJENS</i> , volume 12, No 5, Pages 75-91 Impact Factor: 0 DOI: https://pdfs.semanticscholar.org/7214/7e47e61fd82a9bf23f77303d6263cd51bc01.pdf	2012
A Survey/Review of Frequency-Weighted Balanced Model Reduction Techniques <i>Abdul Ghafoor Victor Sreeram</i>	2008

Conference Proceedings

Kyber-KEM-Ascon: Benchmarking a Lightweight Post-quantum KEM on IoT Devices <i>Sahar Shehzadi Nathan Whaley Ayesha Khalid Abdul Ghafoor Sadiqa Arshad Faiz Ul Islam Máire O'Neill</i> <i>Proceedings - IEEE International Symposium on Circuits and Systems</i> , res.country(231,) Citations: N/A DOI: 10.1109/ISCAS56072.2025.11043792	2025
Diagnosis and Identification of Citrus Canker Growth Rate Using Machine Learning <i>Naureen Zainab Hammad Afzal Fahim Arif Abdul Ghafoor Naima Iltaf Muhammad Zakria Muhammad Javed Hyder Rafia Ahsan</i> <i>2023 IEEE 4th International Conference on Pattern Recognition and Machine Learning (PRML)</i> , res.country(48,) Citations: 1 DOI: 10.1109/PRML59573.2023.10348188	2023
Learning Fruit Class from Short Wave Near Infrared Spectral Features, an AI Approach Towards Determining Fruit Type <i>Ayesha Zeb Waqar Shahid Qureshi Abdul Ghafoor Dympna O' Sullivan</i> <i>2022 8th International Conference on Mechatronics and Robotics Engineering, ICMRE 2022</i> , res.country(57,) Citations: N/A DOI: 10.1109/ICMRE54455.2022.9734107	2022
Wideband compressed sensing based frequency hopping radio network identification <i>Faisal Akram Tauqeer Ahmed Dr Abdul Ghafoor Dr Adil Masood Siddiqui Imran Rashid</i> <i>22nd International Multitopic Conference, INMIC 2019</i> , res.country(177,) Citations: N/A DOI: 10.1109/INMIC48123.2019.9022686	2019
Improved Frequency Limited Model Reduction <i>Hamid Imtiaz Toor Muhammad Imran Abdul Ghafoor Muhammad Zeeshan Abdul Rauf</i> <i>2018 IEEE Conference on Systems, Process and Control (ICSPC)</i> , res.country(157,) Citations: N/A DOI: 10.1109/SPC.2018.8703981	2018
Model Reduction of Discrete Time Systems using Time Limited Gramians <i>Muhammad Imran Abdul Ghafoor Umair Zulfiqar Victor Sreeram</i> <i>Australian & New Zealand Control Conference (ANZCC)</i> , res.country(13,) Citations: N/A DOI: 10.1109/ANZCC.2018.8606584	2018
Techniques for Computation of Frequency Limited H_{∞} Norm <i>Shafiq Haider Abdul Ghafoor Muhammad Imran Fahad Mumtaz Malik</i> <i>4th International Conference on Mechanical, Electronics and Computer Engineering</i> , res.country(116,) Citations: N/A DOI: 10.1088/1755-1315/114/1/012013	2017
Model Reduction Techniques with Error Bounds <i>Muhammad Imran Mehmoona Javed Awan Abdul Ghafoor</i> <i>13th IEEE Conference on Automation Science and Engineering</i> , res.country(48,) Citations: N/A DOI: 10.1109/COASE.2017.8256318	2017
Limited frequency interval Gramians based model reduction for nonsingular generalized systems <i>Safia Akram Muhammad Imran Abdul Ghafoor Victor Sreeram</i> <i>3rd Australian Control Conference (AUCC)</i> , res.country(13,) Citations: N/A DOI: 978-1-4799-2498-1	2013
An Attack Resistant Method for Detecting Dishonest Recommendation in Pervasive Computing Environment <i>Naima Iltaf Abdul Ghafoor usman Zia</i> <i>2012 18th IEEE International Conference on Networks (ICON)</i> , res.country(197,)	2012

Citations: 4
DOI: 10.1109/ICON.2012.6506554

Robust Image Matching algorithm <i>Abdul Ghafoor Rao Naveed Iqbal SHOAIB AHMED KHAN</i> <i>4th EURASIP Conference focused on Video/Image</i> Citations: N/A DOI: 10.1109/VIPMC.2003.1220455	2003
--	------

Image Matching Using Distance Transform <i>Naveed Iqbal Abdul Ghafoor SHOAIB AHMED KHAN</i> <i>Scandinavian Conference on Image Analysis SCIA 2003</i> , res.country(196,) Citations: N/A DOI: 10.1007/3-540-45103-X_87	2003
--	------

Modified Chamfer Matching Algorithm <i>Abdul Ghafoor Rao Naveed Iqbal SHOAIB AHMED KHAN</i> <i>4th International Conference, IDEAL 2003</i> , res.country(94,) Citations: N/A DOI: 10.1007/978-3-540-45080-1_159	2003
---	------

Book Chapters

Preprocessing local features and fuzzy logic-based image segmentation <i>Umer Javed Muhammad Mohsin Riaz Abdul Ghafoor Tanveer Ahmed Cheema</i> <i>In: Book on Biomedical Image Segmentation Advances & Trends</i> , Chapter 8, Pages 187-202 Citations: N/A DOI: doi:10.4324/9781315372273-9	2020
--	------