



Shareen Shafique

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- 🔗 <https://scholar.google.com/citations?user=JOyNtk4AAAAJ&hl=en>

Personal Profile

- A responsible, intelligent and experienced retail professional with an extensive background in teaching, training and research.
- Innovative thinker with proven ability to adopt an analytical approach to solving both complex strategic and implementation problems.
- Sense of responsibility and ability to work independently to meet agreed to targets.

Educational Background

2015-2019



Xi'an Jiaotong University, School of Mechanical Engineering, Xi'an, China.
(School of mechanical engineering rank # 42 in the world)
QS ranking by subject
(<https://www.topuniversities.com/universities/xian-jiaotong-university>)

- **Degree:** Ph.D. in Mechanical Engineering (Physics) (CGPA 3.78/4.0)
- **Advisor:** Dr. Shuming Yang (Vice Dean, School of Mechanical Engineering)
- **Dissertation Title:** High-performance photodetector of V_2O_5 and V_2O_5/rGO nanocomposite.

2010-2012



Center of Excellence for Solid State Physics, University of the Punjab, Lahore, Pakistan

- **Degree:** M.S. Nanotechnology (Physics) (CGPA 3.38/4.0)
- **Advisor:** Dr. Saira Riaz (Director)
- **Thesis Title:** Bacteria removal from water by using nanoparticles.

2006-2010



Department of Physics, University of the Punjab, Lahore, Pakistan

- **Degree:** B.Sc. (Hons) Electronics (Physics) (CGPA 3.25/4.0)
- **Advisor:** Dr. Umar Farooq
- **Thesis Title:** Design and low-cost implementation of a fuzzy logic controller for wall following behavior of a mobile robot

Research Experience (8 years)

I have learnt multidimensional different material synthesis and characterization skills during my research duration such as:

Synthesis Skills

- Hydrothermal method
- Chemical vapor deposition (CVD)
- Photo assisted electrodeposition/Electrodeposition
- Sol-gel method
- Ball milling
- Spray dying
- Sputtering

Characterization Skills

- X-ray Diffraction Spectroscopy (XRD)
- Scanning Electron Microscopy (SEM)
- Energy dispersion mapping (EDX)
- UV/Visible/IR Spectroscopy
- Raman Spectroscopy
- Semiconductor analyzer system
- Optoelectronic measurement system
- Atomic Force Microscopy (AFM)

Publications

1. **S. Shafique**, S. Yang, T. Iqbal, Ag-decorated flower-like V₂O₅/rGO nanocomposite for enhanced photoelectric properties. (ready for submissions)
2. **S. Shafique**, S. Yang, T. Iqbal, Copper NP decorated hierarchical V₂O₅ zinnia-like flowers on large functionalized rGO sheets for superior photodetection properties. (ready for submissions)
3. **S. Shafique**, S. Yang, T. Iqbal, Advanced V₂O₅/rGO based-hybrid nanocomposite for highly optimized broadband photodetector. *Sensors and Actuators A: Physical*. **I. F=3.407**
<https://doi.org/10.1016/j.sna.2021.113073>
4. C. Biyao, S. Yang, **S. Shafique**, Controllable preparation of high performance carbon nanotube probe. *Microsystems & Nanoengineering*. **I.F=5.616**
<https://doi.org/10.1038/s41378-021-00310-w>
5. D.R. Lambada, S. Yang, Y. Wang, **S. Shafique**, Investigation of illumination effects on the electrical properties of Au/GO/p-InP heterojunction with a graphene oxide interlayer in nanomanufacturing and metrology.
<https://doi.org/10.1007/s41871-020-00078-z>
6. Y. Wang, S. Yang, **S. Shafique**, A graphene-silicon Schottky photodetector with graphene oxide interlayer, *Sensors and Actuators A: Physical*, **I. F=3.407**
<https://doi.org/10.1016/j.sna.2020.112232>
7. C. Biyao, S. Yang, Y.T. Woldu, **S. Shafique**, F. Wang, A study on the mechanical properties of carbon nanotube probe with high aspect ratio. *Nanotechnology*, **I. F=3.874**
<https://doi: 10.1088/1361-6528/ab6239>.
8. **S. Shafique**, S. Yang, Y. Wang, Y.T. Woldu, B. Chen, P. Ji, High-performance photodetector by using urchin-like hollow spheres of vanadium pentoxide network device. *Sensors and Actuators A: Physical*, **I. F=3.407**
<https://doi.org/10.1016/j.sna.2019.07.003>.
9. **S. Shafique**, S. Yang, Y.T. Woldu, Y. Wang, Hierarchical synthesis of urchin-like V₂O₅ hollow spheres and its photodetection properties, *Sensors and Actuators A: Physical*. **I. F=3.407**
<https://doi.org/10.1016/j.sna.2019.01.029>
10. A. Vazinishayan, D. R. Lambada, S. Yang, G. Zhang, B. Cheng, Y. T. Woldu, **S. Shafique**, Y. Wang, and N. Anastase, Effects of mechanical strain on optical properties of ZnO nanowire, *AIP Advances*, **I.F=1.579**
<https://doi.org/10.1063/1.5016995>

11. **S. Shafique**, Bacterial Application of Al₂O₃ and FeO Nanoparticles in the Water Purification” in Nano SET -14, International Conference on the impact of Nano-science on energy technologies, (18-20) March 2014 COMSATS, Lahore, Pakistan.
12. U. Farooq, A. Khalid, M. Amar, A. Habiba, **S. Shafique**, R. Noor, Design and low-cost implementation of a fuzzy logic controller for wall following behavior of a mobile robot” in IEEE Xplore, Signal Processing Systems (ICSPS), 2010 2nd International conference, at Dalian University of Technology China, 5-7 July-2010.
<https://doi.org/10.1109/ICSPS.2010.5555781>

Experience

- University of the Punjab, Department of Physics, New campus Lahore, Pakistan.
IPFP fellow (January, 2022- Till date)

Honors and Awards

2014-2019	CSC full Scholarship for PhD.
2010	Winner of merit scholarship in MS Nanotechnology.
2011	Achieved a Laptop from Punjab Government on Merit Basis.
2007-2009	Winner of merit scholarship in BSc (Hons) Electronics.
2006	Roll of Honor.

Co-Curricular Activities

2014	Second Prize in Xi’an Jiaotong University Marathon.
2006	Best athlete from Science Campus.
1999	Silver medal, 17 th National Roller-Skating Championship.

References

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