

Dr.Muhammad Aslam Khan

Present Address

Assistant Professor
Department of Physics
Khawaja Fareed University of Engineering
& Information Technology (KFUEIT),
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Gomal House near Chowk Bahadur pur
Rahim Yar Khan, Punjab 64300
Pakistan
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OBJECTIVE

A position in the field of physics with special interests in atomic physics, quantum optics, quantum Information and condensed matter physics.

EDUCATION

Doctor of Philosophy (PhD), Physics
Dalian University of Technology, Dalian, China
December 2014

Master of Philosophy (M.Phil), Solid State Physics
University of the Punjab, Lahore, Pakistan
November 2010

Master of Science(M.Sc.), Physics
Bahauddin Zakariya University, Multan, Pakistan
July 2006

Bachelor of Science(B.Sc.), Physics and Mathematics
Islamia University of Bahawalpur, Bahawalpur, Pakistan
August 2003

REFEREED JOURNAL PUBLICATIONS

1. S. C. Hou, **M. A. Khan**, X. X. Yi, Daoyi Dong and Ian R. Petersen
“Optimal Lyapunov-based quantum control for quantum systems.”
Phys. Rev. A 86, 022321 (2012) **IF=2.777**
2. **M. A. Khan**, S. C. Hou, K. Farooq, and X. X. Yi
“Single photon reflection and transmission in optomechanical system.”
International Journal of Quantum Information Vol. 11, No. 2 (2013) 1350017 **IF=1.176**
3. **M. A. Khan**, S. C. Hou, K. Farooq, Shanawer Niaz and X. X. Yi
“Reflectivity and transmissivity of a cavity coupled to a nanoparticle.”
International Journal of Quantum Information
Vol. 12, No. 5 (2014) 1450025. **IF=1.176**
4. A.Ahmed, K.Farooq, **M. A. Khan**, and X. X. Yi
“Interferences in photo-detached electron spectra from a non-collinear tri-atomic anion.”
Chin. Phys. B Vol. 23, No. 10 (2014) 103304. **IF=1.469**

5. K. Farooq, **M. A. Khan**, X. Y. Zhang and X. X. Yi
 "Dynamics and transmission of single two level atom in optomechanical system."
 The European Physical Journal Plus ,129, 88 (2014). **IF=3.228**
6. Imran Sadiq, Shahzad Naseem, Muhammad Naeem Ashiq, M. Asif Iqbal, Irshad Ali, **M.A. Khan**,
 Shanawar Niaz, M.U. Rana
 "Spin canting effect and microwave absorption properties of Sm-Mn substituted nanosized material."
 Journal of Magnetism and Magnetic Materials, Vol 395,159-165,(2015). **IF=2.717**
7. Shanawer NIAZ, Samia SLIMANI, Manzoor Ahmad BADAR, Gul SUBHAN, **Muhammad Aslam KHAN**
 "Theoretical Study of Hydrogen- and Halide-Terminated Germanium Nanowires."
 Sensors and Transducers, Vol. 189, Issue 6, June 2015, pp. 162-166. **IF=0.705**
8. K. Farooq, **M. A. Khan**, L.C.Wang and X. X. Yi
 "Dynamics and Transmissivity of the optomechanical system in the squeezed environment."
 International Journal of Modern Physics B, 29, 1550201 (2015). **IF=1.386**
9. Imran Sadiq, Shahzad Naseem, Muhammad Naeem Ashiq, **M.A. Khan**, Shanawar Niaz, M.U. Rana
 "Tunable microwave absorbing nano-material for X- band applications."
 Journal of Magnetism and Magnetic Materials, Vol 401, 63-69. **IF=2.717**
10. Imran Sadiq, Shahzad Naseem, Muhammad Naeem Ashiq, **M.A. Khan**, Shanawar Niaz, M.U. Rana
 "Structural and dielectric properties of doped ferrite nanomaterials suitable for microwave and biomedical applications."
 Progress in Natural Science: Materials International. **IF=4.00**
11. M Usman, L Pan, M Asif, Z Mahmood, **MA Khan**, X Fu
 "Enhanced electrochemical supercapacitor properties with synergistic effect of polyaniline, graphene and Ag₂O."
 Applied Surface Science 370, 297-305. **IF=6.182**
12. Shanawer Niaz, Oguz Gulseren, Muhammad Aslam Khan, and Irfan Ullah
 "Mixed ab initio and semiempirical study of hydrogen-terminated finite germanium nanowires"
 Eur. Phys. J. Plus (2018) 133: 448. **IF=3.228**
13. K.Farooq L.C.Wang M.A.Khan X.X.Yi
 "Optomechanically induced transparency under the influence of spin ensemble system"
 Optik-International Journal for Light and Electron Optics, Vol 179 (2019) **IF=2.187**
14. K. Farooq, H. M. Noor ul Huda Khan Asghar, M. A. Khan and Khalil Khan
 "Transmissivity of optomechanical system containing a two level system"
 International Journal of Modern Physics B, Vol 33 (2019) **IF=1.386**
15. Muhammad Usman, Lujun Pan, Amjad Farid, Sara Riaz, Abdul Sammed Khan, Zhao Yong Peng, M. Aslam Khan "Ultra-fast and highly sensitive enzyme-free glucose sensor based on 3D vertically aligned silver nanoplates on nickel foam-graphene substrate"
 Journal of Electroanalytical Chemistry, Volume 848, 1 September 2019, 113342 **IF=3.807**
16. Muhammad Usman, Lujun Pan, M. Aslam Khan, M Hashim " Carbon nanocoils-nickel foam decorated with silver nanoparticles/sheets using a novel stirring assisted electrodeposition technique for non-enzymatic glucose sensor"
 Carbon journal, Volume 157, February 2020 **IF=8.821**
17. N. A. Noor, Nosheen Mushahid, Aslam Khan, NessrinA Kattan, Asif Mahmood and Shahid M. Ramay
 "Vanadium based XVO₃ (X=Na, K, Rb) as promising thermoelectric materials: firstprinciple DFT calculations"
 Chinese Physics B 2020, Vol 29, Issue 09 **IF=1.469**
18. Marryam Aslam, Aslam Khan, M. Asghar Hashmi, M.Sajjad, Eman Algrafy, Ghulam M.Mustaf, Asif Mahmood, Shahid M.Ramay
 Physical Characteristics of CdZrO₃ Perovskite at Different Pressure for Optoelectronic Application
 Journal of Materials Research and Technology, Volume 9, Issue 5, 2020 **IF= 5.289**

UNIVERSITY MEMBERSHIPS

- Member of Academic Council of Khwaja Fareed University of Engineering & Information Technology (KFUEIT), Rahim Yar Khan
- Member of Board of Faculty (Natural, Management and Social & Humanities) at Khwaja Fareed University of Engineering & Information Technology (KFUEIT), Rahim Yar Khan
- Member of Board of Faculty (CS & IT) at Khwaja Fareed University of Engineering & Information Technology (KFUEIT), Rahim Yar Khan
- Member of Board of Faculty (Engineering) at Khwaja Fareed University of Engineering & Information Technology (KFUEIT), Rahim Yar Khan
- President, Student Disciplinary Committee, KFUEIT, Rahim Yar Khan
- Member, Scholarship Award Committee, KFUEIT, Rahim Yar Khan
- Member, University Convocation Committee, KFUEIT, Rahim Yar Khan
- President, University Vigilance Committee, KFUEIT, Rahim Yar Khan
- Member/Secretary of Board of Studies for department of Physics, KFUEIT, Rahim Yar Khan
- Member, Evaluation Committee for Laboratory Equipment, KFUEIT, Rahim Yar Khan
- Member, Graduate Programs Committee, KFUEIT, Rahim Yar Khan

ACHIEVEMENTS

- Design and Develop **Course Code Policy for KFUEIT Academic Programs**
- Design and Develop **KFUEIT Rules and Regulations for MS/PhD Programs**
- Design and Develop **KFUEIT MS/PhD Thesis Template in Latex as well as in MS Word**
- Prepare Tender documents and establish **Undergraduate Labs.I of Physics** in Department of Physics, Khwaja Fareed University of Engineering and Information Technology, Rahim Yar Khan, Pakistan
- Prepare Tender documents and establish **Undergraduate Labs.II of Physics** in Department of Physics, Khwaja Fareed University of Engineering and Information Technology, Rahim Yar Khan, Pakistan
- Prepare Tender documents and establish **Undergraduate Labs.III of Physics** in Department of Physics, Khwaja Fareed University of Engineering and Information Technology, Rahim Yar Khan, Pakistan
- Prepare Tender documents and establish **Advanced Lab of Physics for MS and PhD** in Department of Physics, Khwaja Fareed University of Engineering and Information Technology, Rahim Yar Khan, Pakistan

MS RESEARCH STUDENT SUPERVISED

Student Name	Registration No	Thesis Title	Thesis Status
SAJID ALI	php01143076	Optical Directional Amplification in a Three-Mode Optomechanical System	Completed
MEMONA KIRAN	PHYS18151006	A flexible free-standing supercapacitor based on Cobalt/PANI/Carbon cloth nanocomposite electrode	completed
SHOUKAT HUS- SAIN	PHYS18151014	Reflectivity and Transmissivity in Cavity Optomechanical System	Completed
RABIA UROOJ	PHYS18151015	Electromagnetically Induced Transparency in Optomechanical System	Completed
MARYAM BAIG	PHYS18151022	Slow Light Effect in Hybrid Optomechanical System	Completed
AMINA TAHIR	PHYS18151051	In-situ green synthesis of MnO ₂ /PANI on 3D submicron-porous flexible carbon cloth as an excellent supercapacitor electrode material	Completed
TAHIR ALI	PHYS18151052	Structural, Electronic and Thermoelectric Properties of MgY(Y= S, Se, Te) by using Density Functional Theory	Completed
USMAN ATTA	PHYS18151058	Predicting Fermion Masses using Flavour Symmetries	Completed
FAISAL NAEEM	PHYS18151088	First Principles Investigation of Structural, Electronic and Thermoelectric Properties of BeY(Y=S, Se, Te) compounds	Completed

PhD RESEARCH STUDENT SUPERVISED

Student Name	Registration No	Thesis Title	Thesis Status
NAEEM AKHTAR	PHYS19171002	————	in process
SHOUKAT HUS- SAIN	————	————	in process

RESEARCH PROJECT COMPLETED

- Higher Education Commission(HEC),Pakistan, grant for up-gradation and Strengthening of the Library,Basic Science & Humanities, Khwaja Fareed University of Engineering and Information Technology, Rahim Yar Khan
3.0 Million HEC, Pakistan Funded
- Investigation of Optical and Electronic Properties of Functionalized Silicon-Germanium Core-Shell Nanowires for Possible Nanodevice Applications.
0.2 Million BUITEMS Funded
- Theoretical Study of the quantum Optomechanical system
0.5 Million HEC funded

ONGOING RESEARCH PROJECT

- NRP Project No 12058 / Title “Fabrication of enzyme-free 3D nanocomposite electrode with new architectures for glucose sensing” , net worth of 15 Million, funded by Higher Education Commission(HEC),Pakistan,

TEACHING/ADMINISTRATION EXPERIENCE

- Working as Director Scholarship at KFUEIT, Rahim Yar Khan from December 17, 2020 to Date.
- Working as a Assistant Dean (Operations) at Faculty of Natural, Humanities, Health & Social Science, KFUEIT from June 5, 2020 to Date
- Focal person of Prime Minister Pakistan Citizen Portal at KFUEIT, Rahim Yar Khan from April 29, 2020 to Date.
- Working as Manager Campus Cleaning Services at KFUEIT Rahim Yar Khan from May 30, 2020 to December 20, 2020
- Working as a Deputy Director, QEC (additional duty) at KFUEIT Rahim Yar Khan from June 2018 to January 15, 2020.
- Working as an Assistant Professor at Department of Physics, KFUEIT Rahim Yar Khan from January 2016 to Date.
- Working as an Assistant Professor at Department of Physics, BUITEMS Quetta from March 2015 to January 2016.
- Working as Lecturer at Prime college RYK from August 2006 to August 2008.

SOCIETY MEMBERSHIPS

- Life time member of Khwarizmi Science Society, Pakistan
- Life time member of PAKISTAN INSTITUTE OF PHYSICS(PIP), Pakistan.
- Life time member of Pakistan Physical Society(PPS), Pakistan

HONORS

- Best Performances Award received from Worthy Vice Chancellor KFUEIT
- China Government PhD scholarship.
- Best paper presentation award.
- Best poster presentation award.

LANGUAGES

English, Chinese(Basic), Urdu, Pashto, Saraiki, Punjabi.

INTERESTS

Playing cricket, computer game, reading book, cooking, traveling.

REFERENCES

1. **Prof. Dr. XueXi Yi**
Center for Quantum Sciences and School of Physics,
Northeast Normal University, Changchun 130024, China
Email: yixx@nenu.edu.cn
2. **Prof. Dr. M Asghar Hashmi**
Dean of All Faculties , Khwaja Fareed University of Engineering and Information Technology
Rahim Yar Khan, Pakistan
Email: asghar.hashmi@kfueit.edu.pk
3. **Dr. Saira Riaz**
Director, Centre of Excellence in Solid State Physics,
University of the Punjab, QAC Lahore-54590, Pakistan
Email: saira.cssp@pu.edu.pk
4. **Dr. Faheel Ahmed Hashmi**
Associate Professor, Department of Physics, COMSATS University Lahore, Pakistan
Email:faheel4@comsats.edu.pk
5. **Prof. Dr. Ling Zhou**
School of Physics and Optoelectronic Engineering,
Dalian University of Technology, Dalian , P.R.China.
Email: zhhlxn@dlut.edu.cn