



# Sanam Saleem

📍 **Home** : Address: University of Agriculture Faisalabad, University of Agriculture Faisalabad Sub campus Okara, 38000, Faisalabd/Okara, Pakistan

📍 **PassPort Number** : FY....., Pakistan

✉ **Email**: [sanam.saleem22@gmail.com](mailto:sanam.saleem22@gmail.com) 🏠 **Phone**: (+92) 03177835577

👤 **Research Gate**: <https://www.researchgate.net/profile/Sanam-Saleem>

**Gender**: Female **Date of birth**: 13/06/1997 **Nationality**: Pakistani

## WORK EXPERIENCE

### Mange Spin Opto-electronics ferro-Thermoelectric(SOFT) Materials and Devices Lab UAF Physics Department (5-year)

**City**: Faisalabad

### University teaching assistant (TA) University of agriculture Faisalabad (1-year)

**Address**: Constituent College Depalpur, Okara , University of Agriculture Faisalabad, Okara , Pakistan

### Physics lecturer

Lecturer Physics

Tutor of TGM

## EDUCATION AND TRAINING

[ 10/11/2021 – Current ]

### Ph.D. (Physics)

*University of Agriculture, Faisalabad, Punjab, Pakistan*

**Country**: Pakistan | | **Final grade**: 3.96/4.00

[ 13/09/2018 – 10/12/2021 ]

### Master of Philosophy (M.Phil.) Physics

*University of Agriculture, Faisalabad, Punjab, Pakistan*

**City**: Faisalabad | **Country**: Pakistan | | **Final grade**: 3.79/4 | **Thesis**: The first principal study of electronic, optical, magnetic and structural properties of V doped SrTiO<sub>3</sub>

[ 30/07/2018 – 30/08/2020 ]

### BS(Physics)

*GC Women University Faisalabad*

**Country**: Pakistan | | **Final grade**: 3.90/4

[ 05/08/2011 – 15/09/2013 ]

### Higher Secondary School Certificate (F.Sc.) Pre-Engineering

*Board of Intermediate and Secondary Education, Faisalabad*

**Country**: Pakistan | **Field(s) of study**: Math-Physics | **Final grade**: 724/1100

[ 03/03/2009 – 23/07/2011 ]

### Secondary School Certificate (Matric) Science

*Board of Intermediate and Secondary Education, Faisalabad*

**Country**: Pakistan | | **Final grade**: 891/1050

**Participation in Post-induction Training and Professional Development for Young Faculty, " 07 August 2024 to 21 August 2024** Directorate of Academics & Teaching Resource Centre, University of Agriculture, Faisalabad.

City: Faisalabad | Country: Pakistan |

**Training session regarding the conduction of the Entry test for National of Medical Sciences (NUMS), Islamabad at Constituent College, Depalpur Okara, UAF on August 31, 2024,**

*Training session regarding the conduction of the Entry test for National of Medical Sciences (NUMS)*

City: okara | Country: Pakistan |

## LANGUAGE SKILLS

**Mother tongue(s):** Urdu

**Other language(s):** Fluent in Urdu and English (reading, writing, and interpretation)

## SKILLS

Zoom | Google Drive | Internet surfing and browsing for scientific work | Command on Origion software/ Expert High Score/ Microsoft Office (Word ExcelPower Point) | Wein2k Software | Xmgrace (graphic data representation) | Skype

## CONFERENCES AND SEMINARS

### Seminars and Certifications

**1- 1st International Conference** on Materials science&Nanotechnology (MSNANO-17) at Government College University, Faisalabad (GCUF), Pakistan (18-19 February, 2017).

**2- Science Exhibition** at GC Women University Faisalabad (GCWUF), Pakistan (26 April, 2017).

**3- 3rd International Conference** on Materials science&Nanotechnology (MSNANO-19) at Government College University, Faisalabad (GCUF), Pakistan (18-20 February, 2019).

**4- One day workshop** On Endnote Software at Community college, University of Agriculture, PARS, Faisalabad (6<sup>th</sup> May, 2019).

**5- Seminar** on Recent Developments in SPACE EXPLORATION at Department of Physics of University of Agriculture Faisalabad (UAF), Pakistan(29 January,2019).

**6. International Conference** on New Frontiers in Experimental and Theoretical Physics at Department of Physics of University of Agriculture Faisalabad (UAF), Pakistan (16,17 April,2018).

**7- International Symposium** on Technologies and Materials for Renewable Energy, Environment & Sustainability at University of Agriculture Faisalabad (UAF), Pakistan 6-7February 2019).

**8- Committee member on Seminar "Break the Barrier: Crime, Criminal Behavior and Youth, 2024**

UAF Sub-campus Okara

**9- Committee member on Seminar on "Solidarity with Kashmir and Palestine", 2024**

UAF Sub-campus Okara

## RECOMMENDATIONS

**Name: Dr. Muhammad Yaseen** Associate Professor

Department Of Physics, University Of Agriculture Faisalabad, Pakistan

**Phone number:** (+92) 3314700425 | **Email:** [m.yaseen@uaf.edu.pk](mailto:m.yaseen@uaf.edu.pk)

**Name: Dr. Muhammad yasir Javed** Associate Professor

Department Of Physics, University Of Agriculture Faisalabad, Pakistan

**Phone number:** (+92) 3366058836 | **Email:** [yasir.javed@uaf.edu.pk](mailto:yasir.javed@uaf.edu.pk)

**Name: Dr. Muhammad Yasin Naz** Assistant Professor,

Department Of Physics, University Of Agriculture Faisalabad, Pakistan

**Phone number:** (+92) 3178106062 | **Email:** [yasin306@uaf.edu.pk](mailto:yasin306@uaf.edu.pk)

## HONOURS AND AWARDS

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### Laptop Under Chief Minister Laptop Scheme

BS (Hons) Physics; Government College Women University Faisalabad (GCWUF)

## HOBBIES AND INTERESTS

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### Extra-Curricular activities

- Reading books and research articles on various topics, including science, history etc.
- Running/Cooking
- Playing Badminton racket
- Gardening

## RESEARCH INTERESTS

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### DFT(Density Functional Theory) Study

Electro-magnetic and optical features of binary/perovskite compounds

Material Science (Computational Physics)

## EVALUATION

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**Good people management and communication skills.**

**Able to work under high pressure and time limitation.**

## INTERNATIONAL PUBLICATIONS

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### 1. Physical characteristics of vanadium-doped SrTiO<sub>3</sub> compound

<https://doi.org/10.1140/epjp/s13360-022-02352-z>.

### 2. Investigation of Mn doped BaS for spintronic and thermoelectric applications

<https://doi.org/10.1088/1402-4896/ac8a27>.

### 3. Tuned physical characteristics of PbSe binary compound: a DFT study

<https://doi.org/10.15251/JOR.2022.185.649>.

### 4. Physical characteristics of Pb<sub>1-x</sub>A<sub>x</sub>Se (A=Fe, Mn, V) for spintronic applicons

<https://doi.org/10.15251/CL.2022.198.553>.

### 5. Physical characteristics of LaCr<sub>x</sub>Al<sub>1-x</sub>O<sub>3</sub>: DFT approach

<https://doi.org/10.15251/JOR.2022.184.481>

**6. Optical and magnetic characteristics of BaTi<sub>1-x</sub>CoxO<sub>3</sub>: A first-principles study**

<https://doi.org/10.15251/CL.2023.207.459>

**7. DFT insight into magnetoelectronic and optical properties of Mo-modified BaTiO<sub>3</sub>**

<https://doi.org/10.1016/j.physb.2023.415163>

**8. Insight into thermodynamic, optoelectronic, and magnetic characteristics of V doped BeSe**

<https://doi.org/10.1016/j.physb.2023.415156>

**9. Modulated Optoelectronic and Magnetic Properties of Mn Doped SrTiO<sub>3</sub>: A Density Functional Theory Insight**

DOI: [10.1002/pssb.202300260](https://doi.org/10.1002/pssb.202300260)

**10. Investigation on the physical properties of Ni doped SrTiO<sub>3</sub> by first-principle calculations**

DOI: [10.15251/JOR.2023.195.513](https://doi.org/10.15251/JOR.2023.195.513)

**11. Electronic, optical and thermoelectric properties of Cs<sub>2</sub>XInCl<sub>6</sub> (X = Ag, Na) halide double perovskites**

DOI: [10.1002/pssb.202300265](https://doi.org/10.1002/pssb.202300265)

**12. Investigation of manganese doped BaSe for energy harvesting and spintronics devices**

DOI: [10.1088/1402-4896/ad04a0](https://doi.org/10.1088/1402-4896/ad04a0)

**13. Insight into electronic, magnetic and optical properties of KMn<sub>x</sub>Nb<sub>1-x</sub>O<sub>3</sub> compound**

DOI: [10.15251/DJNB.2023.184.130](https://doi.org/10.15251/DJNB.2023.184.130)

**14. Investigation of structural, electro-magnetic and optical properties of cubic SmXO<sub>3</sub> (X=Fe, Mn, Cr) perovskites**

DOI: [10.1088/1402-4896/ad01f1](https://doi.org/10.1088/1402-4896/ad01f1)

**15. Physical characteristics of Cs<sub>2</sub>XTlCl<sub>6</sub> (X = Sc, Y) double perovskites for energy harvesting applications**

• DOI [10.1016/j.physb.2024.415700](https://doi.org/10.1016/j.physb.2024.415700)

**16. DFT insights on the Be<sub>1-x</sub>Cr<sub>x</sub>S alloys for optoelectronic and magnetic devices**

• DOI [10.15251/CL.2024.211.53](https://doi.org/10.15251/CL.2024.211.53)

**17. Exploring the Mn doped BaTe alloy for spintronics and energy harvesting applications**

DOI: [10.1088/1402-4896/ad41a0](https://doi.org/10.1088/1402-4896/ad41a0)

**18. Exploring of Be<sub>1-x</sub>Cr<sub>x</sub>Se alloys for spintronics and optoelectronic applications**

DOI: [10.15251/CL.2024.214.365](https://doi.org/10.15251/CL.2024.214.365)

**19. Investigation of thermoelectric and optoelectronic features of Sr<sub>1-x</sub>MnxTe in ferromagnetic phase**

Write here the description...

**20. First-principles exploration of electronic, optical and magnetic features of Nb-doped BeTe for spintronic and optoelectronic devices**

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**21. Investigation of Magneto-optoelectronics Properties of Mg<sub>1-x</sub>MnxS alloys for Optoelectronics and Spintronic Applications**

**22. Investigation of Mg<sub>1-x</sub>Ni<sub>x</sub>S Alloys for Spintronic and Optoelectronic Application**

**23. Thermodynamical stability and optoelectronic characteristics of Sr<sub>1-x</sub>CoxTe: A DFT Study**

**24. Thermoelectric, Optoelectronic and Magnetic Characteristics of Mn-modified SrSe for Spintronic and Energy Harvesting Applications.**

**25. Modified Becke-Johnson potential calculations of Co-substituted MgS alloys for spintronic and optoelectronic applications**

**MANAGEMENT AND LEADERSHIP SKILLS**

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**Spin Opto-electronics ferro-Thermoelectric(SOFT) Materials and Devices Lab,  
Physics Department University of Agriculture Faisalabad**

**BOOK EDITED ABSTRACTS**

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**1. Tunable characteristics of Electromagnetic (EM) surface waves at isotropic chiral-homogeneous plasma interfaces, 2025**

Sanam Saleem, Muhammad Umair, Sehrish Saleem, Tahir Munir Butt, Muhammad Ahmad Raza

**2. Plasmon mode generation in Indium antimonide (InSb) loaded slab waveguide bounded by metal and graphene layers, 2025**

Sanam Saleem\*, Muhammad Umair, Sehrish Saleem, Hira Ashfaq, Muhammad Ahmad Raza

**3. Dyakonov surface waves supported at anisotropic chiral-isotropic plasma planar structure, 2025**

Sanam Saleem\*, Sehrish Saleem, Muhammad Umair, Muhammad Ahmad Raza

**4. Electromagnetic waves propagation in black phosphorus loaded parallel plate waveguide surrounded by plasma layers, 2025**

Sanam Saleem\*, Sehrish Saleem, Muhammad Umair, Muhammad Ahmad Raza

**5. Numerical calculations of transverse electric (TE) surface waves propagation at magnetic materials-plasma- magnetic materials interfaces, 2025**

Sanam Saleem\*, Sehrish Saleem, Muhammad Umair, Muhammad Ahmad Raza

**6. Numerical behaviour of surface plasmon polaritons at chiroferrite-graphene interface for THz applications, 2025**

Sanam Saleem\*, Sehrish Saleem, Muhammad Umair, Muhammad Ahmad Raza

**7. Characteristics of photon plasmon coupling in graphene sandwiched between magnetized plasma layers for THz applications, 2025**

Sanam Saleem\*, Muhammad Umair, Sehrish Saleem, Muhammad Ahmad Raza

**8. Ab initio study of V doped BeTe for spintronic and optoelectronic applications, 2025**

Sanam Saleem\*, Sehrish Saleem

**9. Chiral Carbon Dots: Synthesis, Properties, and Emerging Applications in Sensing, Bio imaging, and Catalysis, 2025**

Ali Raza, Saleem Abbas, Yousra Umbreen, Sanam Saleem, M Ameer, M Numan Akram

**10. Functionalized Single-Layer Graphene for High-Performance Supercapacitors, 2025**

Ali Raza, Yousra Umbreen, Sanam Saleem, M Numan Akram, Saleem Abbas, M Ameer

**11. Interactive Learning in STEM: Graphical Analysis of Radioactive Phenomena Using Spreadsheet, 2025**

Ali Raza, Saleem Abbas, Yousra Umbreen, Sanam Saleem, M Ameer, M Numan Akram

**ASSIGNMENTS NOTIFIED  
BY THE COMPETENT AU-  
THORITY/ADMINISTRAT-  
IVE HEADS.**

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**1. Tutor of undergraduate students, 2024-25**

**2. Member of Tutorial Office, 2024-25**

**3. Member of Central Examinations Committee (CEC), 2024-25**

**4. Hostel Affairs (Assist. Superintendent (Bano Qudsia Hall), 2024**

**5. Hostel Affairs (Assist. Superintendent (Shah Muqem Hall), 2024**

**6. Member of Campus Vigilance/Monitor the Class, 2024-25**

**7. Member of Smart Classroom, IT Audio-Visual Labs, Public Relations and Publications (PRP), 2024-25**

**8. Member of Sports, 2024-25**

**9. Member of Hall Management and Discipline Committee for Celebration of Eid Milad Un Nabi, 24 September, 2024.**

**10. Organizer Defence Day Celebration Plan at UAF Constituent College Depalpur, Okara, arranged by Associate Senior Tutor Office on 6th September 2024**

**11. Invegilator and Registration desk duty (1st Entry test for admission of Undergraduate degree Program for the academic sesión 2024-2025.**

- 12. Registration desk duty (2nd Entry test for admission to Undergraduate degree Program for the academic sesión 2024-2025**
- 13. Registration desk duty (3rd Entry test for admission to Undergraduate degree Program for the academic sesión 2024-2025.**
- 14. Member of Paper Checking of the 3rd Entry Test and preparation of the Results at Constituent College Depalpur, Okara, 2024**
- 15. Invegilator for the conduction of Entry test of National University Medical Sciences (NUMS), Islamabad, 1 September, 2024.**
- 16. Additional Academic activities Allotted, 2025**
- 17. DSA member, 2025**