

# Curriculum Vitae

Annex-R

## Personal Information:

**Dr. GHULAM HASNAIN TARIQ**

*Nationality:* Pakistani.

*Home Address: I. Present:* Kallar Kahar, District Chakwal.

*II. Permanent:* V&PO: Danda Shah Bilawal, Tehsil: Lawa, District: Chakwal (Pakistan)

*Date of Birth:* 01-09-1969 *CNIC#* 37203-8587675-1 *Passport Number:* AR7966752

*Email:* hasnain.tariq@kfueit.edu.pk; g.hasnain@yahoo.com **Cell#** +92(0)3348707991



## Affiliation:

Assistant Professor,  
Photovoltaic & Renewable Energy Laboratory (PRE-Lab), Institute of Physics,  
Khawaja Fareed University of Engineering & Information Technology, Rahim Yar Khan, Pakistan.  
[www.kfueit.edu.pk](http://www.kfueit.edu.pk)

## Qualification:

Qualification	Degree	Subject/s	Year	University
<i>Academics</i>	PhD	Physics	2014	COMSATS IIT, Islamabad
	M.S. / M Phil	Physics (Material Science)	2008	COMSATS IIT, Islamabad
	M. Sc.	Physics	1997	Punjab University
	B. Sc.	Physics, Math A & Math B	1989	Punjab University
<i>Professional</i>	M. Ed.	Teacher Education	2000	AIOU, Islamabad
	B. Ed.	Science teaching	1994	Punjab University

## Theses:

- 1) **PhD Thesis.** Synthesis and Characterization of Thin Film Materials for Photovoltaic Applications.
- 2) **MS Thesis.** Fabrication and characterization of group II-VI semiconductor thin films.

## Scientific Research Projects-PI:

Sr.	Project title	Project No.	Category & Amount	Period/ Duration	Funding Agency	Contributors	Status
7	Photovoltaic Materials Synthesis for Resourceful Energy Salvage.	10304/Punjab/ NRPU/R&D/ HEC/2017	NRPU, Rs. 06.209 million	2019-21	HEC	3 MS students	Completed
6	Synthesis of nano fibres & biogenic nanoparticles for medical applications.	PHYS/PRE-Lab/06/2020-21	Lab/Department	2020-21	Self	2 MS students	Completed
5	Study of Window & Absorbent Layer Materials for Solar Cells.	PHYS/PRE-Lab/05/2020-21	Lab/Department	2020-21	Self	3 MS students	Completed
4	Synthesis of Biogenic Nano Particles	PHYS/PRE-Lab/04/2019-20	Lab/Department	2019-20	Self	2 MS students	Completed
3	Synthesis of Self-healing Coatings	PHYS/PRE-Lab/03/2019-20	Lab/Department	2019-20	Self	1 MS students	Completed

2	Thin Film Materials for Solar Cell Applications	PHYS/PRE-Lab/02/2019-20	Lab/Department	2019-20	Self	3 MS students	Completed
1	Synthesis of Materials for Perovskite Solar Cell Applications	PHYS/PRE-Lab/01/2019-20	Lab/Department	2019-20	Self	4 MS students	Completed

## Contributions in International Scientific Research Projects:

1. **Photovoltaic Materials for the 20<sup>th</sup> Century**, The Engineering and Physical Sciences Research Council (EPSRC) UK funded SUsustainable PowER GENeration (SUPERGEN) Project, (EP/F029624/2) **£1,806,675**, (Mar 2011 – Sep 2012).
  - (a). **Participation:** Worked as a Visiting Researcher (May 12 – Oct 12) with Co-Investigator/Supervisor Dr. David Whinton Lane, Department of Materials and Applied Science, Cranfield University, DCMT, Shrivenham, Swindon, SN6 8LA, UK.
  - (b). **Contributions:** Following contributions were made during visit at Cranfield University (CU), UK;
    1. Development of a combinatorial deposition arrangement in thermal evaporation coating unit.
    2. Development of heating arrangement during deposition of thin film in thermal evaporation coating unit.
    3. **Four (4)** papers were published in international journals as a result of research conducted at CU, UK.
- i. "Physical properties of chalcogenide Sn–Bi–S graded thin films annealed in argon", **G.H. Tariq**, D.W. Lane, M. Anis-ur-Rehman, Applied Physics A; Materials Science & Processing, **120** (4) (2015) 1407-1414.
- ii. "Study of annealing effects on the electrical properties of evaporated SnS thin films for photovoltaic applications", **G.H. Tariq**, K. Hutchings, Ghulam Asghar, D.W. Lane, and M Anis-ur-Rehman, *Chalcogenide Letters*, **12**(3) (2015) 105-109.
- iii. "Study of annealing effects on the physical properties of evaporated SnS thin films for photovoltaic applications", **G.H. Tariq**, K. Hutchings, Ghulam Asghar, D.W. Lane, and M Anis-ur-Rehman, *Journal of Ovonic Research*, **10** (6) (2014) 247 – 256.
- iv. "Annealing effects on the microstructural properties of complex sulfosalt (SnS)<sub>x</sub>–(Bi<sub>2</sub>S<sub>3</sub>)<sub>1-x</sub> gradient thin films", **G.H. Tariq**, K Hutchings, D.W. Lane, K.D. Rogers and M Anis-ur-Rehman, *J. Phys. D: Appl. Phys.* **46** (2013) 485302 (8pp).

## Employment (Teaching since 13-02-1997 to till):

<b>1. Teaching:</b>	I. Assistant Professor, Department of Physics, Khwaja Fareed University of Engineering and Information Technology, Rahim Yar Khan, since 01-07-2017 to till. II. Visiting faculty member at Department of Physics, Riphah International University, Islamabad (March 2015 to 30-06-2017). III. Science subjects at Secondary level in Department of School Education Govt. of the Punjab (13-02-1997 to 30-06-2017).
<b>2. Administrative:</b>	I. Acting Headmaster Govt High School Wanhar, District Chakwal. (01-06-2013 to 30-11-2014 & 01-02-2015 to 30-06-2017). II. Head Cluster Training and Sport Center (CTSC Wanhar) for 42 schools – (01-06-2013 to 30-11-2014 & 01-02-2015 to 30-06-2017). III. Zonal Head of 06 (six) High Schools (GHS Wanhar Zone) – (01-06-2013 to 30-11-2014 & 01-02-2015 to 30-06-2017). IV. Host organizer Head of annual sports of 16 (sixteen) High Schools (GHS Wanhar Zone) (01-06-2013 to 30-11-2014 & 01-02-2015 to 30-06-2017).

## University Teaching Experience:

<b>1. Teaching:</b>	<b>Since March 2015 to till.</b>
	<b>I.</b> Assistant Professor, Department of Physics, Khwaja Fareed University of Engineering and Information Technology, Rahim Yar Khan, since 01-07-2017 to till.
	<b>II.</b> Riphah International University Islamabad, since March 2015 to 30-06-2017 (Visiting Faculty member).

## Supervision of Scholars/Students/Researchers:

### *I. As Supervisor*

#### **1. PhD Scholars/Students:**

Sr.#	Name of Student	Thesis Title	Degree	University	Status
1	Muhammad Abbas	Synthesis and Study of Physical Properties of Advance Hole Transport Materials (HTMs) for Perovskite Solar Cells	PhD	KFUEIT, RYK	Submitted/ Completed

#### **2. MS Researchers/Students:**

Sr.#	Name of Student	Thesis Title	Degree	University	Status
49	Muhammad Bilal	Study of N-type Thin Film Materials for Window Layer Applications in Thin Film Solar Cells	MS-2021-23	KFUEIT, RYK	Completed
48	Rabia Tariq	Synthesis and Characterization of Biodegradable Materials prepared by using Polylactic Acid, Microcrystalline Cellulose and Starch	MS-2021-23	KFUEIT, RYK	Completed
47	Arfan Abdullah	Synthesis and Investigation of Structural, Optical and Electrical Properties of Cesium (Cs) Tin (Sn) based Halide Perovskite CsSn [I(1-X) Br(X)] <sub>3</sub> Thin Films	MS-2021-23	KFUEIT, RYK	Completed
46	Areej Tahir	Biogenic synthesis of silver doped ZnO nanoparticles for antimicrobial applications.	MS-2021-23	KFUEIT, RYK	Completed
45	Amanullah	Synthesis and characterization of n-type zinc oxide thin films for electrons transport application in solar cell	MS-2021-23	KFUEIT, RYK	Completed
44	Muhammad Zikria	Synthesis and Characterization of Ceramic Materials	MS-2021-22	KFUEIT, RYK	Withdraw
43	Muhammad Idrees	Study of N-type Thin Film Materials for Window Layer Applications in Thin Film Solar Cells	MS-2021-22	KFUEIT, RYK	Completed
42	Ali Raza Arif	Synthesis and Study of Physical Properties of P-type Material (Absorbent layer)	MS-2021-22	KFUEIT, RYK	Completed
41	Shazia Jalil	Synthesis and Characterization of Inorganic Perovskite Materials for Solar Cell Applications	MS-2021-22	KFUEIT, RYK	Completed
40	Sidra Yasin	Synthesis and Characterization of Starch Based Biodegradable Nanomaterials	MS-2021-22	KFUEIT, RYK	Completed
39	Muhammad Adeel Aslam	Ecofriendly Synthesis of Metallic Nanomaterials Incorporated with Plant's Extract	MS-2021-22	KFUEIT, RYK	Completed
38	Ahmed Waseem Faridi	Synthesis and Characterization of Halide Perovskite Materials for Solar Cells	MS-2021	KFUEIT, RYK	Completed
37	Mohammad Imran	Study of Physical Properties of Inorganic Hole Transport Thin Films for Perovskite Solar Cells	MS-2021	KFUEIT, RYK	Completed
36	Shahzad Mehmood Hassan	Study of Wide Bandgap Materials for Window Layer in Thin Film Solar Cells	MS-2021	KFUEIT, RYK	Completed
35	Atta Hussain	Light Absorbing Materials for Thin Film Solar Cells	MS-2021	KFUEIT, RYK	Submitted
34	Muhammad Ajmal	Study and characterization of biogenic materials prepared by green synthesis	MS-2021	KFUEIT, RYK	Completed

33	Sehrish Bano	Synthesis and Characterization of Electron Transport Materials for Perovskite Solar Cells	MS-2021	KFUEIT, RYK	Completed
32	Shahbaz Shabbir	Preparation and Investigation of Physical Properties of PbS Thin Films	MS-2020	KFUEIT, RYK	Completed
31	Muzamil Ali	Synthesis and categorization of light harvesting materials for thin film solar cells	MS-2020	KFUEIT, RYK	Completed
30	Maula Bukhsh	Study of nano structured n-type semiconducting (wide band gap) materials for window layer applications in thin film solar cells	MS-2020	KFUEIT, RYK	Completed
29	Muhammad Muzammal Shahid	Synthesis of biogenic Ag-NPs and study their antibacterial activities	MS-2020	KFUEIT, RYK	Completed
28	Noreen Mustafa	Ecofriendly Synthesis of Silver Nanoparticles Incorporated with Moringa Oleifera Leaf Extract and its Biomedical Applications	MS-2020	KFUEIT, RYK	Completed
27	Asim Saeed	Preparation of Low Cost Perovskite Material for Solar Cell Applications	MS-2020	KFUEIT, RYK	Completed
26	Muhammad Abbas	Synthesis and Analysis of Physical Properties of Electron Transport Materials (ETMs) for Inorganic Metal Halide Perovskite Solar Cells	MS-2020	KFUEIT, RYK	Completed
25	Umair Sarwar	Synthesis and characterization of lead free highly stable Perovskite thin film for solar cell applications.	MS-2020	KFUEIT, RYK	Completed
24	Muhammad Sohaib Akram	Synthesis and characterization of Self-Healing coatings for corrosion resistance applications.	MS-2020	KFUEIT, RYK	Completed
23	Tusaddiq Tahir	Investigation of Physical Properties of Metal Oxide Hole Transport Layer of Perovskite Solar Cell	MS-2020	KFUEIT, RYK	Completed
22	Muhammad Imran	Study of Structural, Optical and Electrical Properties of Aluminum (Al) doped Cadmium Sulfide (CdS) Thin Films	MS-2020	AIOU, Islamabad	Completed
21	Hamid Ali Khan	Study of Physical Properties of Wide Band Gap CdS Materials for Solar Cell Applications	MS-2019	AIOU, Islamabad	Completed
20	Raja Muhammad Rafaq	Synthesis and Characterization of SnS Doped Thin Films on Glass Substrate	MS-2019	AIOU, Islamabad	Completed
19	Shakeel Ahmed	Deposition and Characterization of p-type Doped ZnTe thin films	MS-2018	AIOU, Islamabad	Completed
18	Tariq Mahmood Tahir	Analysis of Sn-Bi-S layers for photovoltaic applications.	MS-2018	AIOU, Islamabad	Completed
17	Tariq Iqbal	Study of SnS-Bi <sub>2</sub> S <sub>3</sub> films for photovoltaic devices	MS-2018	AIOU, Islamabad	Completed
16	Amir Shahzad	Influence of Copper doping on Physical Properties of SnS Thin Films	MS-2017	AIOU, Islamabad	Completed
15	Muhammad Akhtar Jamali	Investigation of Physical Properties of CdTe Thin Film for Solar Cell Applications	MS-2017	AIOU, Islamabad	Completed

## *II. As External/Co-supervisor*

Sr.#	Name of Student	Thesis Title	Degree	University	Status
14	Ayesha Sarwar	Synthesis of Se nanoparticles by green synthesis	MS 2022	GCU, Faisalabad	Completed
13	Muhammad Sohail Shah	Solution synthesis of SnS thin films for efficient solar cell applications	MS-2021	KFUEIT, RYK	Completed
12	Iram Rafiq	Study of II-VI n-type CdS Thin Film Window Layers for Solar Cells	MS-2021	KFUEIT, RYK	Completed
11	Maryam Anwer	Characterization of Biogenically Synthesized Zinc Oxide Nano Particles	MS-2021	KFUEIT, RYK	Completed
10	Maria Rasheed	Structural Stability of Sodium Based Fluoroperovskites NaMgF <sub>3</sub> and NaZnF <sub>3</sub>	MS-2021	KFUEIT, RYK	Completed
9	Muhammad Rehan Bilal	First principle calculations of structural stability in different phases of CmO <sub>2</sub> and ThO <sub>2</sub>	MS-2021	KFUEIT, RYK	Completed
8	Khalil Ahmad	Study of Perovskite Materials for Solar Cells	MS-2021	UET, Lahore	Completed

7	Nazia Aslam	Salt tolerance by sorghum produced Zn nanoparticles.	MS-2020	GCU, Faisalabad	Completed
6	Majid Ali	Synthesis and Characterization of Advanced Photovoltaic Materials	MS-2017	Riphah International University Islamabad (RIUI)	Completed
5	Muneeb Ahsan	Study of II-VI Thin Film Materials for Solar Cell Applications	MS-2017	Riphah International University Islamabad (RIUI)	Completed
4	Azhar Mahmood	Synthesis and characterization of Tin Sulphide (SnS) thin film by thermal evaporation method	MS-2016	Riphah International University Islamabad (RIUI)	Completed
3	Mahtab Mahmood	Synthesis and characterization of Cadmium Sulphide (CdS) thin film by thermal evaporation method	MS-2016	Riphah International University Islamabad (RIUI)	Completed
2	Abid Mehmood	Synthesis and structural study of thin film of SnS-Bi <sub>2</sub> S <sub>3</sub> by thermal evaporation method	MS-2016	Riphah International University Islamabad (RIUI)	Completed
1	Amjad Mahmood	Synthesis and structural study of Sn-Bi-S system thin film by sputtering	MS-2016	Riphah International University Islamabad (RIUI)	Completed

## University Administrative Experience:

- Member of admission committee for (BS & MSc Physics) at Khwaja Fareed University of Engineering & Information Technology, Rahim Yar Khan (Fall-2017).
- Member of 2<sup>nd</sup>, 3<sup>rd</sup>, & 4<sup>th</sup> BOS Department of Physics for the BS, MSc, MS & PhD syllabus.
- Advisor for BS & MSc (Physics) Students.
- Incharge Physics Laboratories (2018-2019).
- Departmental Procurement Convener/Coordinator (Feb 2109 to till).
- Member Departmental Sport committee (Feb 2109 to till).
- Member Departmental ORIC committee (Feb 2109 to till).
- Member Departmental OBE committee (Feb 2109 to till).
- Member “Self-Assessment Report” committee (Feb 2109 to till).
- Coordinator Graduate Research Laboratory (Physics) (Feb 2109 to Sep 2021).
- Departmental Program Leader of the MSc Program (April 2109 to till).
- Departmental Coordinator DSA/Extra-curricular activities (Jan 2019 to till).
- Member of Department Graduate Committee (DGC) (Nov 2019 to Nov. 2021).
- Member of Department NRPUR research projects review committee (DPRC) (Dec 2019 to till).
- Departmental Coordinator (Products) (Sep 2021 to till)

## Research Interests & Experience:

- Synthesis of thin film materials using different deposition techniques.
- Experience on thin film deposition by thermal evaporation method.
- Experience on Thin film deposition by sputtering method.
- Study structural properties using X-ray Diffraction & Study structural phases by Raman Spectroscopy
- Optical characterization by using spectrophotometer.
- To study Photoconductivity response of semiconducting materials.
- Semiconductor materials conductivity type determination by hot probe technique.
- Fabrication of solar cells.
- Synthesis of biogenic materials.

## Member of International Scientific Associations:

1. Scientific and Technical Research Association (STRA) **Membership ID:** STRA-M19596 **Membership Category:** Life-Time

2. Associate member of The American Ceramic Society (ACerS). ACerS ID Number: 2429661
3. Community Associate Member of American Chemical Society. ACS Member Number: 32010981
4. Scientific Committee Member of Annual International Congress on Chemistry, Oxford, UK (<https://chemrtc.com/scientific-committee-member/?pdb=12360>).

## Reviewer of International Journals:

1. Science and Technology of Advanced Materials, ISSN: 1468-6996 (Print), Online ISSN: 1878-5514 (Online).
2. Material Research Journal, ISSN: 0884-2914 (Print), ISSN:2044-5326 (Online).
3. Solar Energy, ISSN: 0038-092X.
4. Journal of Advances in Physics, E-ISSN: 2347-3487.
5. International Journal of Smart Grid and Clean Energy, ISSN:2315-4462 (Print), ISSN:2373-3594 (Online).
6. Energy, Environment & Storage; An International Journal.

## Editor of International Journals:

1. SCIREA Journal of Physics, <http://www.scirea.org/journal/EditorialBoard?JournalID=14000>.
2. SCIREA Journal of Materials, <http://www.scirea.org/journal/EditorialBoard?JournalID=43000>.
3. Journal of Advances in Physics, <https://rajpub.com/index.php/jap/about/editorialTeam>.
4. Journal of Advances in Agriculture, <https://rajpub.com/index.php/jaa/about/editorialTeam>.
5. Energy, Environment & Storage (EES); An International Journal, <https://enenstrg.com/Committee/CommitteeCategory?id=4>

## International Conferences organized/arranged/chaired/Co-chaired:

Sr. #	Year	Conference	Role	Category	Period/Duration	City/Country
30	2025	11th Annual International Conference on Network and Information Systems for Computers [ICNISC 2025] <a href="http://www.icnisc2025.com/?op=committee">http://www.icnisc2025.com/?op=committee</a>	Technical Program Committee	International	Aug. 22-24	Wuhan, China
29	2022	10th annual International Conference on Material Science and Environmental Engineering [MSEE2022] <a href="http://www.msee2022.com/?op=committees">http://www.msee2022.com/?op=committees</a>	Technical Program Committee	International	Nov. 25-27	Nanjing, Jiangsu, China
28	2022	6th International Conference on Electrical, Automation and Mechanical Engineering (EAME2022) <a href="http://www.6th-eame.org/com.html">http://www.6th-eame.org/com.html</a>	Technical Program Committee	International	Sep. 18-19	Guangzhou, China
27	2022	10 <sup>th</sup> Annual International Conference on Material Science and Engineering (ICMSE2022) <a href="http://www.icmse2022.net/?op=committee">http://www.icmse2022.net/?op=committee</a>	Technical Program Committee	International	Sep. 16-18	Hangzhou, Zhejiang, China
26	2022	5th Annual International Conference on Energy Development and Environmental Protection [EDEP2022] <a href="http://www.edep2022.com/?op=committee">http://www.edep2022.com/?op=committee</a>	Technical Program Committee	International	July. 22-24	Hangzhou, Zhejiang, China



25	2022	3rd International Conference on Energy, Power and Environmental System Engineering (ICEPESE2022) <a href="http://www.3rd-icepese.com/com.html">http://www.3rd-icepese.com/com.html</a>	Technical Program Committee	International	May 29-30	Shanghai, China
24	2022	2022 International Conference on Environment, Energy and Materials Engineering (ICEEME2022) <a href="http://www.iceeme2022.org/com.html">http://www.iceeme2022.org/com.html</a>	Technical Committee	International	Jan. 16-17	Changsha, China
23	2022	2022 International Workshop on Advanced Materials, Energy & Environment Science (AMEES2022) <a href="http://www.amees2022.org/com.html">http://www.amees2022.org/com.html</a>	International Scientific Committee	International	Jan. 16-17	Changsha, China
22	2021	2nd International Conference on Desalination and Environment (ICDE 2021) <a href="http://www.icde2021.com/?op=committee">http://www.icde2021.com/?op=committee</a>	Technical Program Committee	International	Dec.17-19	Nanjing, China
21	2021	2021 International Conference on Energy, Environment, Epidemiology and Information System (IC3EIS2021) <a href="https://www.ic3eis.org/com.html">https://www.ic3eis.org/com.html</a>	Organizer Committee	International	Sep. 26-27	Beijing, China
20	2021	4th International Conference on Energy and Power Engineering (EPE2021). <a href="http://www.4th-epe.org/com.html">http://www.4th-epe.org/com.html</a>	General Co-Chair	International	Sep. 17-18	Guangzhou, China
19	2021	2021 International Joint Conference on Energy, Electrical and Power Engineering (CoEEPE 2021).	Technical Committee	International	Sep. 10-12	Frankfurt, Germany.
18	2021	The 7th International Conference on Renewable Energy and Development (ICRED 2021).	Reviewer	International	Sep. 10-12	Fukuoka Institute of Technology, Fukuoka, Japan
17	2021	9th Annual International Conference on Material Science and Engineering (ICMSE 2021)	Technical Program Committee	International	July 23-25	Guiyang, Guizhou, China
16	2021	2nd International Conference on Energy, Power and Environmental System Engineering (ICEPESE2021)	International Scientific Committee	International	July 4-5	Shanghai, China
15	2021	2020 International Conference on Modern Management and Education Research (MMER2021)	International Scientific Committees	International	July 4-5	Shanghai, China
14	2021	International Workshop on Environmental Science and Renewable Energy Engineering (ESREE2021)	TPC	International	April 11-12	Beijing, China
13	2020	2020 International Conference on Environmental Science and Renewable Energy (ESRE 2020).	Technical Committee	International	Dec. 28-30	Hong Kong
12	2020	Global Al-Farabi Forum	Participant	International	Dec. 21-22	Islamabad
11	2020	International Conference on Renewable Energy, “Future Challenges and Directions”	Co-Chair	International	Dec. 17-18	Colombo, Sri Lanka
10	2020	2nd International Conference on Energy, Power, Environment and Computer Application (ICEPECA2020)	Technical Committee	International	Nov. 22-23	Beijing, China

9	2020	International Conference on Energy, Environment and Storage of Energy (ICEESEN 2020)	Session Chair	International	Nov. 19-21	Kayseri, Turkey
8	2020	6th Annual International Workshop on Materials Science and Engineering	TPC	International	July, 17-18	Shandong, China
7	2020	9th International Conference on Advanced Materials and Engineering Materials (ICAMEM 2020)	Program Committee	International	July, 3-5	Bangkok, Thailand
6	2020	9 <sup>th</sup> International conference on Semiconductor Materials and Nano Devices	Organizer Committee	International	March, 9-10	Rahim Yar Khan, Pakistan
5	2019	3 <sup>rd</sup> International Conference on Advanced Environmental Engineering (ICAEE2019)	TPC	International	Dec. 20-21	Guangdong, China
4	2019	2 <sup>nd</sup> International Conference on Metal Material Processes and Manufacturing	TPC	International	July 30-31	Jeju Island, South Korea
3	2019	International Conference on Advanced Material Research and Processing Technology (AMRPT2019).	Reviewer Committee	International	July 19-21	Wuhan, China
2	2019	8 <sup>th</sup> International Conference on Advanced Materials and Engineering Materials (ICAMEM2019).	TPC	International	April 18-19	Hong Kong, China
1	2019	8 <sup>th</sup> International conference on Semiconductor Materials and Nano Devices	Organizer Committee	International	March, 9-10	Rahim Yar Khan, Pakistan

## Publications/Research Contributions:

### I. Refereed Journal Articles;

29. Structural, magnetic and impedance spectroscopy of M-type hexaferrites synthesized with WOWS sol gel method, G. Asghar, F. Shabir, S. N. Khosrp, **G. H. Tariq**, et. al., Inorganic Chemistry Communications, <https://doi.org/10.1016/j.inoche.2025.114648>, 2025.
28. Study of the Effects of Compositional Constituents on the Physical Properties of Inorganic Halide Perovskite Thin Films Prepared via Spin Coating Deposition Method, S. Jalil, **G. H. Tariq**, et. al., Journal of Optics and Photonics Research, <https://doi.org/10.47852/bonviewJOPR52024061>, 2025.
27. Tuning of the structural, and dielectric properties of Ho<sup>3+</sup> substituted in Ba<sub>2</sub>CoZnFe<sub>12</sub> – xHo<sub>x</sub>O<sub>22</sub> Y-type hexaferrite, Farhan Haider, Muhammad Shahzad Shifal, **G. H. Tariq**, et.al., Applied Physics A (2025) 131:226, <https://doi.org/10.1007/s00339-025-08345-w>
26. Investigation of physical properties of spin coated Ni<sub>1-x</sub>Zn<sub>x</sub>O (x = 0, 0.05, 0.07, 0.09) thin films for application as hole transport layer for perovskite solar cells, M. Abbas, M. Haseeb-u-Rehman, M. Sohail, **G. H. Tariq**, Journal of Ovonic Research, <https://doi.org/10.15251/JOR.2025.211.151>, 2025.
25. “Effect of copper doping on plasmonic nano films for high performance photovoltaic energy applications”, **Ghulam Hasnain Tariq**, et al., *Phys. Chem. Chem. Phys.*, 2023, DOI: 10.1039/D3CP04332K
24. “Low loss Nickel doped Magnesium-Manganese ferrite nanoparticles: A study of structural and magnetic properties”, Ghulam Asghar, Eena Tariq, Syed Nasir Khisro, **Ghulam Hasnain Tariq**, et al., 2023, Kuwait Journal of Science xxx (xxxx) xxx, <https://doi.org/10.1016/j.kjs.2023.05.001>



23. "Investigation of annealing effects on physical properties of chemically prepared copper oxide thin films", Muhammad Imran, Ghulam Asghar, **Ghulam Hasnain Tariq**, et al., *Results in Optics*, 2023, <https://doi.org/10.1016/j.rio.2022.100331>.
22. "Functional bioinspired nanomaterials for anticancer activity with generation of reactive oxygen species", Allah Dittah Khalid, Naeem Ur-Rehman, **Ghulam Hasnain Tariq**, et al., *Chemosphere*, 2023, <https://doi.org/10.1016/j.chemosphere.2022.136885>.
21. "Thickness-Dependent Physical Properties of Tin Sulfide Thin Films for an Efficient Sunlight-Absorbing Layer", Muhammad Sohail Shah, Sana Ullah, **Ghulam Hasnain Tariq**, Muhammad Sana Ullah Sahar, Ghulam Asghar, and M. Anis-ur-Rehman, *Journal of Electronic Materials* <https://doi.org/10.1007/s11664-022-09881-4>.
20. "Study of wide bandgap n-type CdS window layers for thin-film solar cells", Iram Rafiq, Sana Ullah, **Ghulam Hasnain Tariq**, Mumtaz Ahmad Qaisrani, Hafiz Muhammad Asif Javed, *Journal of Materials Research* (2022). <https://doi.org/10.1557/s43578-022-00688-x>
19. "Synthesis and Characterization of High-Efficiency Halide Perovskite Nanomaterials for Light-Absorbing Applications", Ahmed Waseem Faridi, Muhammad Imran, **Ghulam Hasnain Tariq**, Sana Ullah, Syed Farhan Noor, Sabah Ansar, and Farooq Sher, *Ind. Eng. Chem. Res.* 2022, 25;62(11):4494-4502., <https://doi.org/10.1021/acs.iecr.2c00416>.
18. "Functionalisation of MWCNTs with piperazine and dopamine derivatives and their potential antibacterial activity", Saghir Hussain, Tariq Mahmood Ansari, Hina Sahar, Shamsa Kanwal, Farrukh Mansoor, Timur Darak, M. Zubair Iqbal, Fahim Khurshid Butt, Ajaz Hussain, Aun Muhammad, Sher Zaman, **Ghulam Hasnain Tariq**, Hafiz Muhammad Asif, *Micro & Nano Letters*, **15**(15), (2020) 1–5, doi: 10.1049/mnl.2020.0114.
17. "Enhanced Magnetic Properties of Barium Hexaferrite", *Journal of Electronic Materials*, G. Asghar, S. Asri, S.N. Khusro, **G.H. Tariq**, M.S. Awan, M. Irshad, A. Safeen, Y. Iqbal, W.H. Shah, and M. Anis-ur-Rehman, **49**, 4318-4323 (2020).
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4. "Effects on Structural, Electronic Transport & Optical Properties of Doped & Undoped ZnTe Thin Films for CdTe/CdS Solar Cells", **G.H. Tariq** and M. Anis-ur-Rehman, *Key Engineering Materials*, **510-511** (2012) 89-97.
3. "Role of Synthesis Parameters on Structural and Electrical Properties of M-Type Hexa-Ferrites", G. Asghar, S. Nasir, M.S. Awan, **G.H. Tariq**, M. Akram and M. Anis-ur-Rehman, *Key Engineering Materials*, **510-511** (2012) 201-205.
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## II. Book chapters:

1. **Ghulam Hasnain Tariq**, Muhammad Ashraf, Umar Sohaib Hasnain, *Solar Technology in Agriculture*; DOI: <http://dx.doi.org/10.5772/intechopen.98266>, (2021).

## Conferences attended:

1. International Mini-Symposium on Nano Science and Technology, November 02-03, 2006. Islamabad, Pakistan.
2. 6<sup>th</sup> International Workshop and Training Course on Microelectronics, Micro & Nano and Photonics, April 9-3, 2007, Islamabad, Pakistan.
3. 10<sup>th</sup> International Symposium on Advanced Materials (ISAM-2007), September 03-07, 2007, Islamabad, Pakistan.
4. 3<sup>rd</sup> International Conference on Frontiers of Advanced Engineering Materials (FAEM-08), 15-17 December, 2008, Lahore, Pakistan.
5. 34<sup>th</sup> International Nathiagali Summer College on Physics & Contemporary, 22<sup>nd</sup> June – 4<sup>th</sup> July 2009, at Nathiagali, Pakistan.
6. 11<sup>th</sup> International Symposium on Advanced Materials (ISAM-2009), August 08 – 12, 2009, Islamabad, Pakistan.
7. 1<sup>st</sup> National Conference on Radiation, Matter and Particles, December 2009, Lahore.
8. "International Scientific Spring 2010", 01<sup>st</sup> – 06<sup>th</sup> March 2010, National Centre for Physics (NCP), Islamabad, Pakistan.
9. Workshop on Applications of Nanotechnology (WANT-2010) 31<sup>st</sup> May – 4<sup>th</sup> June 2010, National Centre for Physics (NCP), Islamabad, Pakistan.
10. International Conference on Power Generation Systems and Renewable Energy Technologies (PGSRET) Nov 29 - Dec. 2, 2010, IIU, Islamabad, Pakistan.
11. 12<sup>th</sup> International Symposium on Advanced Materials (ISAM-11), 26<sup>th</sup>-30<sup>th</sup> September, 2011, NCP Islamabad.
12. "International Workshop on Hybrid Perovskite Photovoltaic and Optoelectronic Devices" National Centre for Physics (NCP), Islamabad, Pakistan, October 8 - 10, 2018.
13. "Natural Sciences at the Interface of Climate Change, Food Security and Sustainability (NSICFSS)", University of Kotli Azad Jammu and Kashmir, Pakistan, 24-26 Oct, 2018.