

Curriculum Vitae

PROF. DR. KASHIF NADEEM

Professor (Tenured),
Department of Physics, FBAS,
International Islamic University, Islamabad,
Pakistan.



Contact Information:

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Mailing Address: Department of Physics, FBAS, International Islamic University, H-10,
Post Code 44000, Islamabad, Pakistan.

Personal Information:

Gender: Male

S/O: Safdar Ali

Nationality: Pakistani

Religion: Islam

Date / Place of Birth: 11th July 1982 / Rawalpindi, Pakistan

Language: Urdu and English

Marital Status: Married

Research Interests:

Spin-glass freezing at low temperatures in nanoparticles,
Magnetism at nanoscale,
Magnetism and superconductivity in Iron based superconductors,
Dielectric properties of nanoparticles,
Photocatalytic properties of nanoparticles,
Nanoparticle synthesis and characterization,
Nanocomposites.

Awards:

1. Research Productivity Award, Pakistan Council for Science and Technology (PCST) 2017, Category D.
2. Research Productivity Award, Pakistan Council for Science and Technology (PCST) 2016, Category C.
3. Fully funded Ph.D. scholarship from Higher Education Commission (HEC) of Pakistan to study in Austria, 2008-2011.
4. Young Scientist Post Doc. Fellowship (CAS-TWAS) at Institute of Physics, Chinese Academy of Sciences, Beijing, 2013-2014.
5. Visiting Scientist (CAS-TWAS) at Institute of Physics, Chinese Academy of Sciences, Beijing, 2016.

6. OEAD Post Doc fellowship at Institute of Physics, Karl-Franzens University, Graz, Austria.

Experience:

1. 24-05-2018 to date: Working as **Associate Professor** at Department of Physics, International Islamic University, Islamabad, Pakistan.
2. 01-03-2011 to 23-05-2018: Worked as **Assistant Professor** at Department of Physics, International Islamic University, Islamabad, Pakistan.
3. 01-07-2018 to 01-10-2018: Worked as **Visiting Scientist** at Institute of Physics, Karl-Franzens University, Graz, Austria.
4. 01-06-2016 to 01-08-2016: Worked as **Visiting Scientist** at Institute of Physics, Chinese Academy of Sciences, Beijing, China.
5. 15-09-2013 to 15-09-2014: Worked as **Post Doctorate Scholar** at Institute of Physics, Chinese Academy of Sciences, Beijing, China.
6. 2016-to 2021: **Editorial member of Nature, Scientific Reports.**
7. 20-10-2006 to 04-01-2008: Worked as **Assistant Manager** at AWC, NESCOM.

Instrumental Expertise:

1. Superconducting quantum interference device (SQUID)-magnetometer
2. Vibrating sample magnetometer (VSM)
3. Physical Property Measurement System (PPMS)
4. X-ray diffractometer (XRD)
5. Fourier transform infrared (FTIR) spectroscopy
6. Transmission electron microscopy (TEM)
7. Scanning electron microscopy (SEM)

Academic Record:

- **Post Doctorate (Post Doc.)**
(Physics) (2013-2014)
Worked on “*Slow Spin Dynamics in Iron-Based 122 Superconductors*”
Institute of Physics, Chinese Academy of Sciences, Beijing, China.
- **Doctor of Philosophy (Ph.D.)**
(Physics) (2008-2011)
(with distinction)
Thesis title: “*Preparation and Characterization of Nanoscaled Magnetic Particles*”
Institute of Physics, Karl-Franzens University, Graz, Austria.
- **Master of Philosophy (M.Phil.)**
(Physics) (2005-2007)
Thesis title: “*AC Susceptibility and Size effects of NiFe₂O₄ Nanoparticles*”
Quaid-i-Azam University, Islamabad, Pakistan.
Department of Physics, Quaid-i-Azam University, Islamabad, Pakistan
- **Master of Science (M.Sc.)**
(Physics) (2002-2004)
Department of Physics, Quaid-i-Azam University, Islamabad, Pakistan

- **Bachelor of Science (B.Sc.)**
(Physics, Mathematics, Statistics) (2000-2002)
University of the Punjab, Lahore, Pakistan.
- **Higher Secondary School Certificate (F.Sc.)**
(Pre-Engineering) (1998-2000)
Govt. Asgher mall college, Rawalpindi, Board of intermediate and secondary education, Rawalpindi, Pakistan.
- **Secondary School Certificate (Matric)**
(Science) (1996-1998)
Crescent public school, Board of intermediate and secondary education, Rawalpindi, Rawalpindi, Pakistan.

List of Publications (With Impact Factor):

1. "Sol-gel synthesis and characterization of single-phase Ni ferrite nanoparticles dispersed in SiO₂ matrix"
K. Nadeem, T. Traussnig, I. Letofsky-Papst, H. Krenn, U. Brossmann, and R. Würschum
Journal of Alloys and Compounds **493**, 385-390 (2010). **Impact Factor: 5.316**
2. "Distinguishing magnetic blocking and surface spin-glass freezing in nickel ferrite nanoparticles"
K. Nadeem, H. Krenn, T. Traussing, and I. Letofsky-Papst
Journal of Applied Physics **109**, 013912 (2011). **Impact Factor: 2.546**
3. "Magnetization of Fe-oxide based nanocomposite tuned by surface charging"
T. Traussnig, S. Topolovec, **K. Nadeem**, D.V. Szabo, H. Krenn and R. Würschum
Physica Status Solidi (Rapid Research Letters) **5**, 150-152 (2011). **Impact Factor: 2.821**
4. "Effect of dipolar and exchange interactions on magnetic blocking of maghemite nanoparticles"
K. Nadeem, H. Krenn, T. Traussing, R. Würschum, D. V. Szabó, and I. Letofsky-Papst
Journal of Magnetism and Magnetic Materials **323**, 1998-2004 (2011). **Impact Factor: 2.993**
5. "Exchange bias, memory and freezing effects in NiFe₂O₄ nanoparticles"
K. Nadeem and H. Krenn
Journal of Superconductivity and Novel Magnetism **24**, 717-720 (2011). **Impact Factor: 1.506**
6. "Spin-glass freezing of maghemite nanoparticles prepared by microwave plasma synthesis"
K. Nadeem, H. Krenn, T. Traussnig, R. Würschum, D. V. Szabó, and I. Letofsky-Papst
Journal of Applied Physics, **111**, 113911 (2012). **Impact Factor: 2.546**
7. "Structural and magnetic properties of ZnMg-ferrite nanoparticles prepared using co-precipitation method"
S. Rahman, **K. Nadeem**, M. Anis-ur-Rehman, M. Mumtaz, S. Naeem, and I. Letofsky-Papst
Ceramics International **39**, 5235-5239 (2013). **Impact Factor: 4.527**
8. "Influence of SiO₂ matrix and annealing time on properties of Ni-ferrite nanoparticles"
K. Nadeem, H. Krenn, M. Shahid, I. Letofsky-Papst,
Solid State Sciences, **19**, 27-31 (2013). **Impact Factor = 3.059**
9. "Study of nano-sized (ZnFe₂O₄)_y particles/CuTl-1223 superconductor composites"
M. Mumtaz, S. Naeem, **K. Nadeem**, F. Naeem, Abdul Jabbar, Y.R. Zheng, Nawazish A. Khan, M. Imran
Solid State Sciences, **22**, 21-26 (2013). **Impact Factor = 3.059**
10. "Dielectric properties of (CuO, CaO₂, and BaO)_y/CuTl-1223 composites"
M. Mumtaz, M. Kamran, **K. Nadeem**, Abdul Jabbar, Nawazish A. Khan, Abida Saleem, S. Tajammul Hussain, and M. Kamran

Low Temperature Physics, **39**, 622-629 (2013). **Impact Factor = 0.923**

11. “Dielectric properties of oxygen post-annealed $\text{Cu}_{0.5}\text{Tl}_{0.5}\text{Ba}_2\text{Ca}_3(\text{Cu}_{4-y}\text{Cd}_y)\text{O}_{12-\delta}$ bulk superconductor”

M. Mumtaz, M. Rahim, Nawazish A. Khan, **K. Nadeem**, Khurram Shehzad
Ceramics International, **39**, 9591-9598 (2013). **Impact Factor = 4.527**

12. “Study of CuO Nano-particles/CuTl-1223 Superconductor Composite”

M. Mumtaz, Asif I. Bhatti, **K. Nadeem**, Nawazish A. Khan, A. Saleem, and S. Tajammul Hussain

J. Low Temp. Phys. **170**, 185-204 (2013). **Impact factor = 1.57**

13. “Comparison of surface effects in SiO_2 coated and uncoated nickel ferrite nanoparticles”

K. Nadeem, H. Krenn, W. Sarwar, and M. Mumtaz

Applied Surface Science **288**, 677-681 (2014). **Impact Factor = 6.707**

14. “Effect of amorphous silica matrix on structural, magnetic, and dielectric properties of cobalt ferrite/silica nanocomposites”

K. Nadeem, F. Zeb, M. Azeem Abid, M. Mumtaz, and M. Anis-ur-Rehman

Journal of Non-Crystalline Solids **400**, 45-50 (2014). **Impact Factor = 3.531**

15. “Effect of silica coating on the structural, dielectric, and magnetic properties of maghemite nanoparticles”

K. Nadeem, L. Ali, I. Gul, S. Rizwan, M. Mumtaz

Journal of Non-Crystalline Solids **404**, 72-77 (2014). **Impact Factor = 3.531**

16. “Synthesis and characterization of core-shell Ni/NiO nanoparticles/CuTl-1223 superconductor composites”

K. Nadeem, F. Naeem, M. Mumtaz, S. Naeem, A. Jabbar, Nawazish A. Khan, and M. Imran

Ceramics International **40**, 13819-13825 (2014). **Impact Factor = 4.527**

17. “Competing crystallite size and zinc concentration in silica coated cobalt ferrite nanoparticles”

K. Nadeem, M. Shahid, and M. Mumtaz

Progress in Natural Science: Materials International **24**, 199-204 (2014). **Impact Factor = 3.607**

18. “Suppression of activation energy and superconductivity by the addition of Al_2O_3 nanoparticles in CuTl-1223 matrix”

A. Jabbar, I. Qasim, M. Mumtaz, M. Zubair, **K. Nadeem**, and A. A. Khurram

Journal of Applied Physics, **115**, 203904 (2014). **Impact Factor = 2.546**

19. “Activation energy and excess conductivity analysis of $(\text{Ag})_x/\text{CuTl-1223}$ nano-superconductor composites”

G. Hussain, A. Jabbar, I. Qasim, M. Mumtaz, **K. Nadeem**, M. Zubair, S. Q. Abbas, and A. A. Khurram,

Journal of Applied Physics **116**, 103911 (2014). **Impact Factor = 2.546**

20. “Infrared absorption spectroscopy and fluctuations induced conductivity (FIC) analysis of Be-doped $\text{TlBa}_2\text{Ca}_2\text{Cu}_3\text{O}_{10-\delta}$ superconductor”

M. Mumtaz, M. Zubair, Nawazish A. Khan, and **K. Nadeem**

Ceramics International **40**, 6655-6662 (2014). **Impact Factor = 4.527**

21. “Synthesis and superconducting properties of $(\text{Au})_x/\text{CuTl-1223}$ composites”

A. Jabbar, I. Qasim, K. M. Khan, Z. Ali, **K. Nadeem**, M. Mumtaz

Journal of Alloys and Compounds **618**, 110-114 (2015). **Impact Factor = 5.316**

22. “Highly coercive CoFe_2O_4 nanoparticles-CuTl-1223 superconductor composites”

A. Jabbar, I. Qasim, Shahid A. Khan, **K. Nadeem**, M. Waqee-ur-Rehman, M. Mumtaz, and F. Zeb

Journal of Magnetism and Magnetic Materials **377**, 6-11 (2015). **Impact Factor = 2.993**

23. “Structural and superconducting properties of $(\text{Al}_2\text{O}_3)_y/\text{CuTl-1223}$ composites”

A. Jabbar, I. Qasim, M. Waqee-ur-Rehman, M. Zaman, **K. Nadeem**, M. Mumtaz

Journal of Electronic Materials, **44**, 110-116 (2015). **Impact Factor = 1.938**

24. “Effect of annealing on properties of Mg doped Zn-ferrite nanoparticles”
K. Nadeem, S. Rahman, and M. Mumtaz
Progress in Natural Science: Materials International, 25, 111-116 (2015). **Impact Factor = 3.607**
25. “Noble metals (Ag, Au) nanoparticles addition effects on superconducting properties of CuTl-1223 phase”
A. Jabbar, M. Mumtaz, **K. Nadeem**
The European Physical Journal Applied Physics, 69, 30601, (2015). **Impact Factor: 0.874**
26. “Slow Spin Dynamics in Superconducting $\text{Ca}_{0.9}\text{Ce}_{0.1}\text{Fe}_2\text{As}_2$ ”
K. Nadeem, W. Zhang, D.Y. Chen, Z.A. Ren and X. G. Qiu
Nature, Scientific Reports, Nature 5, 10700 (2015). **Impact Factor: 5.133**
27. “Spin-flop transition and magnetic phase diagram in CaCo_2As_2 revealed by torque measurements”
W. Zhang, **K. Nadeem**, H. Xiao, R. Yang, B. Xu, H. Yang, and X. G. Qiu
Physical Review B 92, 144416 (2015). **Impact Factor: 4.036**
28. “Formation of As-As bond and its effect on absence of superconductivity in the collapsed tetragonal phase of $\text{Ca}_{0.86}\text{Pr}_{0.14}\text{Fe}_2\text{As}_2$: An optical spectroscopy study”
R. Yang, C. Le, L. Zhang, B. Xu, W. Zhang, **K. Nadeem**, H. Xiao, J. Hu, and X. Qiu
Physical Review B, 91, 224507 (2015). **Impact Factor: 4.036**
29. “Memory effect versus exchange bias for maghemite nanoparticles”
K. Nadeem, H. Krenn, and D. V. Szabo
Journal of Magnetism and Magnetic Materials 393, 239-242 (2015). **Impact Factor: 2.993**
30. “Role of magnetic NiFe_2O_4 nanoparticles in CuTl-1223 superconductor”
K. Nadeem, G. Hussain, M. Mumtaz, A. Haider, and S. Ahmed
Ceramics International 41, 15041-15047 (2015). **Impact Factor: 4.527**
31. “Infield response of $(\text{Al}_2\text{O}_3)_x/\text{CuTl-1223}$ nanoparticles-superconductor composites”
M. Waqee-ur-Rehman, Irfan Qasim, M. Mumtaz, **K. Nadeem**, and A. A. Khurram
Physica B 476, 320-326 (2015). **Impact Factor: 2.436**
32. “Role of anti-ferromagnetic Cr nanoparticles in CuTl-1223 superconducting matrix”
Irfan Qasim, M. Waqee-ur-Rehman, M. Mumtaz, Ghulam Hussain, **K. Nadeem**, and Nawazish A. Khan,
Journal of Alloys and Compounds 649, 320-326 (2015). **Impact Factor: 5.316**
33. “Two percolation thresholds and remarkably high dielectric permittivity in pristine carbon nanotube/elastomer composites”
K. Shehzad, A. A. Hakro, Y. Zeng, Shang-Hong Yao, Yi Xiao-Hong, M. Mumtaz, **K. Nadeem**, N. S. Khisro, and Zhi-Min Dang
Applied Nanoscience 5, 969–974 (2015). **Impact Factor: 3.674**
34. “Effect of air annealing on structural and magnetic properties of Ni/NiO nanoparticles”
K. Nadeem, Asmat Ullah, M. Mushtaq, M. Kamran, S.S. Hussain, and M. Mumtaz
Journal of Magnetism and Magnetic Materials 417 (2016) 6-10. **Impact Factor: 2.993**
35. “Surface spin-glass in cobalt ferrite nanoparticles dispersed in silica matrix”
F. Zeb, W. Sarwer, **K. Nadeem**, M. Kamran, M. Mumtaz, H. Krenn, and I. Letofsky-Papst
Journal of Magnetism and Magnetic Materials 407 (2016) 241–246. **Impact Factor: 2.993**
36. “Surface effects in uncoated and amorphous SiO_2 coated cobalt ferrite nanoparticles”
F. Zeb, A. R. Qureshi, **K. Nadeem**, M. Mumtaz, and H. Krenn
Journal of Non-Crystalline Solids, 435 (2016), 69-75. **Impact Factor: 3.531**
37. “Infield superconducting properties of Ni nanoparticles added CuTl-1223 phase”
M. Waqee-ur-Rehman, M. Mumtaz, Irfan Qasim, and **K. Nadeem**
Solid State Communications 228, 32-35 (2016). **Impact Factor: 1.804**
38. “Resistive transition and flux flow mechanism in CoFe_2O_4 nanoparticles added $\text{Cu}_{0.5}\text{Tl}_{0.5}\text{Ba}_2\text{Ca}_2\text{Cu}_3\text{O}_{10-\delta}$ superconductor”
M. Waqee-ur-Rehman, Irfan Qasim, M. Mumtaz, **K. Nadeem**, and S. Qamar

- Journal of Alloys and Compounds* **657**, 348–352 (2016). **Impact Factor: 5.316**
39. “Infield response of $(\text{Co})_x/\text{CuTl-1223}$ nanoparticles-superconductor composites”
M. Waqee-ur-Rehman, M. Mumtaz, Irfan Qasim, and **K. Nadeem**
Cryogenics **73**, 68-72 (2016). **Impact Factor: 2.226**
40. “Ferromagnetic (Ni) nanoparticles-CuTl-1223 superconductor composites”
Irfan Qasim, M. Waqee-ur-Rehman, M. Mumtaz, Ghulam Hussain, **K. Nadeem**, and Khurram Shehzad
Journal of Magnetism and Magnetic Materials **403**, 60-67 (2016). **Impact Factor: 2.993**
41. “Role of Co nanoparticles in CuTl-1223 superconductor”
Irfan Qasim, M. Waqee-ur-Rehman, M. Mumtaz, and **K. Nadeem**
Ceramics International **42**, 1122–1127 (2016). **Impact Factor: 4.527**
42. “Zinc Nanoparticles at Intercrystallite Sites of $(\text{Cu}_{0.5}\text{Tl}_{0.5})\text{Ba}_2\text{Ca}_3\text{Cu}_4\text{O}_{12-\delta}$ superconductor”
Irfan Qasim, M. Mumtaz, **K. Nadeem**, and S. Qamar Abbas
Journal of Nanomaterials **2016**, 6 (2016). **Impact Factor = 2.986**
43. “Dielectric properties of $(\text{Zn})_x/\text{CuTl-1223}$ nanoparticles-superconductor composites”
M. Mumtaz, Liaqat Ali, Shoaib Azeem, Saad Ullah, G. Hussain, M. W. Rabbani, Abdul Jabbar, and **K. Nadeem**
Journal of Advanced Ceramics **5**, 159-166 (2016). **Impact Factor = 6.707**
44. “Flux pinning by Cr nanoparticles in $\text{Cu}_{0.5}\text{Tl}_{0.5}\text{Ba}_2\text{Ca}_2\text{Cu}_3\text{O}_{10-\delta}$ superconductor”
M. Waqee-ur-Rehman, M. Mumtaz, Irfan Qasim, and **K. Nadeem**
Journal of Low Temperature Physics, **184**, 997-1006 (2016). **Impact Factor = 1.57**
45. “Magnetic behavior of NiO nanoparticles determined by SQUID Magnetometry”
Farrakh Shahzad, **Kashif Nadeem**, Julia Weber, Heinz Krenn, and Peter Knoll.
Materials Research Express **4**, 086102 (2017). **Impact Factor: 1.609**
46. “Negative and anomalous T-dependent magnetization trend in CoCr_2O_4 nanoparticles”
M. Kamran, **K. Nadeem** and M. Mumtaz
Solid State Sciences **72**, 21-27 (2017). **Impact Factor: 3.059**
47. “Improvement in Superconducting Properties of $\text{Cu}_{0.5}\text{Tl}_{0.5}\text{Ba}_2\text{Ca}_2\text{Cu}_3\text{O}_{10-\delta}$ Phase by addition of $\gamma\text{-Fe}_2\text{O}_3$ nanoparticles”
M. Mumtaz, Liaqat Ali, Waqee-ur-Rehman, **K. Nadeem**, G. Hussain, G. Abbas, and Bilal Majeed
Journal of Superconductivity and Novel Magnetism **1-9** (2017). **Impact Factor: 1.48**
48. “Structural, magnetic, and dielectric properties of multiferroic $\text{Co}_{1-x}\text{Mg}_x\text{Cr}_2\text{O}_4$ nanoparticles”
M. Kamran, A. Ullah, S. Rahman, A. Tahir, **K. Nadeem**, M. Anis ur Rehman, and S. Hussain
Journal of Magnetism and Magnetic Materials **433**, 178-186 (2017). **Impact Factor: 2.993**
49. “Massive dielectric properties enhancement of MWCNTs/ CoFe_2O_4 nanohybrid for super capacitor applications”
M. Z. Khan, I. H. Gul, H. Anwar, S. Ameer, A. N. Khan, A. A. Khurram, **K. Nadeem**, and M. Mumtaz
Journal of Magnetism and Magnetic Materials **424**, 382-387 (2017). **Impact Factor: 2.993**
50. “Surface spins disorder in uncoated and SiO_2 coated maghemite nanoparticles”
F. Zeb, **K. Nadeem**, S. K. A. Shah, M. Kamran, I. H. Gul, and L. Ali
Journal of Magnetism and Magnetic Materials **429**, 270-275 (2017). **Impact Factor: 2.993**
51. “Role of SiO_2 coating in multiferroic CoCr_2O_4 nanoparticles”
M. Kamran, Asmat Ullah, Y. Mehmood, **K. Nadeem**, and H. Krenn
AIP Advances **7**, 025011 (2017). **Impact Factor: 1.579**
52. “Role of surface spins on magnetization of Cr_2O_3 coated $\gamma\text{-Fe}_2\text{O}_3$ nanoparticles”
K. Nadeem, M. Kamran, A. Javed, F. Zeb, S.S. Hussain, M. Mumtaz, H. Krenn, D.V. Szabo, U. Brossmann and Xiaoke Mu
Solid State Sciences **83**, 43-48 (2018). **Impact Factor: 3.059**

53. “Surface effects and spin glass state in Co_3O_4 coated MnFe_2O_4 nanoparticles”
F. Zeb, M. Ishaque, **K. Nadeem**, M. Kamran, H. Krenn and D. V. Szabo
Materials Research Express 5, 086109 (2018). **Impact Factor: 1.6109**
54. “Reduced surface spin disorder in ZrO_2 coated $\gamma\text{-Fe}_2\text{O}_3$ nanoparticles”
F. Zeb, M. Shoaib Khan, **K. Nadeem**, M. Kamran, H. Abbas, H. Krenn, D.V. Szabo
Solid State Communications 284–286, (2018) 69–74. **Impact Factor: 1.804**
55. “Magnetic and dielectric properties of $\text{NiCr}_x\text{Fe}_{2-x}\text{O}_4$ nanoparticles”
M. Kamran, W. Shoukat, **K. Nadeem**, S. Salman Hussain, F. Zeb and S. Hussain
Materials Research Express 6, 076106 (2019). **Impact Factor: 1.609**
56. “Photocatalytic activity and two-magnon behaviour in nickel oxide nanoparticles with different silica concentration”
Hur Abbas, **K. Nadeem**, N. Saeed, A. Hassan, S. Rahman, H. Krenn, and I. Letofsky-Papst
Journal of Applied Physics 125, 144305 (2019). **Impact Factor: 2.546**
57. “Reduced surface effects in weakly interacting ZrO_2 coated MnFe_2O_4 ”
F. Zeb, M. Ishaque, **K. Nadeem**, M. Kamran, H. Krenn, D.V. Szabo, U. Brossmann, I. Letofsky-Papst
Journal of Magnetism and Magnetic Materials 469, 580–586 (2019). **Impact Factor: 2.993**
58. “Infield superconductivity in Au nanoparticles added $\text{Cu}_{0.5}\text{Tl}_{0.5}\text{Ba}_2\text{Ca}_2\text{Cu}_3\text{O}_{10-\delta}$ phase”
M. Mumtaz, Waqas Ahmad Khan, Liaqat Ali, M. Waqee-Ur-Rehman, **K. Nadeem**
Physica C: Superconductivity and its Applications 559, 21–24 (2019). **Impact Factor: 1.241**
59. “Comparison of temperature dependent magnetic properties of uncoated and SiO_2 coated $\text{BaFe}_{12}\text{O}_{19}$ nanoparticles”
K. Nadeem, J. Z. Minhas, F. Zeb, Misbah Sajjad, H. Abbas and M. Zareef Khan
Material Research Express, 6, 116117(2019). **Impact Factor: 1.609**
60. “A comparative study of magnetic, photocatalytic and dielectric properties of NiO nanoparticles synthesized by sol-gel and composite hydroxide mediated method”
Hur Abbas, **K. Nadeem**, A. Hafeez, A.Hassan, N. Saeed, H.Krenn
Ceramics International, Volume 45, Issue 14, (2019), Pages 17289–17297.
Impact Factor: 4.527
61. “Vortex dynamics in $(\text{NiFe}_2\text{O}_4)_x/\text{CuTl-1223}$ nanoparticles-superconductor composites”
S. Ahmed, M. Zareef Khan, **K. Nadeem**, Hur Abbas, M. Mumtaz
Physica B: Condensed Matter, Volume 581, (2020), 41195. **Impact Factor: 2.436**
62. “Magnetic phase diagram and dielectric properties of Mn doped CoCr_2O_4 nanoparticles”
K. Nadeem, Habib Ur Rehman, F. Zeb, E. Ali, M. Kamran, N. A. Noshahi, H. Abbas
Journal of Alloys and Compounds, Volume 832, (2020), 155031. **Impact Factor: 5.316**
63. “Comparison of surface effects in bare and titanium oxide coated CoFe_2O_4 nanoparticles”
M. Zareef Khan, **K. Nadeem**, F. Zeb, H. Abbas, Basit Ali, I. Letofsky-Papst
Solid State Sciences, Volume 103, (2020), 106186. **Impact Factor: 3.059**
64. “Fabrication of bifunctional nanocomposite for dye degradation”
W. Khalid, M. A. Abbasi, F. Ullah, M. Atif, Z. Ali, **K. Nadeem**, U. Farooq, F. Amin
Ceramics International, Volume 46, Issue 3, (2020), 2823–2828. **Impact Factor: 4.527**
65. “Enhanced photocatalytic Activity of Ferromagnetic Fe-doped NiO nanoparticles”
Hur Abbas, **K. Nadeem**, A. Hassan, S. Rahman, H. Krenn
Optik, Volume 202, (2020), 163637. **Impact Factor: 2.187**
66. “Ferrimagnetic to antiferromagnetic transition and complex impedance analysis of Cr-doped magnesium ferrite nanoparticles”
K. Khan, Z. Iqbal, Hur Abbas, A. Hassan and **K. Nadeem**
Journal of Materials Science: Materials in Electronics 31, 8578–8588 (2020).

Impact Factor: 2.478

67. “Comparative study of frequency-dependent dielectric properties of ferrites MFe_2O_4 ($\text{M} = \text{Co, Mg, Cr and Mn}$) nanoparticles”

Mubasher, M. Mumtaz, Mehwish Hassan, Liaqat Ali, Zubair Ahmad, M. Awais Imtiaz, M. Fahad Aamir, Abdul Rehman and **K. Nadeem**

Applied Physics A **126**, 334 (2020). **Impact Factor: 2.584**

68. “Role of Co_3O_4 nanoparticles addition in in-field superconducting properties of CuTi-1223 phase”

M. Imran, M. Zareef Khan, M. Waqee-Ur-Rehman, Asmat Ullah, S. Ahmed, **K. Nadeem**, M. Mumtaz

Journal of Low Temperature Physics **200**:152–163 (2020). **Impact Factor: 1.57**

69. “Magnetic homogeneity in Fe-Mn co-doped NiO nanoparticles”

Hur Abbas, **K. Nadeem**, H. Krenn, M. Kostylev, J. Hester, A. T. Murdock, S. Yick, Ilse Letofsky-Papst and C. Ulrich

Nanotechnology **31**, 475701 (2020). **Impact Factor: 3.874**

70. “Comparison of anomalous magnetic properties of non-collinear CoCr_2O_4 and NiCr_2O_4 nanoparticles”

R. Zohaib Rasool, **K. Nadeem**, M. Kamran, F. Zeb, Naman Ahmad, M. Mumtaz

Journal of Magnetism and Magnetic Materials **514**, 167225 (2020). **Impact Factor: 2.993**

71. “Role of Mn doping on magnetic properties of multiferroic NiCr_2O_4 nanoparticles”

N.A. Noshahi, **K. Nadeem**, M. Kamran

Ceramics International, **47** (2021) 10643–10649. **Impact Factor: 4.527**

72. “Reduced surface effects and reduced inter-particle interactions in $\text{NiFe}_2\text{O}_4/\text{TiO}_2$ nanocomposites”

M. Zareef Khan, Hur Abbas, **K. Nadeem**, F. Zeb

Journal of Superconductivity and Novel Magnetism, **34**, pages 2171–2178 (2021).

Impact Factor: 1.506

73. “Fe–Co co-doping effects on antiferromagnetic core of NiO nanoparticles”

Hur Abbas, **K. Nadeem**, S. Munir, U. Ahmed, M. Usman, Mikhail Kostylev

Ceramics International, **48**, 3435–3447 (2022), **Impact Factor: 4.527**

74. “Effect of Mg doping on magnetic, and dielectric properties of NiCr_2O_4 nanoparticles”

K. Nadeem, M. Kamran, H. Z. Khokhar, I. Ahmed, F. Zeb, N.A. Noshahi

Ceramics International, **48**, pages 17270–17278 (2022). **Impact Factor: 4.527.**

75. “Competing magnetic states and M–H loop splitting in core–shell NiO nanoparticles”

Hur Abbas, **K. Nadeem**, J. Hester, M. F. Pervez, S. Yick, M. Kostylev, Ilse Letofsky-Papst, B. Ali, C. Ulrich and H Krenn

Nanotechnology **33**, 345711 (2022). **Impact Factor: 3.953**

76. “Concentration dependent exchange coupling in $\text{BaFe}_{12}\text{O}_{19}/\text{NiFe}_2\text{O}_4$ nanocomposites”

M. Zareef Khan, Hur Abbas, **K. Nadeem**, Asad Iqbal, Ilse-Letofsky Papst

Ceramics International, **922** (2022) 166105. **Impact Factor: 5.532**

77. “Bi-functional Ni-doped La_2O_3 nanosheets: their enhanced photocatalytic performance and antibacterial properties”

A. Arshad, S. Siddique, M. Shahid, M. Zulqurnain, R. K. Niazi, Q. Mansoor and **K. Nadeem**

Journal of Physics D: Applied Physics, **55** (2022) 304007. **Impact Factor: 3.409**

78. “Magnetic exchange coupling and effect of grain and grain boundaries on conduction mechanism of $(\text{MgFe}_2\text{O}_4)_{100-x}/(\text{BaFe}_{12}\text{O}_{19})_x$ nanocomposites”

K. Khan, Hur Abbas, **K. Nadeem**

Ceramics International 49 (2023) 13982–13993. **Impact Factor: 5.2**

79. “Spring exchange mechanism and temperature dependent magnetic properties of BaFe₁₂O₁₉/CoFe₂O₄ nanocomposites”

M. Zareef Khan, Hur Abbas, **K. Nadeem**, Shahzad Ahmed, Awais Ghani

Journal of Magnetism and Magnetic Materials 581 (2023) 170989. **Impact Factor: 2.7**

80. “Structural tuning interlinking various optical, dielectric and magnetic trends in annealed Mn_{0.5}Zn_{0.5}Fe₂O₄ spinel ferrites nanostructures”

M. Zulqarnain, S. S. Ali, C. Cheng, **K. Nadeem**, M. Rizwan, Tauseef Anwar

Journal of Magnetism and Magnetic Materials 565 (2023) 170252. **Impact Factor: 2.7**

81. “Effect of TiO₂ on surface spins disorder of MgFe₂O₄ nanoparticles”

K. Khan, Hur Abbas, F. Zeb, **K. Nadeem**

Applied Physics A, 129, 2 (2023). **Impact Factor: 2.9**

82. “The role of Ag ions incorporation on the Magnetic, and Antimicrobial Properties of NiO Nanoparticles”

Hur Abbas, M. Mudassar, **K. Nadeem**, M.T. Yasin, S.A.I. Bokhari, C. Ulrich

Ceramics International 50 (2024) 23039-23046. **Impact Factor: 5.1**

83. “Effects of Cu and Ni co-doping on magnetic, photocatalytic and dielectric properties of Co₃O₄ nanoparticles”

M. Qasim, **K. Nadeem**, M. Shahid, M. Zareef Khan, Ablikim Baqi

Ceramics International, 51 (2025) 11467-11479. **Impact Factor: 5.1**

List of Publications (Without Impact Factor):

84. “Influence of surface spins on the magnetization of fine maghemite nanoparticles”

K. Nadeem, H. Krenn, and D. V. Szabo

American Institute of Physics Conference Proceedings 1569, 347-350 (2013).

Conference Proceeding

85. “Surface spin-glass freezing and blocking in nickel ferrite nanoparticles”

K. Nadeem and H. Krenn

Materials Research Society, proc. vol. 1256, 1256-N06-06 (2010).

Conference Proceeding

86. “Two-magnon behavior of NiO nanoparticles”

F. Shahzad, P. Knoll, K. Ettinger, **K. Nadeem**, H. Krenn, K. Pressl, P. Granitzer, A. Kukovecz, G. Kozma, Z. Konya, and I. Letofsky-Papst

American Institute of Physics Conference Proceedings, 22th International Conference on Raman Spectroscopy, proc. vol. 1267, 255-256 (2010).

Conference Proceeding

Conference/Seminars Contributions:

1. Invited Guest at 2nd International Conference on Physics, ICP 2022, Air University, Islamabad.

2. “Study of spin-glass behaviour in antiferromagnetically Cr₂O₃ coated ferrimagnetic MnFe₂O₄ nanoparticles”

Oral Presentation, 11-15 March 2019, International School on Physics and Allied Disciplines, National Centre for Physics (NCP), Islamabad, Pakistan.

3. “Disordered and Frustrated Magnetization in Coated MnFe_2O_4 Nanoparticles Prepared by Microwave Plasma Synthesis”

Oral Presentation

K. Nadeem, M. Kamran, H. Krenn, D. V. Szabo, U. Brossmann and R. Wurschum
21st International Conference on Solid Compounds of Transition Elements (SCTE 18),
25-29 March 2018, Vienna, Austria.

4. “Poster Competition 2018” at departmental level

Chief Organizer

10 May 2018, Department of Physics, International Islamic University, Islamabad,
Pakistan.

5. “Poster Competition 2018” at departmental level

Chief Organizer

04 Dec. 2018, Department of Physics, International Islamic University, Islamabad,
Pakistan.

6. “Poster Competitions 2018” at Faculty level

Chief Organizer

18 Dec. 2018, FBAS, Department of Physics, International Islamic University,
Islamabad, Pakistan.

7. “Magnetic transitions and negative magnetization in CoCr_2O_4 nanoparticles”

Oral Presentation

K. Nadeem and M. Kamran

International Conference on Nano-composites & Multi-Functional Materials (ICNMM)”,
August 21-23, 2017, at School of Natural Sciences, National University of Sciences and
Technology, H-12, Islamabad, Pakistan.

8. Three Poster Presentations at

1st International Conference on Mathematics and Physics, 14-02. 2017,
Air University (AU), Islamabad, Pakistan.

9. “Fundamentals to Nanoparticle Magnetism”

Invited talk

15 Dec. 2014, Department of Physics, School of Natural Sciences, NUST, Islamabad,
Pakistan.

10. “Torque Magnetometry and dc Magnetization of CaCo_2As_2 ”

Oral Presentation

K. Nadeem, W. Zhang, D. Y. Chen, Z. A. Ren and X. G. Qiu

International Scientific Spring Conference, March 16-19, 2015, Islamabad, Pakistan.

11. “Influence of surface spins on the magnetization of fine maghemite nanoparticles”

Oral Presentation

K. Nadeem, H. Krenn, and D. V. Szabó

APMAS conference (3rd International Advances in Applied Physics & Materials Science
Congress), 24-28 April, 2013, Antalya, Turkey

12. Four Poster Presentations at

International Conference and Workshop on Nano Science and Technology, 1-5 Oct.
2012, Quaid-i-Azam University, Islamabad, Pakistan.

13. “Cross-over between spin-glass freezing and blocking in NiFe_2O_4 nanoparticles”

Oral Presentation

K. Nadeem and H. Krenn

74th German Physical Society meeting (DPG meeting), 21-26 March 2010, Regensburg, Germany.

14. “Surface spin-glass freezing and blocking in nickel ferrite nanoparticles”

Poster Presentation

K. Nadeem and H. Krenn

MRS spring meeting, 05-09 April 2010, San Francisco, USA.

15. “Transmission electron microscopy and characterization of NiFe₂O₄ nanoparticles dispersed in SiO₂ matrix”

Poster Presentation

K. Nadeem, I. Letofsky-Papst, T. Traussnig, R. Wuerschum, and H. Krenn

Microscopy conference 2009 (MC 2009), 30th Aug - 4th Sept. 2009, Graz, Austria.

16. “Multi-phase to single-phase NiFe₂O₄ nanoparticles dispersed in SiO₂ matrix”

Poster Presentation

K. Nadeem, T. Traussnig, H. Krenn, P. Granitzer, I. Letofsky-Papst, Pedro Traar

European Workshop on Self-Organized Nanomagnets, March 29th - April 3rd 2009, Aussois, France.

17. “Charge-induced tuning of the magnetic moment of nanocrystalline maghemite/platinum composites”

Oral Presentation contribution

T. Traußnig, S. Topolovec, D. V. Szabo, S. Landgraf, **K. Nadeem**, H. Krenn, R. Würschum

International Conference on Nanostructured Materials, 13-19 Sep. 2010, Rome, Italy.

18. “Reversible tuning of the magnetic moment of nanocrystalline maghemite/platinum composites by electrochemical charging”

Oral Presentation contribution

T. Traußnig, S. Topolovec, **K. Nadeem**, D. V. Szabo, H. Krenn, and R. Würschum

75th German Physical Society meeting (DPG meeting), 13-18 March 2011, Dresden, Germany.

19. “Exchange bias, memory and freezing effects in NiFe₂O₄ nanoparticles”

K. Nadeem and H. Krenn

Oral Presentation

International Conference on Superconductivity and Magnetism (ICSM 2010), 25-30 April, Antalya, Turkey.

20. “Synthesis and magnetic characterization of NiFe₂O₄ nanoparticles and its nanocomposites”

Poster Presentation

K. Nadeem and H. Krenn

58 Jahrestagung der Österreichischen , Physikalischen Gesellschaft, 22-26 September 2008 an der Montanuniversität Leoben, Austria.

21. “Magnetic properties of NiO nanoparticles investigated by SQUID and magnetic Raman scattering”

Oral Presentation contribution

F. Shahzad, P. Knoll, K. Ettinger, **K. Nadeem**, H. Krenn, G. Kozma, A. Kukovecz, Z. Konya, I. Letofsky-papst, K. Pressl, and P. Granitzer

74th German Physical Society meeting (DPG meeting), 21-26 March 2010, Regensburg, Germany.

22. “Magnetic studies of fine maghemite nanoparticles prepared by microwave plasma synthesis”

Oral Presentation

K. Nadeem, H. Krenn, T. Traussing, R. Würschum, and D. V. Szabo

60th Annual meeting of Austrian Physical Society, 6-10 September 2010, Salzburg, Austria.

Invited Talk

23. “How to stabilize the magnetization of ultrasmall nanomagnets?”

H. Krenn and **K. Nadeem**

Oral Presentation contribution

60th Annual meeting of Austrian Physical Society, 6-10 September 2010, Salzburg, Austria.

24. “Temperature and size dependent properties of NiO nanoparticles”

Oral Presentation contribution

F. Shahzad, P. Knoll, K. Ettinger, **K. Nadeem**, I. Letofsky-papst, H. Krenn, K. Pressl, A. Kukovecz, G. Kozma, and Z. Konya

60th Annual meeting of Austrian Physical Society, 6-10 September 2010, Salzburg, Austria.

Projects:

1. HEC research project, Higher Education Commission 2013, Pakistan.
Titled: “Synthesis and characterization of nanoparticles/ superconductor composites”
2. International Islamic University Research Project 2016, Pakistan.
Titled: “Synthesis and Dielectric properties of Nanoparticles and Nanocomposites”
3. Australian Centre for Neutron Scattering Project, 2019-21, Australia.
Titled: “Competing Magnetic Interaction in Core/Shell Magnetic Structure of NiO Nanoparticles Dispersed in Silica Matrix”.

PhD Students Supervised:

1. Khalid Mehmood Khan

(As supervisor)

PhD (Physics) thesis 2024, Department of Physics, IIUI, Pakistan

Thesis Title: “Magnetic and Dielectric Properties of MgFe₂O₄ Nanoparticles”

2. Muhammad Zareef Khan

(As supervisor)

PhD (Physics) thesis 2024, Department of Physics, IIUI, Pakistan

Thesis Title: “Synthesis and Magnetic properties of Soft Ferrite Based TiO₂ and BaFe₁₂O₁₉ Composites”

3. Dr. Hur Abbas

(As supervisor)

PhD (Physics) thesis 2020, Department of Physics, IIUI, Pakistan

Thesis Title: “Effect of Coating and Doping on Magnetic and Optical Properties of NiO Nanoparticles”

4. Dr. Faisal Zeb

(As supervisor)

PhD (Physics) thesis 2019, Department of Physics, IIUI, Pakistan

Thesis Title: “*Synthesis and Characterization of Coated and Uncoated Ferrite Magnetic Nanoparticles*”

5. Dr. Muhammad Kamran

(As supervisor)

PhD (Physics) thesis 2018, Department of Physics, IIUI, Pakistan

Thesis Title: “*Study of Structural, Dielectric, and Magnetic Properties of Ferrite/Chromite Nanoparticles*”

6. Dr. Liaqat Ali

(As co-supervisor)

PhD (Physics) thesis 2020, Department of Physics, IIUI, Pakistan.

Thesis Title: “*Metallic Nanoparticles Effects on Physical Properties of CuTl-1223 Superconductor*”

7. Dr. Irfan Qasim

(As co-supervisor)

PhD (Physics) thesis 2016, Department of Physics, IIUI, Pakistan.

Thesis Title: “*Structural and superconducting properties of CuTl-12(n-1)n; n = 3, 4/nanostructures composites*”

8. Dr. Abdul Jabbar

(As co-supervisor)

PhD (Physics) thesis 2015, Department of Physics, IIUI, Pakistan.

Thesis title: “*Synthesis and characterization of metal-oxide nanoparticles doped CuTl-based superconductor*”

MS Students Supervised:

1. M. Junaid Raza

MS (Physics) thesis 2024, Department of Physics, IIUI, Pakistan

Thesis title: “*Study of Dielectric Properties of co-doped NiO nanoparticles*”

2. Umar Farooq

MS (Physics) thesis 2024, Department of Physics, IIUI, Pakistan

Thesis title: “*Study of the Dielectric Properties of Sr based co-doped NiO Nanoparticles*”

3. Aziz Ur Rahman

MS (Physics) thesis 2024, Department of Physics, IIUI, Pakistan

Thesis title: “*Effects of co-doping on Dielectric Properties of NiFe₂O₄ Nanoparticles*”

4. Aamir Majeed

MS (Physics) thesis 2024, Department of Physics, IIUI, Pakistan

Thesis title: “*Comparative Study of the Dielectric Properties of Doped and Co-doped Cobalt Ferrite Nanoparticles*”

5. Mr. Tall-e-mund Abdullah

MS (Physics) thesis 2021, Department of Physics, IIUI, Pakistan

Thesis title: “*Temperature dependent DC magnetic properties of Ni_{1-x}(FeMn)_xO nanoparticles*”

6. Mr. Asad Iqbal

MS (Physics) thesis 2021, Department of Physics, IIUI, Pakistan

Thesis title: “*Temperature dependent magnetic properties of NiFe₂O₄/BaFe₁₂O₁₉ nanocomposites*”

7. Mr. Muhammad Yasir

MS (Physics) thesis 2021, Department of Physics, IIUI, Pakistan

Thesis title: *“AC susceptibility and magnetic relaxation of $Ni_{1-x}(FeMn)_xO$ nanoparticles”*

8. Mr. Hafiz Muhammad Usman

MS (Physics) thesis 2021, Department of Physics, IIUI, Pakistan

Thesis title: *“Temperature dependent magnetic properties of $Ni_{1-x}(FeCo)_xO$ nanoparticles”*

9. Mr. Basit Ali

MS (Physics) thesis 2020, Department of Physics, IIUI, Pakistan

Thesis title: *“Structural and magnetic properties of NiO nanoparticles dispersed in SiO_2 matrix.”*

10. Mr. Umair Ahmed

MS (Physics) thesis 2020, Department of Physics, IIUI, Pakistan

Thesis title: *“Effect of Transition Metals Doping on Magnetic and Optical Properties of NiO Nanoparticles.”*

11. Mr. Shiraz Munir

MS (Physics) thesis 2020, Department of Physics, IIUI, Pakistan

Thesis title: *“Co-Doping Effect of Fe and Co on Magnetic Properties of NiO Nanoparticles”*

12. Mr. Shahab ud Din

MS (Physics) thesis 2020, Department of Physics, IIUI, Pakistan

Thesis title: *“Structural, vibrational and dielectric properties of $Ni_{1-x}Mn_xCr_2O_4$ nanoparticles.”*

13. Mr. Farhan Farooq Siddiqui

MS (Physics) thesis 2019, Department of Physics, IIUI, Pakistan

Thesis title: *“Analysis of AC and DC magnetic properties of Cr_2O_3 coated $MnFe_2O_4$ nanoparticles”*

14. Mr. Raja Zohaib Rasool

MS (Physics) thesis 2019, Department of Physics, IIUI, Pakistan

Thesis title: *“Temperature dependent magnetic properties of multiferroic (MCr_2O_4 , $M = Co$ and Ni) nanoparticles.”*

15. Mr. Faheem Ullah

MS (Physics) thesis 2019, Department of Physics, IIUI, Pakistan

Thesis title: *“Fabrication of bifunctional $GO/ZnO/MnPs$ nanocomposites for dye degradation”*

16. Mr. Hamid Zahid Khokhar

MS (Physics) thesis 2019, Department of Physics, IIUI, Pakistan

Thesis title: *“Structural and magnetic properties of Mg doped multiferroic $NiCr_2O_4$ nanoparticles”*

17. Mr. Ehtesham Ali

MS (Physics) thesis 2018, Department of Physics, IIUI, Pakistan

Thesis title: *“Magnetic properties of $Co_{1-x}Mn_xCr_2O_4$ nanoparticles.”*

18. Mr. Zafar Iqbal

MS (Physics) thesis 2018, Department of Physics, IIUI, Pakistan

Thesis title: *“Temperature dependent magnetic response of spinel $MgFe_2O_4$ nanoparticles”*

19. Mr. Naman Ahmed

MS (Physics) thesis 2018, Department of Physics, IIUI, Pakistan

Thesis title: “*Structural and magnetic properties of $Ni_{1-x}Mn_xCr_2O_4$ nanoparticles.*”

20. Mr. Habib Ur Rahman

MS (Physics) thesis 2018, Department of Physics, IIUI, Pakistan

Thesis title: “*Dielectric properties of $Co_{1-x}Mn_xCr_2O_4$ nanoparticles.*”

21. Mr. Noman Saeed

MS (Physics) thesis 2018, Department of Physics, IIUI, Pakistan

Thesis title: “*Effect of SiO_2 coating on dielectric properties of NiO nanoparticles.*”

22. Mr. Ghaznfar Mehboob

MS (Physics) thesis 2017, Department of Physics, IIUI, Pakistan

Thesis title: “*Temperature dependent magnetic properties of uncoated and SiO_2 coated $CoCr_2O_4$ nanoparticles*”

23. Mr. Irfan Ahmed

MS (Physics) thesis 2017, Department of Physics, IIUI, Pakistan

Thesis title: “*Effect of Mg doping on physical properties of $NiCr_2O_4$ nanoparticles.*”

24. Mr. Muhammad Ishaq

MS (Physics) thesis 2017, Department of Physics, IIUI, Pakistan

Thesis title: “*Study of spin-glass behavior in CoO coated $MnFe_2O_4$ nanoparticles.*”

25. Mr. Syed Zaeem Ul Hassan

MS (Physics) thesis 2017, Department of Physics, IIUI, Pakistan

Thesis title: “*Temperature dependent magnetic properties of ZrO_2 coated $CoFe_2O_4$ nanoparticles.*”

26. Mr. Aaqib Javed

MS (Physics) thesis 2017, Department of Physics, IIUI, Pakistan

Thesis title: “*Magnetic properties of Cr_2O_3 coated iron oxide nanoparticles.*”

27. Mr. Waqas Shoukat

(as co-supervisor)

MS (Physics) thesis 2017, Department of Physics, IIUI, Pakistan.

Thesis title: “*Synthesis and Characterization of $NiFe_2O_4$ Nanoparticles by wet chemical sol-gel method.*”

28. Mr. Jabir Zamir Minhas

MS (Physics) thesis 2016, Department of Physics, IIUI, Pakistan

Thesis title: “*Structural and magnetic properties of $BaFe_{12}O_{19}$ nanoparticles.*”

29. Mr. Muhammad Shoaib Khan

MS (Physics) thesis 2016, Department of Physics, IIUI, Pakistan

Thesis title: “*AC and DC magnetic properties of zirconium dioxide coated iron oxide nanoparticles*”

30. Mr. Syed Fahad Ali Shah

MS (Physics) thesis 2016, Department of Physics, IIUI, Pakistan

Thesis title: “*Synthesis and characterization of iron chromite nanoparticles*”

31. Mr. Shah Fahad

MS (Physics) thesis 2016, Department of Physics, IIUI, Pakistan

Thesis title: “*Synthesis and characterization of barium ferrite based nanocomposites*”

32. Mr. Yasir Mehmood

MS (Physics) thesis 2016, Department of Physics, IIUI, Pakistan

Thesis title: “*Magnetic properties of SiO_2 coated $CoCr_2O_4$ nanoparticles*”

33. Mr. Umair Rashid

MS (Physics) thesis 2016, Department of Physics, IIUI, Pakistan

Thesis title: *"Synthesis and characterization of CoCr_2O_4 nanoparticles"*

34. Mr. Asmat Ullah

MS (Physics) thesis 2016, Department of Physics, IIUI, Pakistan

Thesis title: *"Structural, dielectric and magnetic properties of $\text{Co}_{1-x}\text{Mg}_x\text{Cr}_2\text{O}_4$ Nanoparticles"*

35. Mr. Muhammad Zareef Khan

MS (Physics) thesis 2016, Department of Physics, IIUI, Pakistan

Thesis title: *"Role of cobalt oxide nanoparticles in CuTl-superconductor"*

36. Mr. Shehzad Ahmed

MS (Physics) thesis 2016, Department of Physics, IIUI, Pakistan

Thesis title: *"Vortex dynamics in NiFe_2O_4 nanoparticles/ CuTl-1223 superconductor composites"*

37. Ms. Misbah Sajjad

MS (Physics) thesis 2016, Department of Physics, IIUI, Pakistan

Thesis title: *"Synthesis and characterization of M-type hexa-ferrites nanostructured materials"*

38. Mr. Shahid Iqbal

MS (Physics) thesis 2015, Department of Physics, IIUI, Pakistan

Thesis title: *"Temperature dependent magnetic properties of silica coated maghemite nanoparticles"*

39. Mr. Syed Kaman Ali Shah

MS (Physics) thesis 2015, Department of Physics, IIUI, Pakistan

Thesis title: *"Comparison of magnetic properties of uncoated and silica coated maghemite nanoparticles"*

40. Mr. Abdul Mateen

MS (Physics) thesis 2015, Department of Physics, IIUI, Pakistan

Thesis title: *"Manufacturing of nanocomposites filled with carbon nanofibers for electromagnetic wave absorption"*

41. Mr. Adnan Razaq Qureshi

MS (Physics) thesis 2014, Department of Physics, IIUI, Pakistan

Thesis title: *"Temperature dependent magnetic properties of uncoated and coated cobalt ferrite nanoparticles"*

42. Mr. Shahid Ahmed Khan

MS (Physics) thesis 2014, Department of Physics, IIUI, Pakistan

Thesis title: *"Study of cobalt ferrite nanoparticles/ CuTl -based superconductor composites"*

43. Mr. Muhammad Mushtaq

MS (Physics) thesis 2014, Department of Physics, IIUI, Pakistan

Thesis title: *"Synthesis and characterization of nickel oxide nanostructures"*

44. Mr. Abrar Ahmed Khan

(as co-supervisor)

MS (Physics) thesis 2014, Department of Physics, IIUI, Pakistan

Thesis title: *"Berezinskii-Kosterlitz-Thouless (BKT) Transition in K-doped Fe-based superconductor"*

45. Mr. Munawar Zaman

(as co-supervisor)

MS (Physics) thesis 2014, Department of Physics, IIUI, Pakistan

Thesis title: “*Effect of Al_2O_3 nanoparticles in CuTl-based superconductor*”

46. Mr. Ghulam Hussain

(as co-supervisor)

MS (Physics) thesis 2014, Department of Physics, IIUI, Pakistan

Thesis title: “*Study of critical regime of nano (Ag)/CuTl-1223 superconductor composites via excess conductivity analyses*”

47. Mr. Liaqat Ali

MS (Physics) thesis 2014, Department of Physics, IIUI, Pakistan.

Thesis title: “*Study of iron oxide nanoparticles*”

48. Mr. Waseem Serwar

MS (Physics) thesis 2014, Department of Physics, IIUI, Pakistan.

Thesis title: “*Surface effects in ferrite nanoparticles*”

49. Mr. Khalid Khan

(as co-supervisor)

MS (Physics) thesis 2014, Department of Physics, IIUI, Pakistan.

Thesis title: “*Synthesis and characterization of Gold nanoparticles/superconductor composites*”

50. Mr. Faisal Zeb

MS (Physics) thesis 2013 at Department of Physics, IIUI, Pakistan.

Thesis title: “*Synthesis and characterization of Co-ferrite/ SiO_2 nanocomposites*”

51. Mr. Saqib Rehman

MS (Physics) thesis 2012, Department of Physics, IIUI, Pakistan.

Thesis title: “*Synthesis and characterization of spinel ferrite nanoparticles*”

52. Ms. Sumayyah Naeem

MS (Physics) thesis 2012, Department of Physics, IIUI, Pakistan.

Thesis title: “*Synthesis and characterization of ferrite nanoparticles/superconductor composites*”

53. Ms. Farah Naeem

(as co-supervisor)

MS (Physics) thesis 2012, Department of Physics, IIUI, Pakistan.

Thesis title: “*Synthesis and characterization of oxide nanoparticles/superconductor composites*”

54. Mr. Muhammad Shahid

(as co-supervisor)

MS (Physics) thesis 2012, Department of Physics, IIUI, Pakistan.

Thesis title: “*Dielectric and magnetic studies of Co-Zn ferrite/ SiO_2 nanocomposites*”

References:

1. Prof. Dr. Heinz Krenn, Institute for Physics, Karl-Franzens University, Graz, Austria.

E-mail: heinz.krenn@uni-graz.at

2. Prof Dr. Roland Wurschum, Head of Institute of Materials Physics, Dean of the Faculty of Mathematics, Physics, and Geodesy.

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3. Prof. Xianggang Qiu

Institute of Physics, SC03, Chinese Academy of Sciences, Beijing, China.

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4. Prof. Dr. Peter Knoll, Institute for Physics, Karl-Franzens University, Graz,
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5. Prof. Dr. Gunther Paltauf, Institute for Physics, Karl-Franzens University, Graz,
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