Curriculum Vitae

Personal Status

Name: IMAD KHAN

Date and Place of Birth: 15/02/1984 Swabi, Pakistan

CNIC: 16201-1442964-7

Passport NO: FM4119641

Postal Address MohallahYunas Khel V & P/O Yar Hussain

Tehsil Lahor District Swabi

Mobile: +92-3446643723

E-mail: imadkhan723@gmail.com

Qualifications

Ph. D. *Physics (2013)*: University of Malakand, Chakdara, Pakistan

M. Sc. *Physics (2007)*: Hazara University, Mansehra, Pakistan

B. Sc. *Physics, Mathematics (2005)*: University of Peshawar, Pakistan

B. Ed. …….. (2008): Allama Iqbal Open University Islamabad, Pakistan

TEACHING EXPERIENCE

Assistant Professor	University of Malakand	July 2014 to ----------
Lecturer in Physics	University of Malakand	Oct. 2012 to June 2014
Lecturer in Physics	Islamia College University	Aug. 2011 to April 2012
Lecturer in Physics	Hazara University, Mansehra	Sep. 2010 to Jul. 2011)

Research Interest

Condensed matter theory, Band gap engineering, optoelectronics, Spintronics, Modeling and development of functional materials and devices, thermoelectric materials, Density functional theory, TD-DFT

Ph. D. Thesis Title

DFT Studies of Pure and Transition Metals Substituted II-VI Semiconductors

Computational Skill

System: Linux, UNIX and Windows, Compilation and parallelization

Programming: FORTRAN, C^{++}, HTML

Computational Techniques: Software: Wien2K, ABINIT, LDA, GGA, DFT+U, Hybrid functional, mBJ, GW, Latex, Mat lab, Mathematica, Origin,

Ph.D. STUDENTS UNDER SUPERVISSION

1. Mr. Iftikhar Ahmad
2. Mr. Banaras Khan

M.Ph. PHYSICS SUPERVISED

1. Iltaf Uddin	First principle studies of Cu based III-VI chalcopyrite semiconductors	(2014)
2. Fazal Subhan	Band gap engineering of MgZTe	(2014)
3. Ijaz Ahamd	Elastic and mechanical properties of rare-earth antimonide	(2014)
4. Fazle Subhan	Band gap engineering of MgZTe (Z = Zn, Cd, Hg)	(2014)

M.PHIL STUDENTS UNDER SUPERVISSION

1. Abdurahman Nasir
2. Shehzad
3. Rashid Ali
4. Amir Abdullah

Publications

1. R. Iqbal, Imad Khan, I. Ahmad, H.A.R. Aliabad, "DFT studies of Magneto-optic properties of CdCoS," *J. Magn. Magn. Mater*. 351, 60–64 (2014).
2. Z. Ali, M. Shafiq, S. J. Asadabadi, H. A. R. Aliabad, Imad Khan, I. Ahmad, "Magneto-electronic studies of anti-perovskites $NiNMn_3$ and $ZnNMn_3$,"*Comp. Mat . Sci.* 81, 141-145 (2014).
3. Imad Khan, I. Ahmad, D. Zhang, H.A.R. Aliabad, S. J. Asadabadi, "Electronic and optical properties of mixed Be-chalcogenides," *J. Phys. Chem. Solids*, 74, 181–188, (2013).
4. Imad Khan, I. Ahmad, H. A. R. Aliabad, S. J. Asadabadi, Z. Ali, M. Maqbool, "Conversion of optically isotropic to anisotropic CdS_xSe_{1-x} ($0 \leq x \leq 1$) alloy with the substitution of S," *Comp. Mat. Sci.* 77, 145–152 (2013).
5. Imad Khan, H.A.R. Aliabad, W. Ahmad, Z. Ali, I. Ahmad, "First principle studies of optoelectronic properties of the visible light sensitive CZT," *Superlattices and Microstructures* 63, 91–99 (2013).
6. Imad Khan, I. Ahmad, "Theoretical studies of the band structure and optoelectronic properties of ZnO_xS_{1-x}," *Int. J. Quantum Chem.* 113, 1285–1292 (2013).
7. Z. Ali, Imad Khan, I. Ahmad, S. Naeem, H.A.R. Aliabad, S.J. Asadabadi, D. Zhang, "Comparison of the electronic band profiles and magneto-optic properties of cubic and orthorhombic $SrTbO_3$," *Physica B* 423, 16–20 (2013).
8. H.A.R. Aliabad, V. Hesam, I. Ahmad, Imad Khan, "Electronic band structure of $LaCoO_3$/Y/Mn compounds," *Physica B* 410, 112–119 (2013).
9. Z. Ali, S. Ali, I. Ahmad, Imad Khan, H.A. R. Aliabad, "Structural and optoelectronic properties of the zinc titanate perovskite and spinel by modified Becke-Johnson potential," *Physica B* 420, 54–57 (2013).
10. Z. Ali, I. Ahmad, B. Khan, Imad Khan, "Robust half-metallicity and magnetic properties of cubic perovskite $CaFeO_3$," *Chin. Phys. Lett.* 30, 047504-047508 (2013).
11. Imad Khan, I. Ahmad, H.A. R. Aliabad, M. Maqbool, "Effect of phase transition on the optoelectronic properties of $Zn_{1-x}Mg_xS$", *J. App. Phys.* 112, 073104-9 (2012).
12. Imad Khan, A. Afaq, H. A. R. Aliabad and I. Ahmad, "Transition from optically inactive to active Mg-chalcogenides: A first principle study" *Comp. Mat. Sci.* 61, 278–282 (2012).
13. Z. Ali, I. Ahmad, Imad Khan, B. Amin, "Theoretical investigations of the cubic perovskite $SnTaO_3$," *Intermetallics*, 31, 287−291 (2012).

14. Imad Khan, I. Ahmad, B. Amin, G. Murtaza, Z. Ali, "Band gap engineering of $Cd_{1-x}Sr_xO$," *Physica B* 406, 2509–2514 (2011).
15. Z. Ali, I. Ahmad, B. Amin, M. Maqbool, G. Murtaza, Imad Khan, M.J. Akhtar, F. Ghafor. "Theoretical studies of structural and magnetic properties of cubic perovskites $PrCoO_3$ and $NdCoO_3$," *Physica B* 406, 3800–3804 (2011).
16. G. Murtaza, I. Ahmad, B. Amin, A. Afaq, M. Maqbool, J. Maqssod, Imad Khan and M. Zahid, "Investigation of structural and optoelectronic properties of $BaThO_3$," *Optical Materials* 33, 553–557 (2011).
17. M. Bilal, M. Shafiq, I. Ahmad, Imad Khan, "First principle studies of structural, elastic, electronic and optical properties of Zn-chalcogenides under pressure" *J. Semicond.* 35, 072001-9 (2014).

Papers under review

18. Imad Khan, S. Khan, J. Iqbal, H.A. R. Aliabad, Z. Ali, I. Ahmad, "The influence of oxygen composition on the optoelectronic properties of ZnTe," under review in *Indian J. Phys.*
19. Z. Ali, Saifullah, S.J. Asadabadi, Imad Khan, I. Ahmad, "First-Principle Studies of the Perovskite Molybdates $AMoO_3$ (A = Ca, Sr and Ba)," under review in *Comp. Mat. Sci.*
20. Z. Ali, Imad Khan, I. Ahmad, "Theoretical investigations of the paramagnetic $MTaO_3$ (Ca, Sr, Ba)" *Comp. Mat. Sci.*
21. S. Ahmad, H.A.R. Aliabad, R. Ahmad, Imad Khan, Z. Ali, I. Ahmad, "Theoretical studies of pure and fluorine substituted alanine" *Int. J. Quantum Chem.*
22. Imad Khan, I. Ahmad, and H. A. R. Aliabad, "DFT-mBJ studies of the band structures of the II-VI semiconductors", *Int. J. Mater. Research*

Conference and Workshop

1. Imad Khan, "Modeling and simulation within material science," International Conference on Condensed Matter Physics and Engineering, Bahauddin Zakariya University, Multan, Pakistan, 27-29 Dec. 2012.
2. Imad Khan, "Efficient band gap predictions of II-VI semiconductors," 2nd International Work shop on Materials Modeling and Simulation (IWMMS2), University of Malakand, Chakdara, Pakistan, 21-24 May, 2012.
3. Imad Khan, "New trends in density functional theory," 3nd International Work shop on Materials Modeling and Simulation (IWMMS3), University of Malakand, Chakdara, Pakistan, July 21-24, 2013.

Academic References

- Prof. Dr. Iftikhar Ahmad (Chairman Deptt: of Physics University of Malakand, Pakistan)
  E-mail: ahma5532@gmail.com
  Contact #: +92-3329067866
- Dr. Muhammad Maqbool (Asst. Prof. Deptt: of Physics & Astronomy, Ball State University, Muncie,USA)
  E-mail: mmaqbool@bsu.edu
  Contact #: +1-919-2885621
- Dr. Daqing Zhang (Asso. Prof. Deptt: of Physics, California State University, Fresno, USA)
  E-mail: dzhang@csufresno.edu
  Contact #: (559) 278-7096