


Curriculum Vitae

Dr. Jafar Khan Kasi

Professor

Personal Information

Nationality	Pakistani	
Department	Physics	
Faculty	Faculty of Physical and Environmental Sciences	
University	University of Balochistan, Quetta	
Mailing Address	Department of Physics, Office # F-26, University of Balochistan, Quetta	
Contact No	0336-2744633	
Personal Email	jafarkhankasi@gmail.com	
Official Email	jafarkhankasi@um.uob.edu.pk	

Professional Summary

Experienced academic and researcher in Physics with a strong specialization in electronics, microelectronics fabrication, circuit theory, digital electronics, and nanotechnology. Holds a Master of Science in Physics with distinction from the University of Balochistan, and both MS and PhD degrees in Microelectronics Technology from the Asian Institute of Technology (AIT), Thailand. Active in teaching and academic leadership since 2007, having served as Lecturer, Assistant Professor, Associate Professor, and Professor at the University of Balochistan. Authored and co-authored over 100 publications in international journals and conference proceedings.

I'm passionate about innovation in sustainable energy technologies and advancing scientific knowledge through meaningful research and international collaboration. I welcome opportunities to connect with fellow researchers, institutions, and industry partners in related fields.

- Nanotechnology
- Green synthesis of nanoparticles
- Dye-sensitized solar cells (DSSCs)
- Solar thermal setups / energy systems
- Microelectronics fabrication
- Sustainable materials
- Renewable energy research

Articles published (n)	68			
W-Category articles (n)	27			
X-Category articles (n)	12			
Y-Category articles (n)	11			
Z-Category articles (n)	18			
Books published (n)	3			
Projects completed (n)	National	3	International	
MS./M.Phil. produced (n)	22			
Ph.D. produced (n)	5			
Patents registered (n)	0 (one submitted)			
Honors and Awards	Best Paper Award in International conference on Innovation challenges in multidisciplinary research and practice (ICMRP) Kuala Lumpur Dec13-14, 2013			

Research Pages and Accounts

Title	Links
Web of Science	https://mjl.clarivate.com/home
Scopus	https://www.scopus.com/authid/detail.uri?authorId=36610225600
Google Scholar	https://scholar.google.com/citations?user=jkxmhNwAAAAJ&hl=en
ResearchGate	https://www.researchgate.net/profile/Jafar-Khan-Kasi?ev=hdr_xprf
ORCID	https://orcid.org/0000-0003-3926-0806
Academia	https://xix.academia.edu/ProfDrJafarKasi
ScholarGPS® ID	https://scholargps.com/scholars/43708357866853/jafar-khan-kasi

Areas of Research Interests/ Specialization

▪ Nanotechnology, Synthesis of nanofabrication's
▪ Nanoparticle synthesis
▪ Microelectronics
▪ Dye sensitized solar cells
▪ Solar thermal systems
▪ Green synthesis
▪ Synthesis of Carbon nanotube

Education

Degree	Field of Study	Institution	Year
Post-Doctorate			
Ph.D.	Microelectronics	Asian Institute of Technology (AIT)Thailand	2012
M.Phil./MS	Microelectronics	Asian Institute of Technology (AIT)Thailand	2010
M.Sc./M.A.	Physics	University of Balochistan, Quetta Pakistan	1999
B.Sc./B.A	Physics, Maths, Stats	Govt Science Postgraduate College Quetta	1994

Honors and Awards

Title of Award (s)	Institutions	Year
2 nd Position in MSc Physics	University of Balochistan, Quetta Pakistan	1999

Thesis/Dissertations

Thesis Title	Degree	University	Year
Characterizations and applications of anodic aluminum oxide membrane for fabrication of three-dimensional microstructures	Ph.D.	Asian Institute of Technology (AIT)Thailand	2012
Protein sensor for the waste dialysate material	MS	Asian Institute of Technology (AIT)Thailand	2010

Scholarships and Post-Doctoral Fellowships

Programs	Institution	Year
MS/M.Phil.		
Ph.D.		
Post doctorate		

Professional Experience

Position	Institution/Organization	Duration	Responsibilities
		From to	

Academic Appointments

Position	Institution	Duration	Years
Professor	University of Balochistan, Quetta Pakistan	June 2023 to date	2.5 years
Associate Professor	University of Balochistan, Quetta Pakistan	July 2020 to June 2023	2 years
Assistant Professor	University of Balochistan, Quetta Pakistan	October 2012 to June 2020	7.5 years
Lecturer	University of Balochistan, Quetta Pakistan	July 2007 to October 2012	5.5 years
Lecturer	Govt Postgraduate College Quetta	April 2007 to July 2007	3 months
Lecturer	Balochistan Residential College Loralai	July 2000 to April 2007	7 years

Administrative Roles (Internal at UoB)

Role	Institution	Years
Dean		
Chairperson	Department of Physics, University of Balochistan, Quetta Pakistan	March 2023 to March 2025 And September 2025 to date....
Chairperson	Department of Renewable Energy, Energy University of Balochistan, Quetta Pakistan	March 2017 to March 2023
Coordinator M.Phil. Program	Department of Physics, University of Balochistan, Quetta Pakistan	April 2014 to June 2022
Focal Person of Turnitin	Department of Physics, University of Balochistan, Quetta Pakistan	2017 to date.....

Courses Taught

Course Title	Level	Years
Modern Physics	BS Physics	Teach since 2018
Basic Electronics	MSc Physics	Teach from 2007 to 2014
Power Electronics	BS Renewable Energy	Teach from 2018 to 2022
Introduction to Nanotechnology	BS Physics	Teach since 2018
Nanotechnology and Energy	BS Renewable Energy	Teach from 2018 to 2023
Renewable Energy	BS Renewable Energy/ MSc Physics	Teach from 2018 to 2022
Microelectronics	MS/M.Phil Physics	Teach since 2014
Nanoscience and Nanotechnology	MS/M.Phil Physics	Teach since 2014
Characterization of Solid Surfaces	Ph.D Physics	Teach since 2014
Nanomaterials and Nanotechnology	Ph.D Physics	Teach since 2014

Courses Developed

Course Title	Level	Years
Modern Physics	BS	
Basic Electronics	BS	
Power Electronics	BS	
Introduction to Nanotechnology	BS	
Nanotechnology and Energy	BS	
Renewable Energy	BS	
Microelectronics	MS/M.Phil	
Nanoscience and Nanotechnology	MS/M.Phil	
Characterization of Solid Surfaces	Ph.D	
Nanomaterials and Nanotechnology	Ph.D	

Publications

Journal Articles		
No.	Title	Category/Impact Factor
2025 (2)		
1.	Rohi, H., Kasi, A. K., Kiran, S., Ullah, A., Kasi, J. K., & Bokhari, M. (2025). Template-assisted growth of micro-excavated PDMS layer for fabrication of free standing TENG and its application as a self-powered sensor for Oscillation. <i>Journal of Polymer Research</i> , 32(8), 276.	W / IF: 2.80
2.	Ali, M., Khan, Q., Din, M. F. U., Kasi, J. K., Kasi, A. K., Ali, A., & Ullah, S. (2025). Simulation-based optimization of CdS/CdTe solar cells incorporating MXene-enhanced SnO ₂ buffer layer: insights from experimentally validated material properties. <i>Solar Energy</i> , 294, 113510.	W / IF: 6.00
2024 (1)		
3.	Bugti, S., Kasi, A. K., Ullah, S., & Kasi, J. K. (2023). Self-powered TENG probe for scanning surface charge distribution. <i>Nanotechnology</i> , 35(6), 065707.	W / IF = 3.50
2023 (1)		

4.	Ahmed, S., Kasi, J. K., Kasi, A. K., Bokhari, M., Bilal, A., & Ali, S. W. (2023). Phyto-mediated synthesis of enhanced band gap ZnO and TiO ₂ nanoparticles using Pisum sativum peels extract: comparison of their structural, optical, photocatalytic and antifungal characteristics. <i>Chemical Papers</i> , 77(12), 7697-7715.	W / IF = 2.146
	2022 (3)	
5.	Ayaz, M., Khan Kasi, J., Khan Kasi, A., Bokhari, M., & Boschloo, G. (2022). Improved dye regeneration through addition of a triphenylamine electron donor in iodide-based electrolytes for dye-sensitized solar cells. <i>ACS Applied Energy Materials</i> , 5(4), 4240-4246.	W / IF: 6.959
6.	Bilal, A., Kasi, J. K., Kasi, A. K., Bokhari, M., Ahmed, S., & Ali, S. W. (2022). Environment friendly synthesis of nickel ferrite nanoparticles using Brassica oleracea var. capitata (green cabbage) as a fuel and their structural and magnetic characterizations. <i>Materials Chemistry and Physics</i> , 290, 126483.	W / IF: 4.778
7.	Ullah, S., Din, M. F. U., Khan Kasi, J., Khan Kasi, A., Vegso, K., Kotlar, M., ... & Fakharuddin, A. (2022). Mesoporous SnO ₂ nanoparticle-based electron transport layer for perovskite solar cells. <i>ACS Applied Nano Materials</i> , 5(6), 7822-7830.	W / IF:5.097
	2021 (2)	
8.	Rafique, S., Kasi, A. K., Kasi, J. K., Bokhari, M., & Shakoor, Z. (2021). Fabrication of Br doped ZnO nanosheets piezoelectric nanogenerator for pressure and position sensing applications. <i>Current Applied Physics</i> , 21, 72-79.	W / IF: 3.100
9.	Ayaz, M., Kasi, J. K., Kasi, A. K., Bokhari, M., Sohail, M., & Ullah, S. (2021). Natural plant trifolium pratense, mirabilis jalapa and bassia scoparia extract used as photosensitizer in dye-sensitized solar cell. <i>Iranian Journal of Chemistry and Chemical Engineering</i> , 40(3), 872-880.	W / IF: 1.903
	2020 (2)	
10.	Aminullah, A. K. K., Najma, B., Kasi, J. K., Rafique, S., & Bokhari, M. (2020). Fabrication of piezoelectric nanogenerator using 3D-ZnO nanosheets and optimization of charge storage system. <i>Materials Research Bulletin</i> , 123, 110711.	W / IF:5.600
11.	Aminullah, Kasi, A. K., Kasi, J. K., Uddin, M., & Bokhari, M. (2020). Triboelectric nanogenerator as self-powered impact force sensor for falling object. <i>Current Applied Physics</i> , 20(1), 137-144.	W / IF: 2.856
12.	Ajmal, S., Bokhari, M., Kasi, A. K., Kasi, J. K., & Sohail, M. (2020). Effect of Titanium Substrate Surface on the Titanium Oxide Membrane Pore Diameter, Formed upon Anodization in the Presence of Fluoride Ions. <i>Theoretical and Experimental Chemistry</i> , 56(1), 26-32.	W / IF: 1.392
	2019 (1)	
13.	Kakar, M. A., Kasi, J. K., Kasi, A. K., Bokhari, M., Latif, M., & Ayaz, M. (2019). The Efficiency of a Solar Cooker in Pakistan's Quetta Region. <i>Polish Journal of Environmental Studies</i> , 28(6), 4213-4220	W / IF: 1.871
14.	Latif, M., Kasi, A. K., Kasi, J. K., & Bokhari, M. (2019). Strengthening of alumina tubular membrane by Al support and its application for oil-in-water stable emulsion. <i>Microelectronic Engineering</i> , 218, 111134.	W / IF: 2.662
15.	Rafique, S., Kasi, A. K., Kasi, J. K., Aminullah, Bokhari, M., & Shakoor, Z. (2020). Fabrication of silver-doped zinc oxide nanorods piezoelectric nanogenerator on cotton fabric to utilize and optimize the charging system. <i>Nanomaterials and Nanotechnology</i> , 10, 1847980419895741.	W / IF: 3.300
	2018 (2)	
16.	Najma, B., Kasi, A. K., Kasi, J. K., Akbar, A., Bokhari, S. M. A., & Stroe, I. R. (2018). ZnO/AAO photocatalytic membranes for efficient water disinfection:	W / IF: 7.392

	Synthesis, characterization and antibacterial assay. <i>Applied Surface Science</i> , 448, 104-114.	
17.	Aminullah, Kasi, A. K., Kasi, J. K., & Bokhari, M. (2018). Fabrication of mechanically stable AAO membrane with improved fluid permeation properties. <i>Microelectronic Engineering</i> , 187, 95-100.	W / IF:2.662
	2016 (2)	
18.	Bokhari, M., Sohail, M., Kasi, J. K., & Kasi, A. K. (2016). Performance analysis of passive optical networks with energy saving through the integrated sleep mode. <i>Optical Switching and Networking</i> , 21, 16-30.	W / IF: 3.419
19.	Samiullah, A. K. K., & Kasi, J. K. Growth of ZnO Nanoneedles by Thermal Oxidation of Metallic Zinc Microparticles in Air, <i>International Journal of Chemical Engineering</i> 3 (2016) 10-13	W / IF:2.729
	2014 (1)	
20.	Kasi, J. K., Kasi, A. K., Bokhari, M., & Afzulpurkar, N. (2014). Fabrication of Zinc Oxide nanorods Based Gas Sensor. <i>World applied Science Journal</i> , 30(30), 198-204.	W / IF: 0.23
	2013 (2)	
21.	Wewala, W. A. H. S. S., Kasi, J. K., Kasi, A. K., & Afzulpurkar, N. (2013). Design, simulation and comparison of ascending and descending curvilinear microchannels for cancer cell separation from blood. <i>Biomedical Engineering: Applications, Basis and Communications</i> , 25(03), 1350037.	W / IF: 1.020
22.	Kasi, J. K., Kasi, A. K., Bokhari, M., & Afzulpurkar, N. (2013). Synthesis of Unique Structures of Carbon Nanotube at Anodic Aluminum Oxide Template. <i>Applied Mechanics and Materials</i> , 421, 319-323.	W / IF: 0.30
	2012 (04)	
23.	Kasi, J. K., Kasi, A. K., Bokhari, M., & Afzulpurkar, N. (2013). Synthesis of Unique Structures of Carbon Nanotube at Anodic Aluminum Oxide Template. <i>Applied Mechanics and Materials</i> , 421, 319-323.	W / IF: 1.128
24.	Kasi, A. K., Kasi, J. K., Afzulpurkar, N., Hasan, M. M., & Mahaisavariya, B. (2012). Bending and branching of anodic aluminum oxide nanochannels and their applications. <i>Journal of Vacuum Science & Technology B</i> , 30(3).	W / IF: 1.572
25.	Hasan, M., Kasi, A. K., Kasi, J. K., & Afzulpurkar, N. (2012). Anodic aluminum oxide (AAO) to AAO bonding and their application for fabrication of 3D microchannel. <i>Nanoscience and Nanotechnology Letters</i> , 4(5), 569-573.	W / IF: 1.128
26.	Kasi, A. K., Kasi, J. K., Afzulpurkar, N., Bohez, E., & Tuantranont, A. (2012). Continuous Voltage Detachment and Etching (CVDE) technique for fabrication of nano-porous anodic aluminum oxide (AAO) tubular membrane. <i>Nanoscience and Nanotechnology Letters</i> , 4(5), 530-536.	W / IF: 1.128
	2011 (1)	
27.	Kasi, A. K., Afzulpurkar, N., Kasi, J. K., Tuantranont, A., & Dulyaseree, P. (2011). Utilization of cracks to fabricate anodic aluminum oxide nanoporous tubular and rectangular membrane. <i>Journal of Vacuum Science & Technology B</i> , 29(4).	W / IF: 1.572
	Non-Impact Journal Papers (2010-2025)	
28.	Ajab Khan Kasi, W.M. Ashraf, Jafar Khan Kasi , S. Tayyaba, and Nitin Afzulpurkar, "Low cost nano-membrane fabrication and electro-polishing system". <i>World Academy of Science, Engineering and Technology</i> , Vol.64 (2010) 56-58.	
29.	Jafar Khan Kasi , Ajab Khan Kasi, Winadda Wongwiriyan, Nitin Afzulpurkar, Paweena Dulyaseree, Mahadi Hasan and Adisorn Tuantranont, "Synthesis of carbon nanotube and carbon nanofiber in nanopore of anodic aluminum oxide	

	template by chemical vapor deposition at atmospheric pressure”, Advanced Materials Research, Vol. 557-559 (2012) 544-549	
30.	Ajab Khan Kasi, Jafar Khan Kasi , Mahadi Hasan, Nitin Afzulpurkar, Sirapat Pratontep, Supanit Porntheeraphat, Apirak Pankiew, “Fabrication of low cost anodic aluminum oxide (AAO) tubular membrane and their application for hemodialysis”, Advanced Materials Research, Vols. 550-553 (2012) 2040-2045	
31.	Mahadi Hasan, Ajab Khan Kasi, Jafar Khan Kasi , Nitin Afzulpurkar, Supanit Porntheeraphat, Witsaroot Sripumkhai, “Fabrication of thinner anodic aluminum oxide based microchannels”, Advanced Materials Research, Vols. 550-553 (2012) 2046-2050	
32.	W.A.H.S.S.Wewala, Nitin Afzulpurkar, Jafar Khan Kasi , Ajab Khan Kasi, Amporn Poyai, Dhananjay W. Bodhale, “Design and simulation of ascending curvilinear micro channel for cancer cell separation from blood”, Advanced Materials Research, Vols. 557-559 (2012) 2361-2366	
33.	Jafar Khan Kasi , Ajab Khan Kasi, Nitin Afzulpurkar, Erik Bohez, Amporn Poyai, “Bending behaviour of nanochannels in the edges of anodic aluminum oxide membrane”, Advanced Science, Engineering and Medicine, Vol.5 (2013) 239-244	
34.	W.A.H.S.S.Wewala, Jafar Khan Kasi , Ajab Khan Kasi, Nitin Afzulpurkar, “Cell Separation Through Ascending and Descending Curvilinear Microchannels”, Applied Mechanics and Materials Vols. 300-301 (2013) 1649-1653	
35.	Jafar Khan Kasi , Ajab Khan Kasi and Muzamil Bokhari, Electrochemical Performance of Carbon Nanotube Based Supercapacitor, International Journal of Chemical, Nuclear, Metallurgical and Materials Engineering, 8(2014) 1343-1346	
36.	Muzamil Bokhari, Ajab Khan Kasi, Jafar Khan Kasi , Om Prakash Gujela, Nitin Afzulpurkar, “Improving Photoelectric conversion efficiency of DSSC using ZnO/ZnP composite materials”, International Journal of Nanomanufacturing 11, (2015) 56-63	
37.	Muzamil Bokhari, Jafar Khan Kasi , Ajab Khan Kasi and Muhammad Sohail, Sleep mode adoptive to traffic for energy efficient EPON, (Bahria University Journal of Information & Communication Technologies, 9 (2016) 01-07	
38.	Jafar Khan Kasi , Ajab Khan Kasi, Muzamil Bokhari and Muhammad Sohail, Characterization of Cracks in Tubular Anodic Aluminum Oxide Membrane, American Journal of Condensed Matter Physics 6(2016) 36-40	
39.	Aleena Zahid, Ajab Khan Kasi, Jafar Khan Kasi , Muzamil Bokhari and Humaira Abdul Wahid, Fabrication of mini-dialyzers using Anodic Aluminum Oxide and Polysulfone membrane and their comparative study for the improvement of hemodialysis to treat renal failure patients, Pure Applied Biology, 7(2018) 643-654	
40.	Syed Najeebullah, Ajab Khan Kasi, Jafar Khan Kasi , “Design, development and control of long range quadcopter”. Scientific Journal of Mehmet Akif Ersoy University 1 / 1 (September 2018): 17-21.	
41.	Muhammad Usman, Jafar Khan Kasi , Ajab Khan Kasi and Muzamil Bokhari, “Fabrication of Comb-like humidity sensor based on ZnO nanomaterials” Journal of Physics and Materials Science 1:1 (2018) 21-24	
42.	Younas Khan, Jafar Khan Kasi , Ajab Khan Kasi, “Dehydration of vegetables by using indirect solar dryer”. Scientific Journal of Mehmet Akif Ersoy University 1 / 1 (September 2018): 22-28	
43.	Muhammad Tariq, Jafar Khan Kasi , Samiullah, and Ajab Khan Kasi, Fabrication of ZnO Nanorods Based Biosensor via Hydrothermal Method International Journal of Chemical and Materials Engineering, Vol:12, No:10, (2018) 571-57	

44.	Naqeebullah Kakar, Jafar Khan Kasi , Ajab Khan Kasi, Samiullah Tareen, “Production Of Biogas As An Energy Source In Colder Area, Using Flat Plate Thermal Collector”, Scientific Journal of Mehmet Akif Ersoy University 1 / 2 Special Issue (September 2018): 29-35	
45.	Rehana Nazir, Ajab Khan Kasi, Jafar Khan Kasi , “Fabrication of microinjector system (SIM) using anodic aluminum oxide”, Scientific Journal of Mehmet Akif Ersoy University 1 / 2 Special Issue (September 2018): 36-39	
46.	Nadia Sarwar, Jafar Khan Kasi , “Enhancing the Productivity of Water purification through Solar Basin Desalination Process”, Journal of Physics and Materials Science 1:1(2018)25-27	
47.	Jafar Khan Kasi , Muhammad Ayaz, Ajab Khan Kasi, Muzamil Bokhari and Muhammad Sohail “Eventually Dye Sensitized Solar Cell Moving Towards Naturel”, International Journal of Advances in Science Engineering and Technology, Vol-6, Iss-1, Spl. Issue-2 (Mar.-2018) 01-03	
48.	Muhammad Ayaz, Jafar Khan Kasi , Ajab Khan Kasi, Muzamil Bokhari, “Hydrothermal Growth of ZnO Nanorods for Photoelectrode of Dye-Sensitised Solar Cell”, Journal of Physics and Materials Science 1:1 (2018) 09-11	
49.	Sami Ullah and Jafar Khan Kasi , “Fabrication of Low-Cost Solar Flat Plate Collector”, Scientific Journal of Mehmet Akif Ersoy University, techno-Science 2:2 (2019) 27-31	
50.	Masood-ur-Rehman, Ajab Khan Kasi, Jafar Khan Kasi , Muzamil Bokhari and Muhammad Sohail. Design and development of sEMG Prosthetics for recovering amputation of the human hand, Pure and Applied Biology 8:3 (2019)1935-1942	
51.	Sidra Dilshad, Jafar Khan Kasi , Sami Ullah and Ajab Khan Kasi, “Design and analysis of solar air heating system for room”, Scientific Journal of Mehmet Akif Ersoy University, techno-Science 2:3 (2019) 55-62	
52.	Asia Siddique, Jafar Khan Kasi , Ajab Khan Kasi, Muzamil Bokhari and Muhammad Sohail, “Design, Development and Performance of Soft Actuator Based orthotics for Paralysed Hand Rehabilitation”, Journal of Physics and Materials Science 2:1 (2019) 07-12	
53.	Gul Jahan, Muhammad Sohail, Muzamil Bokhari Ajab Khan Kasi and Jafar Khan Kasi , “Polarization division multiplexed system for VLC using RGB LEDs”, Journal of Physics and Materials Science 2:1 (2019) 1-5	
54.	Muhammad Ayaz, Jafar Khan Kasi , Ajab Khan Kasi, samiullah and Mustafa Ali, “Toward Eco Green Energy: Fabrication of DSSC from Recycled Phone Screen”, The Open Access Journal of Resistive Economics (OAJRE), Vol.8, Issue No. 2 (2020) 63-68.	
55.	Nabeela Jogaizai, Muhammad Sohail, Muzamil Bokhari Ajab Khan Kasi and Jafar Khan Kasi , “Performance Investigation of Silicon Photo-Voltaic Solar Panel with Concentrator”, Journal of Physics and Materials Science 2:1 (2020) 36-39	
56.	Muhammad Rameez, Ajab Khan Kasi, Jafar Khan Kasi , Muzamil Bokhari and Muhammad Sohail, “Design and Development of Quadcopter for Counter Terror Attack”, Journal of Physics and Materials Science 3:1 (2020) 6-11	
57.	Ishaq Khan, Muhammad Sohail, Muzamil Bokhari Ajab Khan Kasi and Jafar Khan Kasi , “Assessment of Background Radiation Level in Children Hospital and Provincial Sandman Hospital Quetta City”, Journal of Physics and Materials Science 3:1 (2020) 42-48	

58.	Fahad Ahmed, Ajab Khan Kasi, Jafar Khan Kasi , Muzamil Bokhari and Muhammad Mechanical design and gait control strategy for lower limb prosthesis, Journal of Physics and Materials Science 3:1 (2020) 1-5	
59.	Asma Khaliq, Muhammad Sohail, Muzamil Bokhari, and Jafar Khan Kasi , (2023). Low Cost Compound Parabolic Concentrator for the Photovoltaic System. European Academic Research, X(12), 4271-4277	
60.	Shantul Jan, Jafar Khan Kasi and Ahmed Bilal, Green synthesis of metal oxide nanoparticles using plant extract, its structural and optical properties and application, Journal of Applied Physics (IOSR-JAP) Volume 16, Issue 6 (2024)10-16	
61.	Iraj Batool, Jafar Khan Kasi , Ahmed Bilal, Shehzad Ahmed, Ajab Khan Kasi, Environment-Friendly Synthesis of Copper Ferrite Nanoparticles and Their Characterizations, Journal of Research in Environmental and Earth Sciences, Vol. 10, Issue 12 (2024) 66-70.	
62.	Kalsoom Bibi, Ajab Khan Kasi, Samiullah, Jafar Khan Kasi , Muzamil Bokhari, Fabrication of MXene Doped Triboelectric Nanogenerator for Sensing Application, Journal of Physics and Materials Science Volume 3 (2024) 30-32	
63.	Sumaira, Ajab Khan Kasi, Samiullah, Jafar Khan Kasi , Muzamil Bokhari, Growth of Metal Oxide Nanostructure Thin Film for Optoelectronics Application, Journal of Research in Environmental and Earth Sciences, Vol. 10, Issue 12 (2024) 71-74.	
64.	Hafsa Bibi, Ajab Khan Kasi, Samiullah, Jafar Khan Kasi , Muzamil Bokhari, Growth of Nickel Oxide Thin Film via Anodization Method, Journal of Physics and Materials Science Volume 3 (2024) 33-37	
65.	Bibi Zahida, Jafar Khan Kasi , Ahmed Bilal, Shehzad Ahmed, Syed Wajahat Ali, Ajab Khan Kasi, “Green Synthesis of Cobalt Doped Nickel Ferrite Nanoparticles via Extract of Vitis Vinifera and its impact on Structural, Optical and Magnetic Properties”, Journal of Nanoscope Volume 5, Issue 2, (2024) 101-118	
66.	Amanullah, Jafar Khan Kasi , Ahmed Bilal, Ajab Khan Kasi, Shehzad Ahmed, Syed Wajahat Ali, Brassica Rapa Extract-Mediated Green Synthesis of Zn-Doped Nickel Ferrite Nanocomposites and its Characterization, Journal of Nanoscope Volume 5, Issue 2, (2024) 147-157	
67.	Fazal Muhammad Kakar, Jafar Khan Kasi , Ahmed Bilal, Shehzad Ahmed, Ajab Khan Kasi, Iqra Ibrahim, Ecological Sound Synthesis of ZnO Nanoparticles, Their Structural Characterization and Application in Wastewater Remediation, Materion, Vol. 2. Issue No. 1 (2025) 14 – 20.	
68.		
	Books	
	2016	
1.	Jafar Khan Kasi , Ajab Khan Kasi and Nitin Afzulpurkar, “Characterizations and Applications of Anodic Aluminum Oxide Membrane for Fabrication of Three-Dimensional Microstructures” (2016), LAP LAMBERT Academic Publishing, Saarbrücken, GERMANY ISBN: 978-3-659-87620-2	
	2013 (2)	
2.	Jafar Khan Kasi , Ajab Khan Kasi, Nitin Afzulpurkar, “Protein sensor for the waste dialysate” (2013), LAP LAMBERT Academic Publishing, Saarbrücken, GERMANY ISBN: 978-3-659-39275-7	

3.	Jafar Khan Kasi , W.A.H.S.S. Wewala, Ajab Khan Kasi, “Cancer Cell Separation Through Curvilinear Channel” (2013), LAP LAMBERT Academic Publishing, Saarbrücken, GERMANY ISBN: 978-3-659-42241-6	
	Book Chapters	
	2025	
1.		

Citations (As of March 26, 2026)

Google Scholar	
Citations	648
Publications	74
h-index	15
i-10 index	25
Web of Science	
Citations	
Publications	
h-index	

Conferences Presentations with Abstracts Publications

Conference Title	Year and Location
1. Jafar Khan Kasi , Ajab Khan Kasi, Nitin Afzulpurkar. Effect of Adhesive Layer of Chromium on The Fabrication of Zinc Oxide Nanorods, 4th International Conference on Technology and Science, Turkey, November 18-21, 2021	
2. Younas Khan, Jafar Khan Kasi , Ajab Khan Kasi, Dehydration of Fruits and Vegetables by Using Indirect Solar Dryer, 1 st International conference on material science and Nanotechnology 2018 (ICMSN-2018), Quetta, Pakistan, September 3-4, 2018	
3. Jafar Khan Kasi , Ajab Khan Kasi, Muzamil Bokhari and Muhammad Sohail, Characterization of Cracks in Tubular Anodic Aluminum Oxide Membrane, the World Conference on Engineering and Applied Sciences (WCEAS-2016), Kuala Lumpur, Malaysia, May 28-29, 2016.	
4. Muhammad Ayaz, Jafar Khan Kasi , Ajab Khan Kasi, Samiullah and Mustafa Ali, “Fabrication of Dye Sensitized Solar Cells Using Dye N719 Efficiency and comparison under Sun, Indoor and Moon Light”, 6th International Mechanical; Engineering Congress. (IMEC-2016), Karachi, Pakistan, July 15-16, 2016.	
5. Khurram Shehzad, Ajab Khan Kasi and Jafar Khan Kasi , Effect of Pressure Increases During Increase of Temperature in An Autoclave for the Growth of Bulk ZnO Single Crystals, International Conference on Advanced Materials and Emerging Technologies (ICAMET 2016) Lahore, Pakistan, November 28–29, 2016.	
6. Jafar Khan Kasi , Ajab Khan Kasi and Muzamil Bokhari, Study of Cracks in mom Planar Anodic Aluminum Oxide Membrane, 3rd International Conference on Agricultural, Biotechnology, Biological and Biosystem Engineering (ICABBBE 2016), Jakarta, Indonesia, December 16-17, 2016.	

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8. Ajab Khan Kasi, **Jafar Khan Kasi** and Nitin Afzulpurkar, “New method of fabricating nanoporous anodic aluminum oxide (AAO) tubes”, Physics and chemistry of surface and interface (PCSI-38), Sandiego CA, USA, January 16-20, 2011.
9. **Jafar Khan Kasi**, Ajab Khan Kasi, Nitin Afzulpurkar, Naveed Sheikh, “Protein sensor for the waste dialysate material”, 2nd International Conference on mechanical and electronics Engineering (ICMEE), Kyoto, Japan, August 1-3, 2010.
10. Ajab Khan Kasi, **Jafar Khan Kasi**, Muhammad Waseem Ashraf, Shahzadi Tayyaba, Nitin Afzulpurkar, and Adisorn Tuantranont, “Two layered novel anodic aluminum oxide nanoporous membrane”, 2nd International Conference on mechanical and electronics Engineering (ICMEE), Kyoto, Japan, August 1-3, 2010.
11. Ajab Khan Kasi, **Jafar Khan Kasi**, Shahzadi Tayyaba, Muhammad Waseem Ashraf, Nitin Afzulpurkar, and Adisorn Tuantranont, “Fabrication of low cost nano-porous anodic aluminum oxide membrane” international conference on automation, Robotics and Control System, Orlando, FL, USA, July 12 – 14, 2010.
12. Ajab Khan Kasi, Muhammad Waseem Ashraf, **Jafar Khan Kasi**, Shahzadi Tayyaba, and Nitin Afzulpurkar, “Low cost nano-membrane fabrication and electro-polishing system”, ICNOP 2010: International Conference on Nanotechnology, Optoelectronics and Photonics, Rome, Italy, April 28- 30, 2010.
13. Ajab Khan Kasi, **Jafar Khan Kasi**, Nitin Afzulpurkar, Erik Bohez, Adisorn Tuantranont, Banchong Mahaisavariya, “Fabrication of anodic aluminum oxide (AAO) nano-porous membrane on both sides of aluminum sheet”, 2nd International Conference on mechanical and electronics Engineering (ICMEE), Kyoto, Japan, August 1-3, 2010.
14. Ajab Khan Kasi, **Jafar Khan Kasi**, Nitin Afzulpurkar, Erik Bohez, Adisorn Tuantranont, Banchong Mahaisavariya, “Novel anodic aluminum oxide (AAO) nanoporous membrane for wearable hemodialysis device”, 3rd International Conference on Communications and Electronics (ICCE), NhaTrang, Vietnam, August 11-13, 2010.
15. Muhammad Waseem Ashraf, Shahzadi Tayyaba, Nitin Afzulpurkar, Ajab Khan Kasi, AsimNisar, and **Jafar Khan Kasi**, “MEMS based biomedical microfluidic device” International Conference on Automation, Robotics and Control System, Orlando, FL, USA, July 12 – 14, 2010.
16. Shahzadi Tayyaba, Muhammad Waseem Ashraf, Nitin Afzulpurkar, Ajab Khan Kasi, and **Jafar Khan Kasi** “Design, analysis and simulation of MEMS based polymeric piezoelectric actuator for drug delivery device” International Conference on Automation, Robotics and Control System, Orlando, FL, USA, July 12 – 14, 2010.
17. Ajab Khan Kasi, **Jafar Khan Kasi**, “Actuation of robotic arm through artificial muscles and feedback network”, 2nd Annual computational Science conference, International Islamic University, Islamabad, Pakistan. October 20-25, 2013.
18. Samiullah Tareen, Ajab Khan Kasi, **Jafar Khan Kasi**, “Actuation of robotic leg through human leg motion sensing using microcontroller”, 2nd Annual computational Science conference, International Islamic University, Islamabad, Pakistan. October 20-25, 2013.
19. Muhammad Latif, Ajab Khan Kasi, **Jafar Khan Kasi**, Muzamil Bokhari and Muhammad Sohail, “Fabrication and application of AAO tubular membrane system for water filtration”, 2nd conference on Frontiers of Nanoscience and Nanotechnology, Islamabad, Pakistan. September 08-10, 2015.

20. Moiz-uddin, Ajab Khan Kasi, **Jafar Khan Kasi**, Muzamil Bokhari and Muhammad Sohail, “Design and development of microinduction device for charging energy storage components in microrobots ”, 2nd conference on Frontiers of Nanoscience and Nanotechnology, Islamabad, Pakistan. September 08-10, 2015.
21. Aminullah, Ajab Khan Kasi, **Jafar Khan Kasi**, Muzamil Bokhari and Muhammad Sohail, “Enhancement of Mechanical stability of AAO membrane by Al mesh structure” 2nd conference on Frontiers of Nanoscience and Nanotechnology, Islamabad, Pakistan. September 08-10, 2015.
22. Sabiha Ajmal, Ajab Khan Kasi, **Jafar Khan Kasi**, Muzamil Bokhari and Muhammad Sohail, “Fabrication and Application of TiO₂ membrane for drinking watertreatment”, 2nd conference on Frontiers of Nanoscience and Nanotechnology, Islamabad, Pakistan. September 08-10, 2015.
23. Samiullah, Ajab Khan Kasi, **Jafar Khan Kasi**, Muzamil Bokhari and Muhammad Sohail, “ZnO nanoballons based perovskite solar cell”, 2nd conference on Frontiers of Nanoscience and Nanotechnology, Islamabad, Pakistan. September 08-10, 2015.
24. Sumera Rafique, Ajab Khan Kasi, **Jafar Khan Kasi**, Muzamil Bokhari and Muhammad Sohail, “Fabrication of ZnO piezoelectric nanogenerator by utilizing Cu nanorods top electrode”, 2nd conference on Frontiers of Nanoscience and Nanotechnology, Islamabad, Pakistan. September 08-10, 2015.
25. Samiullah, Ajab Khan Kasi, and **Jafar Khan Kasi**, “Growth of ZnO Nanoneedles by Thermal Oxidation of Metallic Zinc Microparticles in Air” 3rd International Conference On Advances in Applied Science and Environmental Technology (ASET- 2015), Bangkok. Thailand , December 28-29, 2015.
26. Muhammad Ayaz, **Jafar Khan Kasi**, Ajab Khan Kasi, and Mustafa Ali, “Natural Plant extraction for dye sensitized solar cell (DSSC)”, 3rd International conference on Engineering and Emerging Technologies (ICEET-2016), Lahore, Pakistan, April 07-08, 2016.
27. Shamsullah Kakar, Ajab Khan Kasi, **Jafar Khan Kasi**, Muzamil Bokhari, “Fabrication of anodic aluminum oxide (AAO) membrane based microfluidic filtration device”, International Conference on Inventive Research in Science and Technology (ICIRST 2016), Pattaya, Thailand, April 16-17, 2016.
28. **Jafar Khan Kasi**, Muhammad Ayaz, Ajab Khan Kasi, Muzamil Bokhari and Muhammad Sohail “Eventually Dye Sensitized Solar Cell Moving Towards Naturel”, 314th International conferences on Engineering and Natural Science (ICENS) 1st - 2nd January, 2018 Kuala Lumpur, Malaysia
29. **Jafar Khan Kasi**, “Natural Plants Dye Extraction for Dye Sensitized Solar Cell”, 2nd International Conference on materials science and nanotechnology (MSNano-2018) Faisalabad, Pakistan, February 19-20, 2018
30. Moizuddin Moiz, Ahmed Bilal, Ajab Khan Kasi and **Jafar Khan Kasi**, Synthesis of Magnetic Nano-rods of Cobalt using Templet from the Anodization of Aluminum as Anodic Aluminum Oxide, 1st International Conference on Advances in Engineering and Technology-(ICAET-2018), Quetta Pakistan, April 02-03, 2018
31. Huzaiifa Durrani, **Jafar Khan Kasi**, Muhammad Sohail, Muzamil Bokhari and Ajab Khan Kasi, Implementation of unipolar OFDM based VLC transmission system under dimming constraint for high speed data through FPGA, 14th international conference on recent trends in Engineering and technology (RTET-2018) Pattaya, Thailand, April 24-26, 2018
32. Aleena Zahid, Ajab Khan Kasi, **Jafar Khan Kasi**, and Muzamil Bokhari, Fabrication of Minidialyzers using anodic aluminum oxide and polysulfone membrane and their comarative study for hemodialysis, 14th international conference on recent trends in Engineering and technology (RTET-2018) Pattaya, Thailand, April 24-26, 2018
33. Hikmatullah, Ajab Khan Kasi, **Jafar Khan Kasi** and Muzamil Bokhari, Fabrication of DSSCs using optimised length of Titania nanotubes on Ti substrate as an electron transporting medium, 14th

international conference on recent trends in Engineering and technology (RTET-2018) Pattaya, Thailand, April 24-26, 2018

34. **Jafar Khan Kasi**, Natural Plants dyes Extraction for Dye Sensitized Solar Cell, 2nd international conference on material science and nanotechnology 2018 (MSnano-218), Faisalabad, Pakistan, February 19-20, 2018
35. Syed Najeebullah, Ajab Khan Kasi, **Jafar Khan Kasi**, Muzamil Bokhari, M. Sohail, Design, Development and Control of Long Range Quadcopter, 1st International conference on material science and Nanotechnology 2018 (ICMSN-2018), Quetta, Pakistan, September 3-4, 2018
36. Muhammad Ayaz, **Jafar Khan Kasi**, Ajab Khan Kasi, Hydrothermal Growth of ZnO Nanorods for Photoelectrode of Dye-Sensitized Solar Cell, 1st International conference on material science and Nanotechnology 2018 (ICMSN-2018), Quetta, Pakistan, September 3-4, 2018
37. Hafeez ur Rehman, **Jafar Khan Kasi**, Natural Resource Management Particular Focus on Energy, 1st International conference on material science and Nanotechnology 2018 (ICMSN-2018), Quetta, Pakistan, September 3-4, 2018
38. Gul Zareen, **Jafar Khan Kasi**, Ajab Khan Kasi, Aminullah, Design and Fabrication of Triboelectric Nanogenerator Based Table Tennis Racket for Monitoring and Training of Table Tennis Player, 1st International conference on material science and Nanotechnology 2018 (ICMSN-2018), Quetta, Pakistan, September 3-4, 2018
39. Samiullah, Ajab Khan Kasi, **Jafar Khan Kasi**, Hydrothermal Growth of ZnO nanorods on Zinc Microspheres by Sol-gel Seeded Method, 1st International conference on material science and Nanotechnology 2018 (ICMSN-2018), Quetta, Pakistan, September 3-4, 2018
40. Aleena Zahid, Ajab Khan Kasi, **Jafar Khan Kasi**, Comparative Study of High Flux and Low Flux Polysulfone Membrane Base Mini-dialyzers, 1st International conference on material science and Nanotechnology 2018 (ICMSN-2018), Quetta, Pakistan, September 3-4, 2018
41. Hikmatullah, Ajab Khan Kasi, **Jafar Khan Kasi**, Muzamil Bokhari, Muhammad Sohail, Effect of TiO₂ Nanotubes Length on the Performance of DSSCs on Ti Substrate, 1st International conference on material science and Nanotechnology 2018 (ICMSN-2018), Quetta, Pakistan, September 3-4, 2018
42. Nadia Sarwar, **Jafar Khan Kasi**, Enhancing the Productivity of Water purification through Solar Basin Desalination Process, 1st International conference on material science and Nanotechnology 2018 (ICMSN-2018), Quetta, Pakistan, September 3-4, 2018
43. Sabiha Ajmal, Muzamil Bokhari, Ajab Khan Kasi, **Jafar Khan Kasi**, Muhammad Sohail, Desalination of Dye from Water through Nanoporous TiO₂, 1st International conference on material science and Nanotechnology 2018 (ICMSN-2018), Quetta, Pakistan, September 3-4, 2018
44. Muhammad Tariq, **Jafar Khan Kasi**, Samiullah, Ajab Khan Kasi, Fabrication of ZnO Nanorods Based Biosensor via Hydrothermal Method, 1st International conference on material science and Nanotechnology 2018 (ICMSN-2018), Quetta, Pakistan, September 3-4, 2018
45. Muhammad Tariq, **Jafar Khan Kasi**, Ajab Khan Kasi, Muzamil Bokhari, Electroplating for ZnO Based Biosensor, 1st International conference on material science and Nanotechnology 2018 (ICMSN-2018), Quetta, Pakistan, September 3-4, 2018
46. Syed Waseem Raza, Muzamil Bokhari, **Jafar Khan Kasi**, Ajab Khan Kasi, Dye-sensitized solar cell performance compared with different solvents in the electrolyte, 1st International conference on material science and Nanotechnology 2018 (ICMSN-2018), Quetta, Pakistan, September 3-4, 2018

47. Muhammad Ali Kakar, **Jafar Khan Kasi**, Ajab Khan Kasi, Samiullah Tareen, Growth of ZnO wires for the Fabrication of Perovskite Solar Cell, 1st International conference on material science and Nanotechnology 2018 (ICMSN-2018), Quetta, Pakistan, September 3-4, 2018
48. Naqeebullah Kakar, **Jafar Khan Kasi**, Ajab Khan Kasi, Samiullah Tareen, Production of Biogas as an Energy Source in Colder Area, Using Flat Plate Thermal Collector, 1st International conference on material science and Nanotechnology 2018 (ICMSN-2018), Quetta, Pakistan, September 3-4, 2018
49. Muhammad Usman, **Jafar Khan Kasi**, Ajab Khan Kasi, Muzamil Bokhari, Fabrication of Comb-like Humidity Sensor Based on ZnO Nanomaterials 1st International conference on material science and Nanotechnology 2018 (ICMSN-2018), Quetta, Pakistan, September 3-4, 2018
50. **Jafar Khan Kasi**, Sana Idrees, Ajab Khan Kasi, Muzamil Bokhari and Muhammad Sohail “Microchannel Based Filter Fabrication Using Anodic Aluminum Oxide (AAO) Membrane”, International Conference on Chemical and Biochemical Engineering (ICCB) 5th -6th December, 2018, Krabi, Thailand
51. **Jafar Khan Kasi**, “Natural Plants Dye Extraction for Dye Sensitized Solar Cell”, 3rd International Conference on materials science and nanotechnology (MSNano-2019), February 18-20, 2019, Faisalabad, Pakistan.

Conferences Organized

Year	Conference Title	Location
2018	1 st International conference on material science and Nanotechnology 2018 (ICMSN-2018), September 3-4, 2018	Quetta, Pakistan,

Workshops and Seminars Attended

Title	Workshop/Seminar Name	Location	Year	Role
1.	44 th International Nathiagali Summer College (INSC) on Physics and Contemporary Needs	held on 15 th to 20 th July 2019 at NCP, Islamabad.		
2.	Urban Infrastructure Asset Management Organized by Kyoto University Global Centre of Excellence on “Human security engineering for Asia mega cities”	at Asian Institute of Technology Thailand, March 16-20, 2009.		
3.	Two days training Workshop on “Semester System in UoB”, conducted by Faculty Training and Developing Center (FTDC) University of Balochistan,	Quetta, June 18-19, 2014.		
4.	“Project Formulation Workshop” held on 22-23 October, 2014 at Balochistan university of Information Technology, Engineering and Management Sciences, Quetta, organized by Pakistan Science Foundation, Islamabad.			
5.	One day workshop on “Developing industries driven technologies” conducted by ORIC, University of Balochistan, Quetta, with the celebration of Institute of Research Promotion, April 14, 2015.			
6.	One day “Training/Workshop on plagiarism detection service (Turitin)”, conducted by Quality Assurance directorate (QAD), University of Balochistan, Quetta, August 26, 2015.			

Workshops and Seminars Delivered

Title	Workshop/Seminar Name	Location	Year	Role
Integrating Foundational Skills with Modern Pedagogy	3 rd Conference on Leading Curriculum Transformation: organized by Javed Publishers	Quetta	November 12, 2025	Key note speaker
Solarization Balochistan: Cross-sectoral Dialogue for Decentralized Energy Solution	Roundtable Discussion organized by ISDP, Pakistan	Quetta	July 26, 2025	Participant in table talk

Short Courses/ Trainings Attended

Training/Short Course Name	Location	Year

Research Supervision

Name of Students	Thesis Title	Ph.D. Degree	Year
1- Muhammad Latif ,	Thesis Title: Fabrication of mechanically robust AAO tubular membrane and their applications for convective and conductive transfer,		graduated in July 2020
2- Muhammad Ayaz ,	Exploring Alternative Electrolytes and Dyes for Dye-Sensitized Solar Cell,		graduated in July 2022
3- Shehzad Ahmad ,	Title: Synthesis, Characterization and Applications of Metal Oxide Nanoparticles for Photocatalysis,		graduated in October 22, 2024
4- Ahmed Bilal ,	Title: Environment friendly Synthesis of Nanoparticles, Their Characterizations and Application for Wastewater Treatment,		graduated in October 22, 2024
5- Muhammad Ali ,	Title: Development of Cds/CdTe Solar Cell Using Nano Engineered Surface for Enhancement of Conversion Efficiency,		graduated on August 19, 2025
6- Syed Wajahat Ali ,	Title: Green Synthesis of Nanoparticles, Characterizations, and its Multifunctional Applications.		In Progress
7- Huzafa Durrani ,	Title: Optimized Indoor MIMO-OFDM for Visible light communications.		In Progress
Name of Students	Thesis Title	M.Phil. Degree	Year
1. Muhammad Ali ,	M.Phil. Thesis Title: Efficiency of Solar Cooker in Quetta Region		graduated in 2015.
2. Muhammad Ayaz ,	Title: Optimization of ZnO based dye sensitized solar cell (DSSC) using different types of natural dyes,		graduated in 2016.
3. Shehzad Ahmad ,	Title: Synthesis of Nanorods for Energy Harvesting,		graduated in 2015.
4. Sana Idrees ,	Title: Filter Fabrication by using Anodic Aluminum Oxide Membrane,		graduated in 2016.
5. Ahmed Bilal ,	Title: Synthesis of Magnetic Nanorods,		graduated in 2016.
6. Syed Wajahat Ali ,	Title: Synthesis and Characterization of carbon nanotube (CNT)		graduated in 2016.

7. **Iram Naz**, Title: Enhancement the efficiency of dye synthesized solar cell with the application of AAO template, graduated in 2017.
8. **Muhammad Usman**, Title: Fabrication of humidity sensors based on ZnO nanomaterials, graduated in 2018.
9. **Huzaifa Durrani**, Title: Implementation of Unipolar OFDM with Dimming using FPGA, graduated in 2018.
10. **Muhammad Younus**, Title: Dehydration of Fruits and Vegetables by using Indirect Solar Dryer, graduated in March 2019.
11. **Naqeeb Ullah**, Title: Production of Biogas as an Energy Source in Colder Area, using flat plate thermal collector, graduated in March 2019.
12. **Muhammad Tariq**, Title: Fabrication of ZnO based biosensors with high efficiency detection, graduated in April, 2019.
13. **Nadia Sarwar**, Title: Enhancing the Productivity of Water purification through Solar Basin Desalinization Process.
14. **Asia Siddique**, An EMG Controlled Exoskeleton for Paralyzed Hand Rehabilitation
15. **Gul Zareen**, Design and Fabrication of (TENG) Based Smart Racket for Monitoring and Training of Table Tennis Player.
16. **Sidra Dilshad**, Design and Analysis of Solar Air Heating System for Room
17. **Natasha Saleem**, Title: Green Synthesis of Ni Nanoparticles and applying these nanoparticles for antifungal activity.
18. **Shantul Jan**, Title: The Green Synthesis of Metal /Metal Oxide Nanoparticles using Caralluma Tubercullta Extract and its characterization. Graduated on May 21, 2025.
19. **Iraj Batool**, Title: Environment-Friendly Synthesis of Copper Ferrite Nanoparticles and Their Characterizations. Graduated on May 21, 2025.
20. **Amanullah**, Title: Green Synthesis of Zinc dopped Ni Fe₂O₄ and its Application for Antimicrobial Activity **Graduated** in December 5, 2025
21. **Muhammad Fazal**, Title: Ecological Sound Fabrication of Doped ZnO NPs, Their Characterization and Waste Water Treatment **Graduated** in November 27, 2025
22. **Bibi Zahida**, Title: Synthesis of Cobalt Doped Nickle Ferrites Nanoparticles via Extract of Vitis Vinifer (raisin). **Graduated** in Graduated on October 9, 2025
23. **Muhammad Iqbal Uddin**, Title: Green Synthesis of Ni-Doped ZnO Nanoparticales using Green Leaf, Roots Red Cabbage as A Fuel And their Structural Characterization **In Progress**
24. **Naveeda Yousaf**, Title: Green Synthesis of Cobalt Doped Zinc Ferrite Nanoparticles from Coriandrum Sativum: Characterization and Their Application for Antibacterial Activities **In Progress**

Research Projects/Grants and Funding

Project Title	Funding Agency	Amount (millions)	Years	Role
Green synthesis of nanoparticles, and their applications for dye-removal, photocatalytic activity and pharmaceutical wastage removal	Higher Education Commission. NRPU Project # 20-17152 /NRPU/R&D/HEC/2021	Rs. 3.36525	2022 Completed 2025	PI

Regional Natural Plant Dye Extraction for Enhancement the Efficiency of Dyes Sensitized Solar Cell	University of Balochistan UBRF	Rs. 0.37698	2018 Completed 2019	PI
Fabrication of metal oxide nanostructure-based perovskite solar cell	Higher Education Commission. NRPU Project # 10271/Balochistan/ NRPU/R&D/HEC/ 2017	Rs. 1.83129	2019 Completed 2023	Co-PI
Center for nanoscience and nanotechnology (NCNN): Nanosensorics lab, University of Balochistan, Quetta is one of the subs Lab of NCNN	Higher Education Commission (approved by Planning Commission of Pakistan).	Rs. 58.00	2026 In Progress	Co-PI

University Committees Memberships

Name of Committee	Roles	Year
<ol style="list-style-type: none"> 1. Member, Tenure track system (TTS) coommittee University of Balochistan Quetta. 2. Member, Anti harrassment coommittee University of Balochistan Quetta. 3. Elected Member Academic Council, University of Balochistan, Quetta (2016-19). 		

Memberships of Professional Organizations

Name of Organization	Roles
<ol style="list-style-type: none"> 1. Member, National Technology Council (NTC) Pakistan (2015). 	

Editorial Board / Reviewer Roles

Name of Journal	Role	Publisher	Since (Year)
<ol style="list-style-type: none"> 1. Editor in chief, Journal of Physics and Material Science, ISSN# 3079-756X 2. Member Editorial Board of international journal, Nanoscience and Nanoengineering, Horizon Research Publishing Corporation, CA 95134, USA 3. Member Editorial Board of Iranian Journal of Chemistry and Chemical Engineering 4. Member, European Nanoscience and Nanotechnology Association (ENNA). 5. Member Reviwing committee in “International Academy of Industrial, Mechanical & Aeronautical Engineering (IIMAE)” 6. Member Technical Committee of 5th International Conference on Chemistry and Chemical Engineering (ICCCE 2014), August 6-7, 2014 in Singapore. 7. Member of the Editorial board during the year 2013 in international journal News in Engineering (ISSN: 1339-4886), Publisher: \Publishing Society Ltd., Zilina, Slovakia 			

8. Member Reviewing committee in the international peer-reviewed, scientific and technical journal *Bahria University Journal of Information and Communication Technologies (BUJICT)* (ISSN: 1999-4974)
9. Member Internal Reviewing Committee (IRC) / Provincial Reviewing Committee (PRC) for Balochistan Text Book (Since 2014).
10. Member Advisory board, Techno-Science, Scientific Journal of Mehmet Akif Ersoy University, Turkey

Technical/Laboratory Skill Set

Skills	Levels
Project Planning	Basic, Intermediate, Advanced, Expert
Project Designing and Implementation	
Data Collection Tools Development	
Quantitative Data Analysis	
Qualitative Data Analysis	
Grant writing	

Certifications/Diplomas (National/International Organizations)

Title of Certificate	Organizations	Year

Languages Proficiency

Language	Proficiency
English	Read, write, understand, speak
Urdu	Read, write, understand, speak
Pashto	Read, write, understand, speak

Softwares/ Analytical Tools

Software	Proficiency
MS Office	Advanced
Ansys	Basic

References

1.	Name	Prof. Dr. Nitin V Afzulpurkar
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	Contact No.	Phone: (662) 524 5227; Mobile: +660814584087 Fax: +66 (0) 2524-6432
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