

Personal Information:

Name: DR. ABDUL GHAFAR S/O ISLAM-UD-DIN

Institution: University of Agriculture Faisalabad, Faisalabad, 38000, Pakistan

Specialization: Electromagnetics Field Theory

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Educational History:

Total Impact factor of 210 published papers :300 ++

Year	Degree	Field of Study	Institution
2001	M.Sc.(Physics)	Electronics	University of Punjab
2009	Ph.D.	Electromagnetics	Quaid-i-Azam University, Islamabad, Pakistan



Professional Experience:

Institution/ Organization	Position	Period
Federal Urdu University, Islamabad	Visiting Faculty	2006-2008
Sarhad Uni. Campus Islamabad	Visiting Faculty	2007-2008
G.C. University, Faialabad	Research Officer	11-08-2008 to 06-07-2009
G.C. University, Faialabad	Assistant Professor	07-07-2009 to 01-01-2010
Univ. of Agriculture Faisalabad	Assistant Professor	02-01-2010- to-21-10-2016
Department of Electrical Engineering, King Saud University, Saudi Arabia	Post Doc/ Assistant Professor	18-08-2013-to-June 2015
Univ. of Agriculture Faisalabad	Associate Professor (Tenured)	22-10- 2016 to 10-10-2024
Univ. of Agriculture Faisalabad	Professor (Tenured)	10-10-2024 to Till now
Department of Physics, University of Agriculture Faisalabad, Pakistan	Chairman	08-9-2017 to 15-11-2020
Endowment Fund Sectarist, UAF	Executive Director	24-10-2024 to 09-03-2025
Community College Pars, UAF	Principal	05-03-2025 Till Now
Laboratory School & College System	Principal Officer	05-03-2025 Till Now
Punjab Bioenergy Institute	Director	05-03-2025 Till Now

Research Interest: High frequency techniques, Materials and Metamaterials, Chiral metamaterials, Scattering and Propagation of electromagnetic waves, Surface Waves, Graphene,

Research Grants/Projects:

Role	Title	Funding Agencies	Amount
P.I.	Graphene encapsulated nano-materials for cancer detection and treatment by electromagnetics	Higher Education Commission , Pakistan	3.31 millions
P.I.	Analysis of high frequency field of focusing system composed of chiral medium	Higher Education Commission , Pakistan	0.5 Millions
P.I.	Analysis of high frequency field in focal or caustic region of an inhomogeneous slab of chiral medium	Pakistan Science Foundation	0.672 Million

Awards and Distinctions:

Awards	Category	Years	Amounts
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Ph.D Fellowship	Indigenous HEC	2005-2008	Fully Funded
Research Productivity Award(RPA)	D-Category	2009	Rs. 150,000/
Research Productivity Award(RPA)	D-Category	2010-11	Rs. 150,000/
Research Productivity Award(RPA)	C-Category	2011-12	Rs. 200,000/
Honorarium of one month Pay of TTS Assistant Professor	Excellent performance of First year annual review	2010	Rs.80,000/
Research Productivity Award(RPA)	C-Category	2016-17	Rs. 200,000/

Students Supervisions:

Ph.D. Students Produced

Sr. No	Name	Status
1.	Farah Anjum	Ph.D Degree awarded
2.	Muhammad Azam	Ph.D Degree awarded
3.	Muhammad Hasnain Shehzad	Ph.D Degree awarded
4.	Muhammad Irfan	Ph.D Degree awarded
5.	Muhammad Zeeshan Yaqoob	Ph.D Degree awarded
6.	Maryam Saeed	Ph.D Degree awarded
7.	Muhammad Arfan	Ph.D Degree awarded

Ph.D. Students in Progress

Sr. No	Name	Status
8.	Muhammad Umair	Ph.D comprehensive written and oral examination passed, thesis write up stage and going to Pennsylvania State university under IRSIP
9.	Muhammad Usman	Ph.D comprehensive written and oral examination passed, thesis write up stage and going to Sapienza Università di Roma under IRSIP
10.	Muhammad Arif	Ph.D comprehensive written and oral examination passed, research continue
11.	Muhammad Noman	Ph.D comprehensive written and oral examination passed, research continue
12.	Muhammad Adeel	Course work
13.	Muhammad Shoaib	Course work

Students supervised in other Degrees

Role	Degree	No of Students Awarded Degrees
Supervisor	MS/M.phil	120
Co-Supervisor	MS/M.phil	03
Supervisor	M.Sc.+B.S(Hons)	34+20

PUBLICATIONS:

Total publications: 195,

**Publications as Corresponding
/Principal author:142**
Publications as Co- author:71
**Publications published in Q1
Journals:35**
**Publications published in Q2
Journals:35**
**Publications published in Q3
Journals:80**
**Publications published in Q4
Journals:42**
Total Impact Factor: 343.63

Publications 2025(I. Factor 4.238)

Authors name, Title	Journal, Vol. Issue, page no. Year	I.F	Qua rtile
Tunable characteristics of surface plasmon polaritons (SPPs) supported at ferrite-graphene-double negative metamaterial	Accepted Journal of Nanoelectr onics and Optoelectro nics	0.6	Q4
Plasmonic wave at uniaxial chiral-metal-uniaxial chiral interface	Accepted Optica Applicata	0.7	Q4
Plasmonic characteristics of magnetized plasma– graphene-magnetized plasma–perfect magnetic conductor planar waveguides	Accpted Journal of the European Optical Society: Rapid Publications	1.1	Q3
Plasma loaded uniaxial chiral slab waveguide	Accepted Scientific Reports	3.8	Q1
Modeling of plasmon modes at the indium antimonide– black phosphorus interface	Accepted JOSA B	1.8	Q3

Publications 2024(I. Factor 29.4)

Authors name, Title	Journal, Vol. Issue, page no. Year	I. F	Qua rtile
Arfan, M., A. Ghaffar, Majeed AS Alkanhal, Y. Khan, Ali H. Alqahtani, and I. Shakir. "Extinction efficiency	Optical and Quantum Electronics 55, no. 10	3.3	Q3

and scattering asymmetry of a PEMC sphere illuminated by vortex electromagnetic waves..	(2023): 891.		
Arfan, M., A. Ghaffar, Majeed AS Alkanhal, Y. Khan, A. H. Alqahtani, and I. Shakir. Laguerre–Gaussian beam scattering by a marine aerosol."	<i>Optical and Quantum Electronics</i> 56, no. 1 (2024): 92.	3. 3	Q3
Razzaz, F., A. Nawaz, and A. Ghaffar. "Tunable properties of graphene loaded waveguide surrounded by magnetic materials.	<i>Digest J Nanomater Biostruct</i> 19, no. 1 (2024).	1. 1	Q4
Sana, Tahseen, Majeed AS Alkanhal, Ahtisham Ali, Hafeez Ullah, Abdul Ghaffar, Yasin Khan, and Muhammad Zeshan Yaqoob. "Hybrid Dyakonov surface waves at uniaxial crystal-temperature-sensitive material interfaces.	<i>International Journal of Optics</i> 2024, no. 1 (2024): 5757834	1. 8	Q3
Yaqoob, M. Z., Ahtisham Ali, Majeed AS Alkanhal, A. Ghaffar, Y. Khan, and M. Umair. "Temperature-Dependent Electromagnetic Surface Wave Supported by Graphene-Loaded Indium Antimonide Planar Structure."	<i>International Journal of Optics</i> 2024, no. 1 (2024): 9607121.	1. 8	Q3
Arif, Muhammad, Abdul Ghaffar, Muhammad Yasin Naz, and Haq Nawaz Bhatti. "Excitation of surface plasmon polaritons (SPPs) at uniaxial chiral-graphene planar structure.	<i>Plasmonics</i> 19, no. 5 (2024): 2517-2525.	3. 3	Q3
Arfan, M., N. Khaleel, A. Ghaffar, F. Razzaz, S. M. Saeed, and T. M. Alanazi. "Hermite–Gaussian beam scattering by a PEMC sphere.	<i>Optical and Quantum Electronics</i> 56, no. 2 (2024): 135.	3. 3	Q3
Yaqoob, M. Z., M. Anwar, A. Ghaffar, Majeed AS Alkanhal, Y. Khan, and M. U. Shahid. "Temperature-assisted electromagnetic surface modes in graphene-based temperature sensitive metafilms."	<i>Optics Continuum</i> 3, no. 5 (2024): 714-731.	1. 1	Q4

Umair, M., A. Ghaffar, Majeed AS Alkanhal, Y. Khan, and M. U. Shahid. "Tunability of plasmon modes at uniaxial chiral–black phosphorus planar structure.	<i>Plasmonics</i> (2024): 1-9.	3. 3	Q3
ARIF, M., M. UMAIR, A. GHAFAR, MAJEED AS ALKANHAL, Y. KHAN, and MU SHAHID. "Characteristics of metal–uniaxial chiral–metal plasmonic waveguide structure."	<i>Optoelectronics and Advanced Materials-Rapid Communications</i> 18, no. July-August 2024 (2024): 313-318.	0. 5	Q4
Arif, Muhammad, Muhammad Umair, Abdul Ghaffar, Majeed AS Alkanhal, Yasin Khan, and M. U. Shahid. "Propagation properties of plasma-filled parallel plate waveguide (PPWG) surrounded by black phosphorus (BP) layers	. " <i>Waves in Random and Complex Media</i> (2024): 1-11.	-	-
Arif, Muhammad, Muhammad Umair, Abdul Ghaffar, Majeed AS Alkanhal, and Muhammad Amir Ali. "Dispersion properties in uniaxial chiral–graphene–uniaxial chiral plasmonic waveguides." <i>Plasmonics</i> (2024): 1-10.	<i>Plasmonics</i> (2024): 1-10.	3. 3	Q3
Umair, M., A. Ghaffar, Majeed AS Alkanhal, Y. Khan, M. U. Shahid, and M. Amir Ali. "Characteristics of Plasmon Mode at Anisotropic Plasma–Black Phosphorene Interface."	<i>Plasmonics</i> (2024): 1-8.	3. 3	Q3
Iftikhar, A., Ghaffar, U., Ghaffar, A., & Yaqoob, M. Z. (2024). A REVIEW ON ELECTROMAGNETICS OF CANCER CELLS: MODELING TO TREATMENT.	<i>Kashf Journal of Multidisciplinary Research</i> , 1 (11), 11-26. 2024	-	-

Publications 2023(I. Factor 33.06)

Authors name, Title	Journal, Vol. Issue, page no. Year	I.F	Quartile
1. M Arfan, M Asif, A Ghaffar, F Razzaz, SM Saeed, TM Alanazi, Analysis of Scattering characteristics of PEMC sphere by vortex Bessel beams	Optik –International Journal for Light and Electron Optics 298 (2024)171599	3	Q2
2. S Shaukat, G Abbas, M Afzaal, MY Naz, M Qamar, A Ghuffar, Y Khan, Analysis of optical properties of Diallyldimethylammonium chloride dielectric-coated gold nanospheres for targeted drug delivery	Mater. Res. Express 10 (2023) 125010	1.5	Q3
3. MZ Yaqoob, A Ali, MAS Alkanhal, A Ghaffar, Y Khan, M Umair, Temperature-Dependent Electromagnetic Surface Wave Supported by Graphene-Loaded Indium Antimonide Planar Structure	International Journal of Optics Volume 2024, Article ID 9607121, 10 pages	1.7	Q3
4. M Arif, A Ghaffar, MY Naz, HN Bhatti, Excitation of Surface Plasmon Polaritons (SPPs) at Uniaxial Chiral-Graphene Planar Structure	Plasmonics (2023) 1-11	3.00	Q3
5. M Arfan, N Khaleel, A Ghaffar, F Razzaz, SM Saeed, TM Alanazi, Hermite–Gaussian beam scattering by a PEMC sphere	Optical and Quantum Electronics (2024) 56 (2), 135	3.00	Q2
6. M Arfan, A Ghaffar , FK Alsaif, Y Khan, I.Shakir, Analysis of light scattering of a Gaussian beam by a perfect electromagnetic conductor (PEMC) sphere	Indian J Phys https://doi.org/10.1007/s12648-023-02835-4	2.00	Q2
7. MZ Yaqoob, M Ahamd, A Ghaffar, F Razzaz, SM Saeed, TM Alanaz, Thermally tunable electromagnetic surface waves supported by graphene loaded indium antimonide (InSb) interface	Scientific Reports (2023), 13 (1), 18631	3.99	Q2
8. M Arfan, A Ghaffar , MAS Alkanhal, Y Khan, AH Alqahtani, I.Shakir, Extinction efficiency and Scattering asymmetry of a PEMC sphere illuminated by vortex electromagnetic wave	Optical and Quantum Electronics (2023) 55 (10), 891	3.00	Q2
9. M. Arfan, A Ghaffar , MAS Alkanhal, Y Khan, AH Alqahtani, Sajjad Ur Rehman, Laguerre–Gaussian Beam Scattering by a Perfect Electromagnetic Conductor (PEMC) Sphere	Arabian Journal for Science and Engineering (2023) 48:8001–8009	2.90	Q1
10. MU Shahid, A Ghaffar , MY Naz, HN Bhatti, Electromagnetic Waves in Graphene-Coated Partially Filled Chiroplasma Cylindrical Waveguide	Plasmonics (2023) 18:1979–1989	3.00	Q2
11. M Umair, A Ghaffar , MAS Alkanhal, Y Khan, AH Alqahtani, I Shakir, Plasmonic Modes of Metallic Slab in Anisotropic Plasma Environment	Plasmonics (2023) 18:1979–1989	3.00	Q2
12. M. Umair, A. Ghaffar , Majeed A. S. Alkanhal, Y. Khan, Ali. H. Alqahtan, Light Plasmon Coupling in Planar Chiroplasma–Graphene Waveguides	Plasmonics (2023) 18:1029–1035	3.00	Q2
13. M Arfan, A Ghaffar, MAS Alkanhal, Y Khan, AH Alqahtani, I Shakir, Laguerre–Gaussian beam scattering by a marine aerosol	Optical and Quantum Electronics (2023) 55 (9), 756	3.00	Q2
14. M. Arfan, N. Khaleel, A. Ghaffar , Y. Khan , I. Shakir’ Study of scattering for a PEMC sphere with Bessel beam illumination	Optical and Quantum Electronics (2023) 55:443	3.00	Q2

15. M Arfan, A Ghaffar , MY Naz, Majeed AS Alkanhal, Ali H Alqahtani, Y Khan, Laguerre–Gaussian beam interaction by a metamaterial coated perfect electromagnetic conductor (PEMC) cylinder	Optical and Quantum Electronics (2023) 55:252	3.00	Q2
16. M Arfan, N Khaleel, A Ghaffar , FK Alsaif, Y Khan, S Alsulamy, Scattering of Laguerre–Gaussian Beam by a Topological Insulator Cylinder Coated with Metamaterials	Iranian Journal of Science,1-11	1.7	Q3
17. M. Z. Kazim, M. Yaseen, A.Ghaffar , I. A. Bhatti, Physical Properties of Ba ₂ XIO ₆ (X Ag, Na) Double Perovskite Oxides for Energy Harvesting Devices	Arabian Journal for Science and Engineering (2023) 48:779–787	2.90	Q2
18. M. Arfan, A. Ghaffar , M. Y. Naz, M. A. Hanif, F. K. Alsaif, Y. Khan, Characteristics of Laguerre–Gaussian beam scattering from a coated circular nihility cylinder	J. of optoelectronics and advanced materials 25(1), 2023,	0.5	Q4
19. M Arfan, A. Ghaffar , MY Naz, MA Hanif, Radar Cross Section (RCS) of perfect electromagnetic conductor (PEMC) cylinder by a Laguerre–Gaussian beam	Kuwait J.Sci., Vol.50, No.(3B),July.2023,pp(1-10)	1.4	Q2
20. A Kamal, MA Iqbal, HN Bhatti, A Ghaffar , Cytotoxic, Thrombolytic and Antibacterial Evaluation of Synthesized Substituted and Un-Substituted Selenium-N-Heterocyclic Carbene Adducts	Journal of the Chemical Society of Pakistan, 45 (128),2023	0.66	Q4
Publications 2022 (I. Factor 25.95)			
21. Rao Adeel Un Nabi, Muhammad Yasin Naz, Shazia Shukrullah, A. Ghaffar , <u>A Critical Review on Waste Plastic into Value-Added Hydrocarbons and Fuels</u>	Energy and Environment in the Tropics	4.5	Q1
22. M. Shoaib, M. Y. Naz, S. Shukrullah, M. A. Munir, A.Ghaffar , M. Irfan, S. N. F. Mursal, K. Kamran, Synthesis and testing of photocatalytic potential of MgFe ₂ O ₄ /ZnO/perlite magnetic heterojunction for degradation of synthetic dyes	Applied Physics A (2022) 128:979	1.5	Q3
23. Amna Kamal, Muhammad Adnan Iqbal, Haq Nawaz Bhatti, A.Ghaffar , <u>Selenium-N-heterocyclic carbene (Se-NHC) complexes with higher aromaticity inhibit microbes: synthesis, structure, and biological potential</u>	J. of Coordination Chemistry,2022, VOL. 75, NOS. 11–14, 1915–1928	1.67	Q3
24. M. Saeed, A. Ghaffar , M. Y. Naz, M. A. Hanif, Propagation of Surface Waves Along the Graphene Coated Metal Cylindrical Waveguide Embedded in Dielectric Environment	Pak. j. sci. ind. res. Ser. A: phy. sci. 2022 65A (3) 207-213	0.65	Q4
25. M. Akram, H. M. A. Javed, A. Ghaffar , M.I. Majeed, Investigations of Zr/TiO ₂ -based nanocomposites for efficient plasmonic dye-sensitized solar cells	International Journal of Modern Physics B	1.45	Q3
26. F Anjum, MY Naz, A Ghaffar , NM AbdEl-Salam, KA Ibrahim, HF Mohamed, Study of thermophysical properties of moist and salt crystallized fired clay bricks for energy saving perspective	Journal of Thermal Analysis and Calorimetry, 147 (7), 4541-4552, 2022	1.45	Q3
27. S. Nisar, M. A.Hanif, M. Zahid, A. Ghaffar , Enzymatic glycosylation of menthol: optimization of synthesis and extraction processes using response surface methodology and biological evaluation of synthesized product	Chemical Papers (2022) 76:2649–2675	2.1	Q3
28. M Arfan, Majeed AS Alkanhal, A Ghaffar , Ali H Alqahtani, Scattering of Laguerre–Gaussian beam from a chiral-coated perfect electromagnetic conductor (PEMC) cylinder	Journal of Computational Electronics, 1-10,2022	1.98	Q3
29. M Arfan, A Ghaffar , MAS Alkanhal, MY Naz, AH Alqahtani, Y Khan, Orbital Angular Momentum Wave	Optik, 168562,2022	2.84	Q2

Scattering from Perfect Electromagnetic Conductor (PEMC) Sphere			
30. MA Ali, A Ghaffar , Majeed AS Alkanhal, Y Khan, Study of hybrid surface Plasmon modes in metallic circular waveguide filled with magnetized plasma	Waves in Random and Complex Media 32 (1), 449-462,2022	4.05	Q1
31. A Ghaffar , M Umair, MAS Alkanhal, Y Khan, Dispersion characteristics of surface plasmon polaritons in a graphene-plasma-graphene waveguide structure	Canadian Journal of Physics 100 (2), 123-128,2022	1.03	Q3
32. M. Saeed, A. Ghaffar, M.Y. Naz, S. Shukrullah, Q. A. Naqvi, Graphene-Based Plasmonic Waveguides: a Mini Review	<u>Plasmonics</u> vol. 17, 901–911 (2022)	2.73	Q2
Publications 2021 (I. Factor 60.91)			
33. M.Saeed, A.Ghaffar , M. AS Alkanhal, Y.Khan, Characteristics of hybrid surface plasmon polaritons at a chiral graphene metal interface in cylindrical waveguides	Optical and Quantum Electronics, Vol.53, Issue 10, 1-14, 2021	2.79	Q2
34. M Azam, A Ghaffar , Y Jamil, HN Bhatti, Hybrid surface plasmon polariton (SPPs) modes between metal and anisotropic plasma interface	Journal of Ovonic Research Vol., 17, Issue 6, 509-517, 2021	0.77	Q4
35. I Ahmad, S Shukrullah, MY Naz, E Ahmed, M Ahmad, SU Rehman, HN Bhatti, A Ghaffar , The role of synthesis method in hydrogen evolution activity of Ce doped ZnO/CNTs photocatalysts: A comparative study	International Journal of Hydrogen Energy, Vol.46, Issue 59, 30320-30333, 2021	5.5	Q1
36. N. Ul Huda A., Muhammad Y. Naz, S. Shukrullah, A. Ghaffar , M. Irfan, D. Walczak, A. Głowacz, M. H Mahnashi, S. Rahman, G. Królczyk, A. O Alqarni, U.M.Niazi, Concurrent Synthesis and Immobilization of Ag Nanoparticles over TiO ₂ via Plasma Reduction for Photocatalytic Treatment of Methyl Blue in Water	Materials, Vol.14, Issue, 20, Pages, 6082, 2021	2.23	Q3
37. MY Naz, M Irfan, S Shukrullah, I Ahmad, A Ghaffar , UM . Niazi, S Rahman, M Jalalah, MA Alsaiani, MKA Khan, Effect of microwave plasma treatment on magnetic and photocatalytic response of manganese ferrite nanoparticles for wastewater treatment	<u>Main Group Chemistry</u> , vol. 20, no. 3, pp. 423-435, 2021	1.34	Q3
38. M. Z. Yaqoob; A. Ghaffar ; M. A. S. Alkanhal; M. Y. Naz; A.H. Alqahtani; Y. Khan, Tunable surface waves supported by graphene-covered left-handed material structures	Optics Communications 489 (2021) 126874	2.310	Q2
39. M.Azam, M.Z.Yaqoob, A.Ghaffar, Majeed AS Alkanhal, Ali H Alqahtani and Y.Khan, Electromagnetic energy surface modes in metamaterial-filled bi-layer graphene structures	Plasmonics (2021) 16:1175–1194	2.404	Q3
40. M. Z. Yaqoob, A. Ghaffar , Majeed A. S. Alkanhal, Sajjad ur Rehman, Ali H. Alqahtani, Y. Khan, Hybrid surface waves in chiral loaded resistive metasurfaces	Eur. Phys. J. Plus (2021) 136:666	3.991	Q1
41. M. Z. Yaqoob, A. Ghaffar , M. Y. Naza and M. A. Hanif, Graphene-loaded left-handed media for tunable electromagnetic surface waves	J. of Electrom. Waves & Appl., 35(13) , 1754-1769, 2021	1.335	Q3
42. M. U. Shahid, A. Ghaffar , M. A.S. Alkanhal, Y. Khan, Propagation of electromagnetic waves in graphene-wrapped cylindrical waveguides filled with magnetized plasma	Optik - International Journal for Light and Electron Optics 244 (2021) 167566	2.443	Q2
43. I.Toqeer, M.Z.Yaqoob, A. Ghaffar , Majeed A. S. Alkanhal, Y.Khan and Yosef T. Aladadi, Reflectance and	Vol. 38, No. 4 / April 2021 / Journal of the	1.88	Q3

transmittance of terahertz waves from graphene embedded metamaterial structures	Optical Society of America A		
44. M Saeed, A Ghaffar , Majeed AS Alkanhal, and Y Khan, Hybrid energy surface plasmon modes supported by graphene-coated circular chirowaveguide	Optical Materials 114 (2021) 110869	3.08	Q2
45. H.Ambreen, M. Yaseen, A. Ghaffar , M. Zahid ,First principle insight on physical characteristics on Mn doped Bes compound	Materials Science in Semiconductor Processing 127 (2021) 105697	3.9	Q2
46. M. Y. Naz ,M. Irfan , S. Shukrullah, I. Ahmad, A. Ghaffar ,U. M. Niazi ,S. Rahman, M. S. Jalalah ,M. A. Alsaiani M. K. A. Khan, Study of structural, magnetic and optical properties of oxygen plasma-treated manganese-doped iron oxide photocatalyst, for wastewater treatment	Applied Physics A (2021) 127:491 https://doi.org/10.1007/s00339-021-04646-y	2.584	Q2
47. Asma Jabeen, Haq Nawaz Bhatti , Saima Noreen and A. Ghaffar , Adsorptive removal of 2, 4, 6-trichloro-phenol from wastewater by mango seed shell and its magnetic composites: batch and column study	International Journal of Environmental Analytical Chemistry, https://doi.org/10.1080/03067319.2021.1941916	2.862	Q2
48. M. Azam, M. Umair, A. Ghaffar , Majeed A.S. Alkanhal , Ali H. Alqahtani and Y. Khan,Dispersion characteristics of surface plasmon polaritons (SPPs) in graphene–chiral–graphene waveguide	WAVES IN RANDOM AND COMPLEX MEDIA https://doi.org/10.1080/17455030.2021.1902018	4.85	Q1
49. M.M. Tiwana, AB Manan, A.Ghaffar , Diffraction of electromagnetic waves due to a point source by a three part boundary satisfying perfect electromagnetic conductor conditions	WAVES IN RANDOM AND COMPLEX MEDIA https://doi.org/10.1080/17455030.2019.1587211	4.85	Q1
50. Majeed A. S. Alkanhal, M. Umair , A. Ghaffar ,M.Y.Naz , Ali H Alqahtani and Y. Khan,,Propagation of Hybrid Surface Waves in Ferrite Anisotropic Plasma Planar Structures	<u>Optik</u> Volume 229, March 2021, 166255	2.01	Q2
51. M Umair, A Ghaffar , Majeed AS Alkanhal, MY Naz, Ali H Alqahtani, Y Khan, Dispersion characteristics of hybrid surface waves at chiral-plasma interface	J. of Electrom.Waves & Appli , 2021, Vol. 35, No. 2, 150–162	1.37	Q3
52. M. Saeed, Majeed A. S. Alkanhal, A. Ghaffar , Ali H. Alqahtani, Y. Khan, Energy Plasmon Modes in Metamaterial-filled Double-layerGraphene-wrapped Cylindrical Waveguides	Plasmonics (2021) 16:695–709	2.40	Q3
53. F. Anjum, M. Y. Naz, A. Ghaffar , N. M. AbdEl-Salam, K. A. Ibrahim, H. F. Mohamed, Study of thermophysical properties of moist and salt crystallized fired clay bricks for energy saving perspective	Journal of Thermal Analysis and Calorimetry https://doi.org/10.1007/s10973-021-10827-x	4.626	Q1
54. F.Anjum, M.Y. Naz, A.Ghaffar , S. Shukrullah, N. M A.-Salam, K. A.Ibrahim,Moisture and Temperature Response of Structural and Lithology based Thermophysical and Energy Saving Traits of Limestone using Experimental and Least-Square Fitting Methods	Journal of Thermal Science Vol.30, No.2 (2021) 551-561	2.43	Q2

55. F.Anjum, M.Y.Naz, A.Ghaffar, S. Shukrullah, K.Kamran, and A. Ghaffar , Study of Microstructural, Physical, Thermal, and Mechanical Properties of Organic Waste-Incorporated Fired Clay Bricks in the Framework of Energy Conservation	J. Mater. Civ. Eng., 2021, 33(5): 04021066	3.266	Q1
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Publications 2020(I. Factor 33.67)

56. M Saeed, A Ghaffar , Majeed AS Alkanhal, Ali H Alqahtani and Y Khan, Energy Plasmon modes in metamaterial-filled double-layer graphene-wrapped cylindrical waveguides	Plasmonics, https://doi.org/10.1007/s11468-020-01328-y	2.404	Q3
57. M Saeed, A Ghaffar , Majeed AS Alkanhal, Ali H Alqahtani, Y Khan, Sajjad ur Rehman, Plasmon modes supported by metamaterial-filled monolayer graphene cylindrical waveguides	Journal of the Optical Society of America B	2.106	Q3
58. MZ Yaqoob, A Ghaffar , Majeed AS Alkanhal, MY Naz, Ali H Alqahtani, Y Khan, Electromagnetic surface waves supported by a resistive metasurface-covered metamaterial structure	• Scientific Reports (2020) 10:15548	4.379	Q1
59. M.A.Ali, A.Ghaffar , Majeed A.S. Alkanhal, and Y.Khan, Study of hybrid surface Plasmon modes in metallic circular waveguide filled with magnetized plasma	• Waves In Random And Complex Media, doi.org/10.1080/17455030.2020.1779386	4.853	Q1
60. M. Umair, A.Ghaffar ; Majeed A. S. Alkanhal; Ali H. Alqahtani; Y. Khan, Transverse electric surface waves in ferrite medium surrounded by plasma layers	Journal of the European Optical Society- Rapid Publications (2020) 16:17	1.528	Q3
61. M.Umair, M.Azam, Majeed alkanhal, A.Ghaffar , Y.T.Aladadi and Y.Khan, Characteristics of Surface Plasmon Polaritons in Magnetized Plasma Film Walled by Two Graphene Layers	Journal of Nanoelectronics and Optoelectronics	0.96	Q4
62. K. A. Ibrahim, M. Y. Naz, S. Shukrullah, S. A. Sulaiman, A. Ghaffar & N. M. AbdEl-Salam, Nitrogen Pollution Impact and Remediation through Low Cost Starch Based Biodegradable polymers	• Scientific report, (2020) 10:5927	4.379	Q1
63. S. Shukrullah, M. A. Javed, M. Y. Naz, N. M. AbdEl-Salam, K. A. Ibrahim, and A. Ghaffar , Velocimetry and response surface regression analysis of a swirling bed tested with mesh-coupled axial blade distributor	Review of Scientific Instruments	1.587	Q3
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164.	A. Ghaffar , M. Y. Naz and Q. A. Naqvi, Electromagnetic field transmitted by dielectric Plano convex lens placed in chiral medium	PIER, 23 , 67-81, 2012	1.54	Q3

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165.	S. Ahmed, A. Ghaffar , Q.A.Naqvi, N. Ahmed, Aqeel A. Syed, Effect of dissipative and dispersive DNG material coating on the scattering behavior of parallel nihility circular cylinders	Math. Problems in Engg., 2011 , 727605, 2011	0.611	Q3
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166.	M.Y. NAZ., A. Ghaffar , N. U. Rehman, S. Naseer and M. Zakaullah. Double and triple langmuir probes mea-surements in inductively coupled nitrogen plasma	Prog. in Electromag. Res. 114 , 113-128, 2011	5.298	Q1
167.	M. Y. Naz, A. Ghaffar , N. U. Rehman, M. Azam, S. Shukrullah, A. Qayyum, and M. Zakaullah, Symmetric and asymmetric double langmuir probes characterization of radio frequency inductively coupled nitrogen plasma	Prog. in Electromag. Res. 115 , 207-221, 2011	5.298	Q1
168.	A. Ghaffar , Focusing by a cylindrical plano convex lens of chiral medium	J. Electromag. Waves and Appl., 25 , 833–844, 2011	2.965	Q1

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169.	A. Ghaffar , H. Liaquat & Q. A. Naqvi ,Focusing of electromagnetic wave from hyp. lens into a uniaxial crystal with an arbitrary orientation of the optical axis in the presence of aberrations	Prog. in Electromag. Res. 107 , 379-396, 2010	3.251	Q1
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170.	A. Ghaffar , A. A. Rizvi and Q. A. Naqvi "Fields in the focal space of symmetrical hyperboloidal focusing lens	Prog. in Electromag. Res. 89 , 255–273, 2009	3.314	Q1
171.	A. Ghaffar and Q. A. Naqvi, Focusing of electromagnetic plane wave into uniaxial crystal by a Wood lens	Gen. European J. of Physics, 7(1),41-49,2009	0.771	Q3

Publication 2008(I. Factor 19.06)

172.	A. Aziz, A. Ghaffar , Q.A.Naqvi and K. Hongo, Analysis of the fields in two dimensional Gregorian system	J. of Electromag. Waves and Appl., 22, 85–97, 2008	1.140	Q3
173.	A. Ghaffar , A. Hussain, K. Hongo & Q.A. Naqvi, Radiation characteristics of an inhomogeneous slab using Maslov's method	J. of Electromag. Waves and Appl., 22, 301–312 2008	1.140	Q3
174.	A. Ghaffar , M. Sajjad and Q. A. Naqvi "Study of focusing of field diffracted by the quartic lens into a uniaxial crystal	Prog. in Electromag. Res. 86 , 321–339, 2008	3.385	Q1
175.	M.R.Ashraf, A. Ghaffar , Q.A.Naqvi,Fields in the focal space of symm. hyperbolic focusing lens using Maslov's method	J. of Electrom.Waves & Appl,V.22, 2008	1.140	Q3
176.	A. Ghaffar , Q. A. Naqvi and Kohei Hongo "Focal region fields of three dimensional gregorian system	Optics Commun. 281 , 1343–1353,2008	1.552	Q2
177.	M. A. Fiaz, A. Ghaffar and Q. A. Naqvi ,High frequency expressions for the field in the caustic region of a PEMC cylindrical reflector using Maslov's method	J. of Electrom.waves & Appl., 22, 385-397,2008	1.140	Q3
178.	A. Ghaffar , Q. A. Naqvi ,Study of focusing of field refracted by a cylindrical plano-convex lens into a uniaxial crystal by using Maslov's method	J. of Electrom.Waves & Appl.,22, 665–679, 2008	1.140	Q3
179.	A. Ghaffar and Q. A. Naqvi "Focusing of electromagnetic plane wave into uniaxial crystal by a three dimensional plano convex lens	Prog. in Electromag. Res. 83 , 25–42, 2008	3.385	Q1
180.	M. A. Fiaz, A. Abdul, A. Ghaffar , and Q. A. Naqvi, High frequency expression for the field in the caustic region of a PEMC Gregorian system using Maslov's method	Prog. in Electromag. Res. 81 , 135–148, 2008	3.385	Q1
181.	A. Ghaffar , S. Latif and Q. A. Naqvi , Study of focusing of field refracted by an Inhomogeneous slab into a uniaxial crystal by using Maslov's method	Journal of Modern Optics, 55(21), 3513–3528, 2008	1.551	Q3

Publication 2007(I. Factor 3.320)

182. A. Ghaffar, Q.A.Naqvi and K. Hongo , Analysis of the fields in two dimensional Cassegrain system	Prog. in Electromag. Res. vol:72, 215–240, 2007	3.320	Q1
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Book Chapter:

1. Multi-tip Probe Diagnostics for Plasmas: Designs and Applications, LAP Lambert Academic Publishing (2014-05-06)
2. Synthesis and Processing of Nanomaterials, Solar Cells pp 1-23, Springer

Book: Recent trends in Physics (accepted for publication)**Conferences, Proceedings and Trainings**

- i) Lecture deliver by video Conference: Title of the talk “Analysis of high frequency field of focal region of focusing system using Maslov’s method” dated 21-11-2010.
- ii) Organized: A vacuum technology workshop held on October 03-04 2011 in UAF.
- iii) Participated in a workshop on “Statistical analysis using SPSS and MINITAB” held on October 05-07, 2011 in UAF.
- iv) Presented an oral presentation “Reflected electromagnetic field by chiral coated spherical reflector” held on Nov. 21-22, 2011 in NUST Conference on Applications and Methods of Physics
- v) Participated in a National Seminar on “Nanotechnology: Opportunities and future prospects in Pakistan” held on December 06, 2012 in GCUF.
- vi) Training Certificate on Statistical Methods for Researchers using R, organized by Deptt of Math & Statistics, University of Agriculture Faisalabad, Aug. 09-11, 2017.
- vii) Training Certificate on Synopsis and Thesis writeup, organized by Department of Mathematics & Statistics, University of Agriculture Faisalabad with the financial support of US-Pakistan Center for Advanced Studies, July 26-28, 2017.
- viii) Training Certificate on Technical and Patent Writing, organized by Department of Chemistry, University of Agriculture Faisalabad, January 28, 2017.
- ix) Certificate of Conference Paper, 1st International Conference on Emerging Technologies, organized by the Department of Chemical Engineering and Technology, University of Gujrat, Gujrat, June 1-2, 2016.

- x) Conference Abstract Proceeding, Biopolymer coating for controlled release from granular urea, organized by US-Pakistan Center for Advanced Studies in Agriculture and Food Security, University of Agriculture Faisalabad, January 28, 2017.
- xi) Paper accepted in an International Conference, UTP-UMP Symposium on Hybrid Energy Systems (SES 2017), organized by the Universiti Teknologi PETRONAS, Malaysia, September 26-27, 2017.
- xii) Focal person/ Convener of International conference of frontier of experimental and theoretical physics 16-17 April 2018, organized by department of Physics University of Agriculture, Faisalabad, Pakistan
- xiii) M.Y.Naz, S.Ahmad, S.Shukurullah, N.U.H. Altaf and A.Ghaffar, Effect of microwave plasma treatment on membrane structure of polysulfone fabricated using phase inversion method, Materials Today: Proceedings

Editorial Works

Reviewer of Highly Reputed International Journal Papers

- i) International Journal of Applied Electromagnetics and Mechanics
- ii) Progress in Electromagnetics Research.
- iii) Journal of Electromagnetic Waves and Applications.
- iv) Journal of Electronic Imaging.
- v) Applied computational Electromagnetics society.

Advisory Administrative and Community Services

- i) Chairman Department of Physics, Sep. 2017 to Nov. 2020
- ii) Sectary Faculty board of study of Faculty of Science UAF
- iii) Convener to Assist Dean for rationalization of Evening College Program Budget, UAF
- iv) Member Selection board for appointment of faculty, Ghazi University, Dera Ghazi Khan
- v) Member Selection board for appointment of faculty, Mian Muhammad Nawaz Agriculture University, Multan
- vi) Member Selection board for appointment of faculty, Riphah International University, Faisalabad
- vii) Member Selection board for appointment of Lecturer, Punjab public service commission
- ix) Convener/ Member Departmental Technical committee of tenure track system Faculty.
- x) Member Faculty board of study of Department of Physics, Government College University, Faisalabad
- xi) Member Faculty board of study of Department of Physics, Riphah International University, Faisalabad
- xii) Member Faculty board of study of Department of Physics, Ghazi University, Dera Ghazi Khan
- xiii) Paper setter Subject of Physics, Central Superior Services (FPSC) Islamabad
- xiv) Paper setter Subject of Physics, (SPSC) Sindh
- xv) Sectary departmental board of study of department of Physics UAF
- xvi) Member Faculty board of study of Faculty of Science UAF
- xvii) Member of Synopsis Scrutiny Committee of Faculty of Sciences UAF
- xviii) Tutor of Lalik Jan Shaheed-1 Group of UAF
- xix) Member of the Board of Examiners for Ph.D. of UAF.