

PERSONNEL DETAILS

Name : Safeera.T.A
Date of Birth : 28/09/1989
Marital Status : Married
Nationality : Indian
Email : safeeraba@gmail.com
Contact No : (+91) 9495981907
Home Address: X/676 G
Thevaruparambil
Muttar Link Road
Manjummel P. O
Kochi,Kerala,India
PIN-683501

**EDUCATIONAL QUALIFICATIONS**

- Doctor of Philosophy (Ph.D.) : M G University -2018
- Master of Science (M.Sc.) : M G University -2012(Score-87%)
- Bachelor of Science (B.Sc.) : M G University -2010(Score-94%)

ACHIEVEMENTS

- National Eligibility test (UGC-NET) -2017
- Graduate Aptitude Test in Engineering (GATE) -2014

HONORS AND AWARDS

- Maulana Azad National Fellowship For Minority Students (UGC, India) -2014

PROFESSIONAL EXPERIENCE

- **Assistant Professor** : MES Asmabi College,P Vemballur 2020-2022
(Dept. Physics) ,Thrissur Kerala, India
- **Assistant Professor** : Christ College Irinjalakuda,Thrissur, 2023
(Dept. Physics) Kerala, India
- **Assistant Professor** : MES Asmabi College,P Vemballur 2023-Present
(Dept. Physics) ,Thrissur Kerala, India

RESEARCH INTERESTS

Any field in Material Science.

Eg: Nano and bulk synthesis of compounds and their characterization [structural, morphological, optical, electrical, etc.]

RESEARCH EXPERIENCE

Doctoral Researcher

-2014 - 2018

Department of Physics, Union Christian College, Aluva, Kerala, India

Thesis Title : *Study on the effect of activator incorporation on the structural, morphological and optical properties of ZnO and ZnGa₂O₄ nanophosphors*

Issuing Authority : *M G University, Kerala, India.*

- Phosphor synthesis after optimization of experimental conditions, and detailed characterizations of these were done. Main focus was given to the luminescence efficiency with doping.
- Collaborate and coordinate with faculty, staff scientists, and fellow graduate students across departments.

Project Assistant

-2013-2015

Department of Physics, Union Christian College, Aluva, Kerala, India

Project Title : *Preparation and characterization of Nanophosphors for Display and Biomedical Applications*

Sanctioning Authority : *Department of Science and Technology, India*

Reference : *SR/S2/CMP-00061201 I, 0510312012*

INTERNATIONAL PUBLICATIONS

1. *Structural and optical characterization of potassium doped zinc oxide Nano sheets*, P V Athma, N Johns, E I Anila, T A Safeera, **Optical Materials** 38 (2014) 223-227.
2. *Photoluminescence of nanocrystalline ZnS thin film grown by sol-gel method* I Anila, T A Safeera, R Reshmi, J. **Fluorescence** 25 (2015) 227-230.
3. *Nanostructured zinc oxide thin film by simple vapor transport deposition*, P V Athma, Arturo I. Martinez, N Johns, T A Safeera, R Reshmi, E I Anila, **Super lattices and Microstructures** 85 (2015) 379-384.
4. *Low temperature fabrication and characterization of Wurtzite structured ZnS quantum dots by chemical spray pyrolysis*, T A Safeera, N Johns, E I Anila, Arturo I Martinez, P V Sreenivasan, R Reshmi, Mallick Sudhanshu, M K Jayaraj, **Journal of Analytical and Applied Pyrolysis** 115 (2015) 96-102.
5. *Effect of anionic concentration on the structural and optical properties of nanostructured ZnS thin films*, T A Safeera, N Johns, E I Anila, **Optical Materials** 58 (2016) 32-37.
6. *Zinc gallate and its starting materials in solid state reaction route- A comparative study*, T A Safeera, N Johns, K Mini Krishna, P V Sreenivasan, R Reshmi, E I Anila, **Materials Chemistry and Physics** 181 (2016) 21-25.

INTERNATIONAL PUBLICATIONS

7. *Enhanced luminescence of triethanolamine capped calcium sulfide nanoparticles synthesized using wet chemical method*, S Rekha, T A Safeera, Arturo I. Martinez, E I Anila, **J. Luminescence** 190 (2017) 94-99.
8. *Synthesis and characterization of ZnO nanophosphor by microwave combustion technique*, T A Safeera, E I Anila, **International Journal of Recent Innovation in Engineering & Research** 2 (2017) 7.
9. *Wet chemical synthesis of chitosan capped ZnO:Na nanoparticles for luminescence applications*, T A Safeera, E I Anila, **International Journal of Biological Macromolecules** 104 (2017) 1833-1836.
10. *Synthesis and characterization of ZnGa₂O₄:Eu³⁺ nanophosphor by wet chemical method*, TA Safeera, E I Anila, **Scripta Materialia** 143 (2018) 94-97.
11. *Low temperature synthesis and characterization of zinc gallate quantum dots for optoelectronic applications*, T A Safeera, Rabi Khanal, Julia E. Medvedeva, Arturo I. Martinez, G. Vinitha, E I Anila, **J. Alloys and compounds** 740 (2018) 567-573.
12. *Wet chemical approach for the low temperature synthesis of ZnGa₂O₄:Tb³⁺ quantum dots with tunable blue-green emission*, T A Safeera, E I Anila, **J. Alloys and Compounds** 764 (2018) 142-146.
13. *An investigation on the luminescence quenching mechanism of ZnGa₂O₄:Tb³⁺ phosphor*, T A Safeera, E I Anila, **J. Luminescence**, 205 (2019) 277-281
14. *Impact of activator incorporation on red emitting rods of ZnGa₂O₄:Cr³⁺*, T A Safeera, Jacob Johny, Sadasivan Shaji, E I Anila, **Material Science and Engineering C** 94 (2019) 1037-1043.
15. *Excitation induced tunable emission from yellow to red in ZnO:Eu³⁺, Na⁺ nanophosphors*, T A Safeera, E I Anila **J. Alloys and Compounds** 786 (2019) 758-763.
16. *Pure red luminescence and concentration dependent tunable emission color from europium doped zinc sulfide nanoparticles* R Bindu , T A Safeera and E I Anila, **Journal of Material Science: Materials in Electronics** 33 (2022) 17793-17801

CONFERENCE PROCEEDINGS AND PRESENTATIONS

1. *Synthesis and characterization of nanostructured ZnS thin film*, T A Safeera, K J Anju, P J Joffy, E I Anila, A I P conf. proc. 1512 (2013) 668.
2. *Synthesis and characterization of ZnO Nano nails*, T A Safeera, N Johns, P V Athma, E I Anila, International Conference on Light - OPTICS'14, NIT Calicut, Kerala, India; 19-21 March (2014). AIP Conf. Proc. 1620, 572 (2014).
3. *Effect of yttrium doping on the photoluminescence of zinc gallate*, T A Safeera, E I Anila, R Reshmi, International Conference on Light - OPTICS'14, NIT Calicut, Kerala, India, 19-21 March (2014).
4. *Synthesis and characterization of zinc gallate phosphors*, T A Safeera, Rosemol Thomas, Elizabeth Kurian, R Reshmi, E I Anila, ICAFM 2014 : 2nd International Conference on Advanced Functional Materials, CSIR-National Institute for Interdisciplinary Science & Technology, Thiruvananthapuram, India, 19-21 February (2014).

CONFERENCE PROCEEDINGS AND PRESENTATIONS

5. *Structural and photoluminescence study of $ZnGa_2O_4$* , T A Safeera, Rosemol Thomas, Elizebeth Kurian, N Johns, K R Bindu, Reshmi Raman, K Mini Krishna, E I Anila, National Seminar on Frontiers of Nanotechnology, Sree Sankara Vidya Peetom College, Perumbavoor; 6-7 March (2014).
6. *Structural and optical characterization of zinc gallate nanoparticles*, V Danisha, Sonu Baby, T A Safeera, R Reshmi, E I Anila. International Conference on Energy Harvesting, Storage and Conversion - ICEEE 2015, CUSAT, 5-7 February (2015).
7. *Synthesis of nanostructured PbS:Bi thin film by chemical bath deposition*, V G Athira, C R Roshni, T A Safeera, P V Sreenivasan, R Reshmi, M Alex, E I Anila, International Conference on Energy Harvesting, Storage and Conversion - ICEEE 2015, CUSAT, 5-7 February (2015).
8. *Synthesis and characterization of ZnO nanophosphor by microwave combustion technique*, T A Safeera and E I Anila, IC-AMMN-2K16-International Conference on "Advances in Applied Mathematics, Materials Science and Nanotechnology for Engineering and Industrial Applications" January 7-9, Federal Institute of Science and Technology, Cochin (2016).
9. *Zinc gallate phosphor - A study of Cr doping*, T A Safeera, E I Anila, COCHIN NANO 2016 - th International conference on Nanoscience and Technology, Cochin University of Science and Technology, Cochin, 20-23 February (2016).
10. *Green emitting $ZnGa_2O_4:Tb^{3+}$ nanoparticles synthesized by wet chemical method*, T A Safeera, E I Anila, National Workshop on Nano photonics, Centre for Advanced Materials, Department of Physics CUSAT, In Collaboration with SPIE CUSAT Student Chapter, 18 - 19 March (2016).
11. *Yellow emitting chitosan capped ZnO synthesized by wet chemical route*, T A Safeera, S Rekha, E I Anila. Global Nanotechnology Congress and Expo, Dubai, UAE, April 21-23 (2016).
12. *A study on quenching behavior in aloe-vera capped ZnO:Na quantum dots*, T A Safeera, E I Anila, INNVENT 2017, Inter University Centre for Nanomaterials and Devices, CUSAT, December 13-15 (2017).

TECHNICAL SKILLS

Programming languages: C ++
Other: Windows OS

LANGUAGES

English: Fluent
Hindi: Fluent
Malayalam: Native
Arabic: Intermediate

REFERENCES

- Dr. E I Anila
Associate Professor
Department of Physics
Union Christian College
Aluva - 683102
- Dr. Athma P V
Associate Professor & Head
Department of Physics
SNM College, Maliankara
Ernakulam - 683516
- Dr. R Reshmi
Assistant Professor
Department of Physics
Union Christian College
Aluva - 683102

Links: <https://scholar.google.com/citations?user=L1UpmNEAAAAJ&hl=en>
https://www.researchgate.net/profile/T_A_Safeera

