

Name :	Dr. Muhammad Irfan		
Education:	Ph.D. QAU, Islamabad		
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Experience:	Title	Date	Institution
	ASSOCIATE PROFESSOR	Feb. 22, 2017	Mirpur University of Science and Technology AJK
	ASSISTANT PROFESSOR	Sep. 7,2011	Federal Urdu University Islamabad
	ASSISTANT PROFESSOR	March 14, 2011,	G. C. Satellite Town Rawalpindi
	Lecturer	May 9,2006, 2011,	G. C. Satellite Town Rawalpindi
	PhD research Scholar	Oct. 11, 2002	Physics Department QAU Islamabad
	Lecturer	Sept. 1,1996 t	G. C. Sargodha
	Lecturer	Oct.1, 1994	G. C. Farookah Sargodha
Honors and Awards			
Memberships	Pakistan Society for Semiconductor Science		
Graduate Students	Number of M.Phil. Students Supervised:34		
Service Activity	Curriculum development, Teaching and Research		
Brief Statement of Research Interest	Materials Science		

Publications	<ol style="list-style-type: none"> 1. The reduced weak links in $\text{Cu}_{0.5}\text{Tl}_{0.5}\text{Ba}_2\text{Ca}_{4-x}\text{Mg}_x\text{Cu}_5\text{O}_{14-\delta}$ ($x = 1, 2$ and 3) superconductors. Nawazish A. Khan, M. Irfan Journal of Alloys and Compounds 432 (2007) 49–54. 2. Normal Pressure Synthesis of Mg Doped $\text{Cu}_{0.5}\text{Tl}_{0.5}\text{Ba}_2\text{Ca}_2\text{Mg}_2\text{Cu}_5\text{O}_{14-\delta}$ Superconductor. Nawazish A. Khan, M. Irfan and Shahid Nawaz Physica C 455 (2007) 63-66. 3. $(\text{Cu}_{0.5}\text{Tl}_{0.5})\text{Ba}_2\text{Ca}_{n-1}\text{Cu}_{n-y}\text{Ge}_y\text{O}_{2n+4-\delta}$ ($n = 3, 4$ and $y = 0.5, 0.75, 1.0$); Superconductors with GeO_2 Planes. Nawazish A. Khan and M. Irfan Physica C 468 (2008) 2341–2344. 4. Fluctuation-induced conductivity of five planar $\text{Cu}_{0.5}\text{Tl}_{0.5}\text{Ba}_2\text{Ca}_{4-x}\text{Mg}_x\text{Cu}_5\text{O}_{14-\delta}$ ($x = 1, 2$) superconductors. M. Irfan, Najmul Hassan and Nawazish Ali Khan Physica C 469 (2009) 86–90 5. Fluctuation-induced conductivity of $\text{Cu}_{0.5}\text{Tl}_{0.5}\text{Ba}_2\text{Ca}_2\text{Cu}_2\text{M}_1\text{O}_{10}$ ($M = \text{Si}, \text{Sn}, \text{Ge}$) superconductors. M. Irfan, Sajid Khan, Najmul Hassan and Nawazish Ali Khan, J Supercond. Nov. Magn. 22 (2009) 769-774 6. Enhanced three-dimensional excess conductivity in Be-doped $\text{Cu}_{0.5}\text{Tl}_{0.5}\text{Ba}_2\text{Ca}_{3-x}\text{Be}_x\text{Cu}_4\text{O}_{12-\delta}$ ($x = 0, 0.5, 0.75, 1.0, 1.25, 1.5$) superconductors. M. Irfan, Najmul Hassan, Syed Asad Manzoor, Babar Shabbir, and Nawazish Ali Khan J. Appl. Phy. 106 (2009) 113913 (1-7) 7. Study of phonon modes and superconducting properties of the oxygen post-annealed $\text{Cu}_{0.5}\text{Tl}_{0.5}\text{Ba}_2\text{Ca}_{n-1}(\text{Cu}_{n-y}\text{Ge}_y)\text{O}_{2n+4-\delta}$ ($n = 3, 4$ and $y = 0, 0.5, 0.75, 1.0$) superconductors. M. Irfan and Nawazish A Khan, Cryogenics 50 (2010) 61-65 8. Different regions of fluctuation conductivity in Sn-doped $\text{Cu}_{0.5}\text{Tl}_{0.5}\text{Ba}_2\text{Ca}_2(\text{Cu}_{3-y}\text{Sn}_y)\text{O}_{10-\delta}$ superconductors. Nawazish A. Khan, Najmul Hassan, M. Irfan, Tayyaba Firdous Physica B 405 (2010)1541-1545 9. Thermally activated dissipation mechanism in Sn doped CuTl-1223 superconductors. Nawazish A. Khan Tayyaba Firdous P. Kameli, M. Irfan, Najmul Hassan, J Mater Sci: Mater. Electron 21 (2010)1308-1312. 10. Suppression of Superconductivity Due to Enhanced Co Doping in $\text{Cu}_{0.5}\text{Tl}_{0.5}\text{Ba}_2\text{Ca}_2\text{Cu}_{3-y}\text{Co}_y\text{O}_{10-\delta}$ Superconductors. Babar Shabbir · Anayat Ullah · Najmul Hassan M. Irfan · Nawazish A. Khan, J Supercond. Nov. Magn. 24 (2011) 1521-1526 11 How Ge doping affects CuTl-1234 superconductors, International Jr. Mod. Phys. B, M. Irfan, Nawazish A. Khan, Int. J. Mod. Phy. B. 25 (2011) 3853-3861
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12. Annealing effect on the excess conductivity of $\text{Cu}_{0.5}\text{Tl}_{0.25}\text{M}_{0.25}\text{Ba}_2\text{Ca}_2\text{Cu}_3\text{O}_{10-\delta}$ ($\text{M} = \text{K}, \text{Na}, \text{Li}, \text{Tl}$) Superconductors. Najmul Hassan, **M. Irfan**, Nawazish A. Khan, Salah Khan, A. Shakoor. A. Majid, Atif M. Jadoon and Sardar Sikander Hayyat, J. App. Phy. 111 (2012) 93914-5
13. Reduced Three-Dimensional (3D) Conductivity in Fe Doped CuTl-1223 Superconductors, Najmul Hassan, **M. Irfan**, Nawazish A. Khan, Shah Hussain, I A. Shakoor, and A. Majid Chinese Jr. Phy. 51 (2013) 560
14. Synthesis and properties of Pr-substituted Mg Zn ferrites for core materials and high, frequency applications, Muhammad Waqas Mukhtar, **Muhammad Irfan**, Ishtiaq Ahmad, Ihsan Ali, Majid Niaz Akhtar, Muhammad Azhar Khan, Ghazanfar Abbas, M. U. Rana, Akbar Ali and Mukhtar Ahmed Jr. of Mag. Magnetic Materials, 381 (2015) 173
15. Enhanced room temperature ferromagnetism in Cr-doped ZnO nanoparticles prepared by auto-combustion method, Khizar-ul Haq, M. Irfan¹, Muhammad Masood, Murtaza Saleem, Tahir Iqbal, Ishaq Ahmad, M. A. Khan, M. Zaffar, and **Muhammad Irfan** Journal of Semiconductors, 39 (2018) 043001-8
16. Synthesis and characterization of transition-metals-doped ZnO nanoparticles by sol-gel auto-combustion method, Khateeba Irshad, Muhammad Tahir Khan, Adil Murtaza, Khizar-ul-Haq, **M. Irfan**, M. A. Khan Physica B: Condensed Matter 550 (2018) 436.
17. Investigations on ZnO/polymer nanocomposite thin film for polymer-based devices, Tahir Iqbal, **M. Irfan**, Shahid M Ramay, Hamid M Gaithan, Asif Mahmood and Murtaza Saleem Mater. Res. Express 6 (2019) 075322
18. Mg and Ni Incorporated ZnO Diluted Magnetic Semiconductor for Magnetic and Photo-Catalytic Applications, Tahir Iqbal, **M Irfan**, Shahid M Ramay, Abdullah Alhamidi, Hamid Shaikh, Murtaza Saleem and Saadat A. Siddiqi Chinese Journal of Chemical Physics 33 (2020) 743-748
19. ZnO–PVA Polymer Matrix with Transition Metals Oxide Nano-fillers for High Dielectric Mediums Applications, Tahir Iqbal, **M Irfan**, Shahid M Ramay, Asif Mahmood, Murtaza Saleem and Saadat A. Siddiqi Chinese Journal of Polymers and the Environment 28 (2020) 2422-2432.
20. Synthesis and Investigation of Electrical Properties of Strontium Metal-Doped Hexaferrite Nanoparticles, Hina Waris, Usman Liaqat, Iftikhar Hussain Gul and **Muhammad Irfan** Journal of Superconductivity and Novel Magnetism 35 (2022) 235-41.

21. Structural and optical investigations on ZnO-PVDF-NiO advanced polymer composites for modern electronic devices. Tahir Iqbal, Khizar Ul Haq, **M Irfan**, Maria Khalil, Shahid M Ramay , M A Ebdah and Murtaza Saleem, Mater. Res. Express 10 (2023) 045302.

22. Computational convection analysis of second grade MHD nanofluid flow through porous medium across a stretching surface. Umer Farooq, **Muhammad Irfan**, Shaheer Khalid, Ahmed Jan, Muzamil Hussain, Journal of Mathematics and applied Mechanics. 104 (2024) issue 4.

23. On the Synthesis of Graphene Oxide/Titanium Dioxide (GO/TiO₂) Nanorods and Their Application as Saturable Absorbers for Passive Q-Switched Fiber Lasers. Zain ul Abedin, Ajaz ul Haq, Rizwan Ahmed, Tahani A. Alrebdi, Ali M. Alshehri, **Muhammad Irfan** and Haroon Asghar. Nanomaterials 14 (2024) 1682