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Faculty		Arts and Basic Sciences		
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Qualification				
Year	Degree/Certificate	Name of the Institute/ University	Field of study	
2016	PhD	The Islamia University of Bahawalpur	Physics (Magnetic Materials)	
2004	MS/ MPhil	The Islamia University of Bahawalpur	Physics (Medical Physics)	
2000	Graduation	The Islamia University of Bahawalpur	Physics (Digital Electronics)	
Publications in HEC Recognized journals				
S. No	Title of Paper	Name of Journal	National/ International	Publication date
1.	Dielectric, Impedance and modulus spectroscopic studies of $\text{Co}_{0.3}\text{Cd}_{0.7}\text{Zn}_{1.5x}\text{Fe}_{2-x}\text{O}_4$ nanoparticles	Applied Physics A (Impact factor = 1.78)	International	2019
2.	Characterization of Zirconium Substituted Cobalt Zinc Ferrites Synthesized via Co-Precipitation Technique	Digest Journal of Nanomaterials and Biostructures (Impact factor = 0.84)	International	2019
3.	Effects of bismuth on structural and dielectric properties of cobalt-cadmium spinel ferrites fabricated via micro-emulsion route	Chinese Physics B (Impact factor = 1.436)	International	2019
4.	Role of Praseodymium and Neodymium on lithium ferrites and smart technological application	Results in Physics (Impact factor = 2.08)	International	2019
5.	Structural, magnetic and dielectric properties of Ni-Co	Physica B: Condensed Matter (Impact factor = 1.43)	International	2019

	doped BiFeO ₃ multiferroics synthesized via micro-emulsion route			
6.	Mechanism of the Effect of Electron Beam Melting on the Distribution of Oxygen, Nitrogen, and Carbon in Silicon	International Journal of Materials Research (Impact factor = 0.87)	International	2019
7.	A Simulation Model Approach to Analysis of High Breakdown Voltage in Normally-Off 4h-SiC Vertical Junction Field Effect Transistor	Journal of Ovonic Research (Impact factor = 0.74)	International	2018
8.	Dose verification of volumetric-modulated arc therapy using one-dimensional and two-dimensional dosimeters	Journal of Radiotherapy in Practice ESCI	International	2018
9.	Thermogravimetric analysis, optical and dielectric properties of newly developed LiNi _{0.5} Pr _x Fe _{2-x} O ₄ nanocrystalline ferrites	Digest Journal of Nanomaterials and Biostructures (Impact factor = 0.84)	International	2018
10.	Intensity modulated radiation therapy: A review of current practice and future outlooks	Journal of Radiation Research and Applied Sciences ESCI	International	2018
11.	Quality Assurance of Volumetric-Modulated Arc Therapy Head and Neck Cancer Treatment Using Presage® Dosimeter	Journal of Radiotherapy in Practice ESCI	International	2018
12.	Design and Optical Modeling of a Low-Profile Stationary Concentrating Solar Collector for Medium Temperature Heat Supply	Journal of Telecommunication, Electronic and Computer Engineering Scopus index	International	2018
13.	Structural, Morphological and optical investigations of silver nanoparticles synthesized by sol-gel auto combustion Method	Digest Journal of Nanomaterials and Biostructures (Impact factor = 0.84)	International	2018
14.	Dosimetric, Radiobiological and Secondary Cancer Risk Evaluation in Head-and-Neck Three-Dimensional Conformal Radiation Therapy, Intensity-Modulated Radiation Therapy, and Volumetric Modulated Arc Therapy: A Phantom Study	Journal of Medical Physics ESCI	International	2018

15.	Removal of SiC from Silicon After Electron Beam Melting Technique on Industrial Scale	Silicon (Impact factor = 1.2)	International	2018
16.	Solid State Synthesis and Characterization of Spintronics Material $Hg_{0.8}Cd_{0.2}Te$	Journal of applied & Emerging Sciences	National	2018
17.	Measurement of ambient gamma radiation levels at different localities of Quetta, Pakistan	Interciencia Journal (Impact factor = 0.28)	International	2017
18.	Improvement of solar cell performance after oxygen removal by electron beam melting	Silicon (Impact factor = 1.2)	International	2017
19.	Developmental and Reproductive Toxicity of Hydrothermally Synthesized Zirconium dioxide Nanoparticles	Interciencia Journal (Impact factor = 0.28)	International	2017
20.	New $LiCo_{0.5}Pr_xFe_{2-x}O_4$ nanoferrites: Prepared via low cost technique for high density storage application	Ceramics International (Impact factor = 2.98)	International	2017
21.	Evaluation and comparison of dc resistivity of $NiZr_xCo_xFe_{2-2x}O_4$, $Ni_{0.5}Sn_{0.5}Co_xMn_xFe_{2-2x}O_4$, $Mg_{1-x}Ca_xNi_yFe_{2-y}O_4$ and $Mg_{1-x}Ni_xCo_yFe_{2-y}O_4$ nanocrystalline materials	Materials Research Express (Impact factor = 1.06)	International	2017
22.	New $LiNi_{0.5}Pr_xFe_{2-x}O_4$ Nanocrystallites: Synthesis Via Low Cost Route for Fabrication of Smart Advanced Technological Devices	Ceramics International (Impact factor = 2.98)	International	2017
23.	Redistribution of carbon from silicon by electron beam melting	Digest Journal of Nanomaterials and Biostructures (Impact factor = 0.84)	International	2017
24.	A comparative study of 16-frame and 8-frame gated SPECT imaging for determination of left ventricular volumes and ejection fraction	Science International (Impact factor = 0.75)	International	2017
25.	Morphological and magnetic behavior of neodymium doped	Digest Journal of Nanomaterials and	International	2017

	LiNi _{0.5} Fe ₂ O ₄ nanocrystalline ferrites preparedvia micro-emulsion technique	Biostructures (Impact factor = 0.84)		
26.	The Effect Of Rare Earth Dy ³⁺ ions on Structural, Dielectric and Electrical Behavior Of Ni _{0.4} Co _{0.6} Dy _y Fe _{2-y} O ₄ Nano-FerritesSynthesized By Wet Chemical Approach	Digest Journal of Nanomaterials and Biostructures (Impact factor = 0.84)	International	2017
27.	A Diagonosing Case of the Eye and Orbital Tumor through B-Scan	Science International (Impact factor = 0.75)	International	2016
28.	Enhanced Dielectric and Photocatalytic Behaviour of Dy-Co Co-Doped Multiferroic BiFeO ₃ Nanoparticles	Digest Journal of Nanomaterials and Biostructures (Impact factor = 0.84)	International	2016
29.	Study of Current-voltage Characteristic Using Deep Level Transient Spectroscopy Technique of Schottky Diode Made of SiC	Journal of applied & Emerging Sciences	National	2016
30.	Structural and Electromagnetic Studies of Ni _{0.7} Zn _{0.3} Ho _{2x} Fe _{2-2x} O ₄ Ferrites	Ceramics International (Impact factor = 2.98)	International	2016
31.	Structural, Morphological and Electrical Properties of Heat Treated CaHPO ₄ Biomaterials	Optoelectronics and Advanced Materials (Impact factor = 0.47)	International	2015
32.	Impacts of Neodymium on Structural, Spectral and Dielectric Properties of LiNi _{0.5} Fe ₂ O ₄ Nanocrystalline Ferrites Fabricated Via Micro-Emulsion Technique	Physica E (Impact factor = 2.22)	International	2015
33.	Rare Earth Tb ₃₊ Doped LaFeO ₃ Nanoparticles: New Materials for High Frequency Devices Fabrication	Ceramics International (Impact factor = 2.98)	International	2015
34.	Structural and Electromagnetic Behavior Evaluation of Nd-Doped Lithium-Cobalt Nanocrystals for Recording Media Applications	Journal of Alloys and Compounds (Impact factor = 3.13)	International	2015
35.	La _{1-x} Eu _x FeO ₃ Nanoparticles: Fabrication Via Micro-Emulsion Route for High Frequency Devices Applications	Journal of Alloys and Compounds (Impact factor = 3.13)	International	2015
36.	Characterization of Ingan by Means of I-V Measurements of Respective Light-Emitting Diode (LED) by DLTS	Arabian Journal for Science and Engineering (Impact factor = 0.86)	International	2015
37.	A Comparative Study of Crop Classification by Using Radiometric and Photographic	Sindh Univ. Res. Jour	National	2015

	Data			
38.	Conformal Coating of Cobalt-Nickel Layered Double Hydroxides Nanoflakes on Carbon Fibers for High-Performance Electrochemical Energy Storage Supercapacitor Devices	Electrochimica Acta (Impact factor = 4.79)	International	2014
39.	Characterization of ZnO by mean of I-V measurement of respective schottky diode by DLTS	Journal of applied and Emerging Sciences	National	2013
40.	Characterization of ZnO by means of C-V measurement of respective schottky diode by DLTS	Journal of applied and Emerging Sciences	National	2013
41.	Characterization of SiC by means of C-V measurement of respective schottky diode by DLTS	Journal of applied and Emerging Sciences	National	2012
42.	Characterization of InGaN by means of C-V measurement of respective Light Emitting Diode (LED) by DLTS	Journal of applied and Emerging Sciences	National	2011
		Total Impact factor =		

Paper Presented

S. No	Title of Paper	Name of Conference	National/ International	Date
1	Comparison of rare earth cation doping for structural and magnetic properties	2nd Conference on Frontiers of Nanoscience and Nanotechnology, PINSTECH, Islamabad	National	September 2015.
2	Impacts of rare earth cation on the structure, dielectric and magnetic properties of ferrites', Presented poster in conference	nanomagnetism 2015 at NCP, Islamabad.	International	February 2015
3	Synthesis of Starch Coated Iron Oxide Nanoparticles by Co-precipitation, Pakistan.	International Scientific Spring 2013, Hosted by ICTP, Italy and Organized by National Centre of Physics, Islamabad	International	March 2013
4	Comparison of IMRT vs IMPT	11th Shaukat Khanum Cancer Symposium Costs of Cure, Lahore, Pakistan.	National	November 2012

Books Authored/ Edited

S. No	Name of book	Publisher	ISBN

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Work Experience				
S. No	From (year)	To (year)	Name of the Institution/ Organization	Position held
1	2019	To date	Balochistan University of Information Technology, Engineering and Management Sciences (BUIITEMS) Quetta-Pakistan	Associate Professor
2	2009	2019	Balochistan University of Information Technology, Engineering and Management Sciences (BUIITEMS) Quetta-Pakistan	Assistant Professor
3	2006	2009	Balochistan University of Information Technology, Engineering and Management Sciences (BUIITEMS) Quetta-Pakistan	Lecturer
4	2004	2006	Govt. College of Technology (GCT)Bahawalpur-Pakistan	Lecturer
5	2002	2004	Bahawalpur Study Center (Rays College), Allama Iqbal Open University Islamabad-Pakistan	Lecturer
6	2000	2002	Govt. College of Technology (GCT)Bahawalpur-Pakistan	Lecturer
Area of specialization			Material Science	
Expertise			Medical Physics, Magnetic materials, Nanotechnology, dielectrics ceramics	
HEC Approved supervisor			Yes	
If Yes, provide HEC URL			https://www.hec.gov.pk/english/scholarshipsgrants/ASA/Pages/APS-EPORTAL.aspx ID#19184	
Research grants/ Projects				
Additional Information				
<p>I did my PhD work on the nano-ferrite materials and its analysis. I submitted my thesis entitled “Impacts of Rare Earth Cations on the Properties of Lithium Based Spinel Ferrites”. Where substitution of rare earth metals praseodymium and neodymium on lithium ferrites was carried out. The impacts of these rare earth metals on thermal, structural, magnetic and dielectric properties were studied. The possible application of these ferrites for high frequency devices and electromagnetic application were studied</p> <p>I joined Balochistan University of Information Technology, Engineering and Management Sciences (BUIITEMS) as lecture in September 2006. This university is newly chartered by government of Pakistan. Here establishment of lab is necessary for B.S. Physics program and applied physics for engineering classes like Petroleum & Gas engineering, Electronics engineering, Computer engineering, Textile engineering. I prepare a PC-1 report for this purpose to HEC through BUIITEMS. This grant of about 39 Million was approved and lab equipments have been purchased under my supervision. The syllabus was not yet decided; I conducted the 1st Board of study to finalize the syllabus as coordinator. Also conduct practical in the subjects relating to physics. The whole work was under my control. My research work was paused due to these activities.</p> <p>Being the Faculty Member and working as a Lecturer in the Basic Sciences Department college of</p>				

technology Bahawalpur, Pakistan my responsibilities are:

- To develop and prepare syllabus and lesson plans based on course outlines for Diploma level to Graduation level classes.
- To establish a system of student evaluation and assessment to ensure high standard of academic performance and credibility for Mechanical, Electrical, Electronics, Civil, Telecommunication, Computer, and Auto & Forming Technologies.
- To conduct lectures according to the specified schedules.
- To plan, develop and implement practical activities to support the academic and curriculum development.

Working as a **Member** of the Graduate Studies, all the Technologies in college of Technology Pakistan, my responsibilities were :

- To assess the graduate (Mechanical production, civil communication, Electrical and Electronics) students.
- To help Mechanical Department, in organizing the curriculum.

In addition to teach computer science and information technology to graduation level students at the study center Allama Iqbal Open University, my additional responsibilities were to develop and prepare lesson plans of the subjects like, Basic Electronics, Electricity and Magnetism, and Digital Logic Design.