



SHRIMATI INDIRA GANDHI COLLEGE

(Affiliated to Bharathidasan University)

Nationally Accredited at 'A' Grade (4th Cycle) by NAAC | An ISO 9001 : 2015 Certified Institution
Tiruchirappalli - 620 002

Name : Dr.A.Anitha Ezhil Mangaiyar Karasi
Designation : Assistant Professor
Department : Physics
Qualification : M. Sc., M. Phil, Ph.D.,
Experience : **Teaching: 22 Years** **Research: Nil**
Area of Specialization(s) : Thin Films
Email (Official ID) : anithaezhilmangaiyarkarasi@sigc.edu
Aadhar No : 9863 0605 9270

Academic Qualifications

Degree	Branch	Institution / University Name	Year of Graduation
Ph.D.	Physics	Bharathidasan University Urumu Dhanalakshmi College, Tiruchirappalli	2022
M.Phil.	Physics	Bharathidasan University (CDE) Tiruchirappalli	2006
M.Sc.	Physics	Seethalakshmi Ramasamy College Tiruchirappalli, Bharathidasan University	2001
B.Sc.	Physics	Shrimati Indira Gandhi College, Tiruchirappalli, Bharathidasan University	1999

Research Publications (Indexed)

International: 8

National: 1

LIST OF ARTICLES PUBLISHED IN JOURNALS IN CHRONOLOGICAL ORDER:

1. **Ms.A.Anitha Ezhil Mangaiyar Karasi** and Dr.S.Seshadri published an article on “SnS Thin Films Prepared By Chemical Spray Pyrolysis At Different Substrate Temperatures for Photovoltaic Application” in IOSR Journal of Applied Physics, Google Scholar, Scopus indexed with Impact factor: 3.75, www.iosrjournals.org

E-ISSN: 2278-4861, Vol 10, Issue 4, Page No: 1-6, July 2018.
<http://iosrjournals.org/iosr-jap/papers/Vol10-issue4/Version-1/A1004010106.pdf>
2. **Ms.A.Anitha Ezhil Mangaiyar Karasi** and Dr.S.Seshadri published an article on “Tin sulphide (SnS) Thin Films with Different [S]/[Sn] Ratios Prepared by Chemical Spray Pyrolysis Technique” in International Journal of Research and Analytical Reviews, Scopus indexed with Impact factor: 5.75 www.ijrar.org

E-ISSN: 2348-1269, P-ISSN: 2349-5138, Vol 6, Issue 1, Page No: 421-430, Jan 2019.
<http://www.ijrar.org/papers/IJRAR19J1056.pdf>
3. **Ms.A.Anitha Ezhil Mangaiyar Karasi**, Dr.S.Seshadri and Dr.L.Amalraj published an article on “Effect of Tin Precursor Concentration on Physical Properties of Spray Deposited Tin Sulfide Thin Films” in International Journal of Recent Scientific Research, Impact factor: 7.38. www.recentscientific.com. ISSN: 0976-3031, Vol 10, Issue 4(B), Page No: 31756-31762, April 2019.

<https://www.recentscientific.com/sites/default/files/13165-A-2019.pdf>
4. **Ms.A.Anitha Ezhil Mangaiyar Karasi**, Dr.S.Seshadri and Dr.L.Amalraj published an article on published an article on “Structural, Optical and Photosensing Properties of Spray Pyrolyzed SnSSe Thin Films” in International Journal of Current Advanced Research, Google Scholar, Scopus indexed Journal with Impact factor: 6.614. www.journalijcar.org

ISSN(Online): 2319-6475, ISSN(Print): 2319-6505, Vol 8, Issue 3(G), Page No: 18047-18051, March 2019 .

https://journalijcar.org/sites/default/files/issue-files/9080-A-2019_0.pdf
5. **Ms.A.Anitha Ezhil Mangaiyar Karasi**, Dr.S.Seshadri and Dr.L.Amalraj published an article on “Optimization of substrate temperature in chemical spray pyrolysis technique to get p-type layers of SnS Thin Films” in Aegaeum journal, www.aegaeumjournal.com ISSN NO: 0776-3808, Scientific Journal Impact Factor – 6.1, journal, Volume 8, Issue 12, December – 2020, Page No: 1-28.

<http://aegaeum.com/gallery/agm.j-4448.01-f.pdf>

6. **Ms.A.Anitha Ezhil Mangaiyar Karasi**, Dr.S.Seshadri and Dr.L.Amalraj published an article on “Effect of Precursor Concentration on Physical Properties of Nebulized Spray Deposited Tin Selenide Thin Films” in Aegaeum journal, ISSN NO: 0776-3808, Scientific Journal Impact Factor – 6.1, journal, Volume 8, Issue12, December – 2020, Page No:45-72
<http://aegaeum.com/gallery/agm.j-4461.04-f.pdf>
7. Dr.A. Angelin prema.,**Ms.A.Anitha Ezhil Mangaiyar karasi** , Dr..Arockiasahayaraj. published an article on “Characterization of Lead and Stannous Doped Cadmium Sulfide Thin Film Grown by Chemical Bath Deposition Technique with SEM and XRD Analysis.Alochana chakra journal,ISSN NO:2231 3990-, Scientific Journal Impact Factor – 6.1, journal, Volume IX, Issue V,May/2020, page No: 1926 ,899 ACJ MAY 1926.pdf
8. **Ms.A.Anitha Ezhil Mangaiyar Karasi**, Dr.R.Sambasivam, Dr.S.Seshadri and Dr.L.Amalraj published an article on “Influence of Substrate Temperature on Physical Properties of Nebulized Spray Deposited Tin Selenide Thin Films” in ECS Journal Solid State Science and Technology, UGC-CARE Scopus Indexed Journal
ISSN NO: 2163-8777, Scientific Journal Impact Factor – 2.11, Volume 8, Issue 10, August2021, Page No:45-72
<https://iopscience.iop.org/article/10.1149/2162-8777/ac1e6b/pdf>
9. **Ms.A.Anitha Ezhil Mangaiyar Karasi**, Dr.R.Sambasivam, Dr.S.Seshadri and Dr.L.Amalraj published an article on “Effect of Substrate Temperature on Structural,Electrical and Optical Properties of Spray Deposited Tin Selenide Thin Films Applicable for Photovoltaic Measurements” in ECS Journal Solid State Science and Technology, UGC-CARE Scopus Indexed Journal
ISSN NO: 2163-8777, Scientific Journal Impact Factor – 2.11, Volume 11, Number 2, February 2022
<https://iopscience.iop.org/article/10.1149/2162-8777/ac4ffd/pdf>

Book Publications

1. **Published** a Book Chapter on “Review on Tin (II) Sulfide Material” in “**Advances in Science, Technology and Innovations**” ISBN: 978-93-93737-59-5
2. Publish a Book chapter on " Perspective of Nano-material synthesis and it's Energy storage Applications ", Taylor and Francis, April 2025 (Review)

Presentations in Conference: 08

Papers Presented

1. “SnS Thin Films Prepared By Chemical Spray Pyrolysis At Different Substrate Temperatures for Photovoltaic Application” in International conference ICRAM15 conducted by Anna university of Technology, Trichy.
2. “Preparation and Characterisation of SnS thin films by Chemical spray pyrolysis technique, ICRAM 17, August 31, Urumu Dhanalakshmi college, Trichy
3. “Tin sulphide (SnS) Thin Films with Different [S]/[Sn] Ratios Prepared by Chemical Spray Pyrolysis Technique”, ICRAM 18, KSR college of science, Tiruchengode.
4. “Effect of Substrate temperatures of spray deposited Tin Selenide thin films”, National conference in National college on Feb 2019.
5. “Effect of Precursor Concentration on Physical Properties of Nebulized Spray Deposited Tin Selenide Thin Films”, AVVM Poondi pushpam college, National conference in Sep 2019.
6. “Effect of Precursor solution volume of sprayed SnSe thin films for Photovoltaic applications” National conference in Urumu Dhanalakshmi college on Feb 2020.
7. Presented a paper on "Nanomaterial Synthesis and it's Biological Applications", Periyar Maniammai University, Tanjore on February 24th, 2025
8. Presented a Paper on Structural, Functional and Electrical Properties of CdSe Thin Films doped with Cu, In and Ga .

Participation in Orientation Programme / Short Term Courses: 02 (Naan Mudhalvaan)

Participation in Faculty Development Programme: 5

1. Participated in Five days Programme on “NAAN MUDALVAAN” Organized by Tamil Nadu Govt and BDU entitled “DATA ANALYTICS BY TABLEAU” from January 30th to February 5th 2023.
2. Advancements of IR Spectroscopy (AFM) by Bharat Ratna Prof. C.N. Rao Research Centre on September 29th 2023.
3. “Research to Publications” Organized by Adhiyaman College of Arts & Science from September 4th to 11th, 2023.

4. Material Technology in Current Scenario (MTACS'23) from 25th Oct to 1st Nov by Satyabhama Institute of Technology.
5. Seven Days FDP on " NEP orientation and Sensitisation Programme " in Bharathidasan University from March 4th to 13th March 2024 organized by UGC Malayvia Mission Teacher Training Academy.
6. Participated Naan Mudalvaan " Drone Applications and Aerial Survey" Organized by Tamilnadu Govt and Bharathidasan University, Tiruchirapalli on 06.01.2025 to 11.01.2025.

Patent

Deep Learning Approaches for Bandgap and Efficiency Estimation in Perovskite Solar Cells

Nano-Enabled Drug Delivery System For Targeted Therapeutic Applications

Any other information: (Awards won, books written, columns written, your strengths)

Best Oral Presentation Award in " Effect of Precursor Concentration on Physical Properties of Nebulized Spray Deposited TinSelenide Thin Films", AVVM Poondi Pushpam college, National conference in Sep 2019.