



Curriculum Vitae

- **Name:** Mohammed Saad Sadeq
- **Title:** Doctor (Dr)
- **Department:** Basic Sciences Department
(Physics)
- **E-mail:** Mohamed.sadek@su.edu.eg

A) Academic Qualifications:

- Bachelor's Degree in Physics University: Zagazig University Year: 2007
- Masters Degree in Nuclear Physics University: Zagazig University Year: 2015
- Ph.D in Experimental Nuclear Physics University: Zagazig University Year: 2019

• Other Qualifications:

B) Academic promotions :

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- Demonstrator, Date:2009
- Assistant Lecturer, Date:2015
- Lecturer, Date:2019



- Assistant Professor,

Date: Not yet

-Professor

Date: Not yet

C) Scientific Merit:

- Google Scholar: Mohammed Saad Sadeq
- Citations: 875 h-index: 19 i10-index: 26
- Scopes ID: 57211329538
- Citations: 802 h-index: 18 i10-index: 26
- Orcid –N: 0000-0003-1457-0269

D) Academic Administrative Experiences: None

E) Scientific Activities

1: Membership of Professional Organizations and Scientific Societies

2: Training Courses/workshops:

- **Usage of International Data Base**, Training and Continuing Education Centre (TCEU), Zagazig University, Egypt (7-8/3/2018).
- **Plagiarism and References Management**, Training and Continuing Education Centre (TCEU), Zagazig University, Egypt (7-8/3/2018).
- **TOEFL Review Course**, Community Service and Environment Development Sector, ENGLISH FOR SPECIFIC PURPOSES CENTRE (ESP), Zagazig University, Egypt (28/8/2015 to 12/10/2015).
- **Internet and Latex**, Zagazig University, Egypt (31/8/2013 to 11/9/2013).
- **Statistical Data Analysis Using SPSS**, Zagazig University, Egypt (14/9/2013 to 2/10/2013).
- **Widows and Microsoft Office**, Zagazig University, Egypt (17/8/2013 to 28/8/2013).
- **TOEFL SCORE (TOEFL EQUIVALENT)**, Public service, Language Center, Suez Canal University, Egypt.

- **Lab Safety**, Public service, Suez Canal University, Egypt.
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- **Patent Course**, Suez Canal University, Public service, Suez Canal University, Egypt.
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- **Fundamentals of Digital Transformation Certificate (FDTC)**, Suez Canal University, Egypt.
- **Exams and Students Evaluation Systems**, (FDTC), Suez Canal University, Egypt.
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- **International Publishing of scientific research**, (FLDC), Cairo University, Egypt.

3: Conferences, Seminars and Workshops:

4: Teaching Scopes:

- **Physics 1**, Department of Basic Sciences, Faculty of Engineering, Sinai University, Egypt.
- **Physics 2**, Department of Basic Sciences, Faculty of Engineering, Sinai University, Egypt.
- **Physics 1**, Department of Basic Sciences, Faculty of Dentistry, Sinai University, Egypt.
- **Biophysics 1**, Department of Basic Sciences, Faculty of Physical Therapy, Sinai University, Egypt.
- **Physics 2**, Department of Basic Sciences, Faculty of Dentistry, Sinai University, Egypt.
- **Biophysics 2**, Department of Basic Sciences, Faculty of Physical Therapy, Sinai University, Egypt.
- **Electronic Materials**, Department of Electrical Engineering, Faculty of Engineering, Sinai University, Egypt.
- **Fundamentals of Electrical and Electronic Engineering**, Department of Architecture, Faculty of Dentistry, Sinai University, Ismailia, Egypt.

5: Scientific supervision number:

2 Master and 2 Ph.D.

6: Awards and Certificates of Appreciation:

7: Peer reviewing of scientific research/ Proects:

Review different papers for many journals such as Ceramics International (Elsevier), Journal of Material Science: Materials in Electronics (Springer), Frontiers in Materials, section Ceramics and



Glass, Journal of Inorganic and Organometallic Polymers and Materials (Springer) and Results in Chemistry (Elsevier)

8: Scientific Mission:

9: patency:

10: Consultancy Experience:

11: Other Activities:

F) Scientific Publications:

1. Studies on Some Inorganic Oxide Glasses Used as Gamma-Ray Shields and for Radio-Active Waste Encapsulation, published in Nature and Science, 2014; 12(12).
2. Effect of mixed heavy metal cations on the A.C. conductivity and dielectric properties of some boro-silicate glasses, Ceramics International 44 (2018) 14363–14369.
3. Effect of mixed rare-earth ions on the structural and optical properties of some borate glasses, Ceramics International, 45 (2019) 18327-18332.
4. Effect of samarium oxide on the structural, optical and electrical properties of alumino-borate glasses with constant copper chloride, J. Rare Earths, 38 (2020) 770-775.
5. The role of CuCl_2 in tuning the physical, structural and optical properties of some $\text{Al}_2\text{O}_3\text{-B}_2\text{O}_3$ glasses, Journal of Non-Crystalline Solids, 528 (2020) 119749-119754.
6. Influence of cobalt ions on the structure, phonon emission, phonon absorption and ligand field of some sodium borate glasses, Journal of Non-Crystalline Solids 525 (2019) 119666.

7. Influence of Fe cations on the structural and optical properties of alkali alkaline borate glasses, *Journal of Non-Crystalline Solids* 548 (2020) 120320.
8. Impact of cobalt ions on the phonon energy and ligand field parameters of some borate glasses, *Journal of Non-Crystalline Solids* 555 (2021) 120535.
9. Effect of iron oxide on the structural and optical properties of alumino-borate glasses, *Ceramics International* 47 (2021) 2043–2049.
10. Impact of sunlight on the optical properties and ligand field parameters of nickel borosilicate glasses, *Ceramics International* 47 (2021) 8566–8572.
11. The tungsten oxide within phosphate glasses to investigate the structural, optical and shielding properties variations, *Journal of Materials Science: Materials in Electronics* (2021).
12. The structure, correlated vibrations, optical parameters and metallization criterion of Mn–Zn–Cr nanoferrites, *Journal of Materials Science: Materials in Electronics* (2021).
13. The path towards wide-bandgap and UV-transparent lithium phosphate glasses doped with cobalt oxide for optical applications, *Journal of Non-Crystalline Solids* 569 (2021) 120983
14. Influence of cobalt oxide on the structure, optical transitions and ligand field parameters of lithium phosphate glasses, *Ceramics International* 47(2021)28536-28542
15. Environment influence on the crystal field and Racah's parameters of constant NiO-doped borosilicate glasses, *Optik* 247 (2021) 167861
16. Structure, stability and optical parameters of cobalt zinc borate glasses, *Ceramics International* 47(2021) 31470-31475.
17. Enhancing the magnetization, dielectric loss and photocatalytic activity of Co–Cu ferrite nanoparticles via the substitution of rare earth ions, *Journal of Materials Research and Technology*, 15 (2021) 2543-2556

18. Impact of bismuth oxide on the structure, optical features and ligand field parameters of borosilicate glasses doped with nickel oxide *Ceramics International* 47(2021)21443-21449
19. Covalency and Racah parameters of Fe³⁺ in Mn–Zn–Cr nanoferrites, *Ceramics International* 47(2021) 28237-28239.
20. Impact of Cr³⁺ substitution on the nephelauxetic ratio and Racah parameter of Cr-Mn-Zn nanoferrites, *Phys. Scr.* 97 (2022) 015804.
21. The combination of high optical transparency and radiation shielding effectiveness of zinc sodium borate glasses by tungsten oxide additions, *Journal of Alloys and Compounds* 904 (2022) 164037.
22. Enhancing the gamma-ray attenuation parameters of mixed bismuth/ barium borosilicate glasses: Using an experimental method, Geant4 code and XCOM software, *Progress in Nuclear Energy* 145 (2022) 104124
23. Towards highly transparent tungsten zinc sodium borate glasses for radiation shielding purposes, *Ceramics International* (2022)
24. Optical and radiation shielding properties of titano-phosphate glasses: influence of BaO, *Journal of the Australian Ceramic Society* (2022)
25. Impact of Y₂O₃ on the structural, optical, radiation shielding, and ligand field parameters of transparent borate glass containing constant CrO₃ and high Na₂O contents, *Ceramics International* (in press)
26. Effect of Y₂O₃ on the structural, optical and radiation shielding properties of transparent Na-rich borate glass with diluted and fixed Fe₂O₃, *Ceramics International* (2022)
27. Effects of TiO₂, V₂O₅, MnO₂ and Ti₂O₃ on structural, physical, optical and ionizing radiation shielding properties of strontium boro-tellurite glass: An experimental study, *Optical Materials* 127 (2022) 112350
28. The combination of high optical transparency and radiation shielding effectiveness of zinc sodium borate glasses by tungsten oxide additions, *J. Alloys Compd.* 904 (2022) 164037.

29. Fe₂O₃ within Na₂O-Al₂O₃- B₂O₃ glasses to study the structural and optical features changes, *Optical Materials* 131, 112419
30. Transparent and radiation shielding effective Na₂O-CrO₃ borate glasses via AgI additives, *Ceramics International* 48 (20), 30817-30825
31. Induced linear and nonlinear optical modifications of nickel cadmium borosilicate glass by sunlight irradiation, *Ceramics International* (2022)
32. Enhancement of linear optical and dielectric properties as well as gamma-ray protection capacities of PbO reinforced in TeO₂-WO₃ glasses: Comparative study, *Applied Physics A* 128 (9), 1-10
33. Synthesis, physical, FTIR, and optical characteristics of B₂O₃· CaO· ZnO glasses doped with Nb₂O₅ oxide: Experimental investigation, *Journal of Materials Science: Materials in Electronics*, 1-12
34. Antimony (III) Oxide-Reinforced Lithium-Calcium Borate Glasses: Preparation and Characterization of Physical, Optical, and γ -Ray Shielding Behavior Through Experimental and Theoretical Methods, *Journal of Electronic Materials* 51 (10), 5869-5879.
35. The irradiation impacts of high gamma doses on optical features and degradation of Makrofol DE 1-1, *Ceramics International* (2022)
36. Machine learning density prediction and optical properties of calcium boro-zinc glasses, *Optical Materials*, 134(2022) 113145
37. Exploring the physical, vibrational, optical, and dielectric properties of chromium-doped bismo-borate barium glasses for potential use in optical applications, *Optical and Quantum Electronics* 55 (10), 904 (2023)
38. Impacts of BaO additives on the mechanical, optical and radiation shielding properties of BaO-K₂O-CoO-Al₂O₃-B₂O₃ glasses, *Optical Materials* 143, 114195 (2023)
39. Environmental influence of high Na₂O additions on microstructure and ligand field parameters of Cr³⁺ inside borosilicate glass, *Ceramics International* 49 (16), 27201-27213 (2023)

40. The structure, optical basicity, ligand field strength and shielding parameters of alkali/alkaline borate glasses doped with V₂O₅, *Optical Materials* 142, 114078 (2023)
41. Elucidating the effect of La₂O₃–B₂O₃ exchange on structure, optical and radiation shielding improvements of Na₂O–NiO–B₂O₃ glass, *Optical Materials* 142, 114051 (2023)
42. Microstructure, electronic transitions and UV transparency of K₂O–B₂O₃–Sm₂O₃ glass via PbO additives, *Optical Materials* 142, 113969 (2023)
43. Impact of Y₂O₃ on the structural, linear and nonlinear optical parameters of Na₂O–Fe₂O₃–B₂O₃ glass, *Optik* 283, 170923(2023)
44. Composition dependence of transparency, optical, ligand field and radiation shielding properties in CdO–Fe₂O₃–Na₂O–B₂O₃ glasses, *Ceramics International* (2023)
45. Environmental impacts of La₂O₃ on the optical and ligand field parameters of Ni ions inside Na₂O–B₂O₃ glass, *Journal of Alloys and Compounds*, 170891 (2023)
46. Influence NiO on the structure, elastic properties and buildup factor of BaO–CdO–borosilicate glasses, *Physica Scripta* (2023)
47. Fabrication, physical, optical, and gamma-ray attenuation properties of platinum-doped borate glasses: experimental and theoretical investigation, *Journal of Materials Science: Materials in Electronics* 34 (16), 1326 (2023)
48. Impact of CdO on optical, structural, elastic, and radiation shielding parameters of CdO–PbO–ZnO–B₂O₃–SiO₂ glasses, *Ceramics International* 49 (11), 19160–19173 (2023)
49. Compositional dependence of transparency, linear and non-linear optical parameters, and radiation shielding properties in lanthanum, iron and calcium borate glasses, *Radiation Physics and Chemistry*, 111027 (2023)
50. Co-doped yttria borate glasses: investigation of physical, FTIR spectroscopy, optical and radiation interaction characteristics, *Journal of Materials Science: Materials in Electronics* 34 (14), 1180 (2023)

51. Impact of lead oxide on the structure, optical, and radiation shielding properties of potassium borate glass doped with samarium ions, Optik 278, 170738 (2023)
52. Influence of ZnO on the structural, optical, ligand field and antibacterial characteristics of sodium borosilicate glasses containing minor Cr₂O₃ additions Physica Scripta 98 (5), 055933 (2023)
53. Vibrational, optical, and physical properties of yttrium oxide reinforced B₂O₃-ZnO-NaF-CoO glasses for optical applications, Journal of Materials Science: Materials in Electronics 34 (12), 1-13 (2023)
54. An examination of synthesis, physical, optical, and radiation safety features of Ce/Yb-doped borate glasses, Journal of Materials Science: Materials in Electronics 34 (10), 876 (2023)
55. Synthesis, physical, optical characteristics, neutron/γ-rays shielding capacity of newly arsenic glasses: experimental, theoretical, and simulation investigations, Optical and Quantum Electronics 55 (4), 365 (2023)
56. Impact of Y₂O₃ on structural, mechanical and nonlinear optical properties of CrO₃-Na₂O-B₂O₃ glasses, Optik 274, 170546 (2023)
57. The structural, optical, mechanical, and radiation-shielding features of transparent borate glasses containing bismuth and lead cations, Applied Physics A 128 (12), 1049 (2023)

G) Quality Assurance in Higher Education:

- **Reviewer/Auditor**
- **QA Trainer**
- **QA Managing Positions**
- **Training Attended**

H) Skills

- **Language Skills:** Very good in writing, reading and speaking.



- **Computer Skills:** Professional in using computer.
- **Presentation skills:** Professional presenter.
- Other skills:.....