

Profile

Name of the Faculty	Dr. Juluru Anjaiah	
Designation	Professor	
Department	Freshman Engineering	
Area of Interest	Materials Science	
Subjects Taught	Applied Physics, Solid State Physics and Semiconductor Devices	
JNTUH Registration Id	1666-150408-110342	
College Staff Code	SC1336	
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Educational Qualifications:

S. No.	Degree	Specialization	University/College	Year
1	B.Sc.	Mathematics, Physics and Chemistry	Osmania University, Hyderabad	1995
2	M.Sc.	Physics	Department of Physics, Osmania University, PG College, Hyderabad	1998
3	PhD	Physics [Materials Science]	Department of Physics, Osmania University, Hyderabad, India	2005

Publications Details:

S.No.	Title with page no.	Journal Name
1	Study on certain physical properties of ZnF ₂ -CdO-TeO ₂ :Cr ₂ O ₃ glasses.	African Physical Review (2010) 4:0010 pp 73-85.
2	Luminescence studies of samarium ion doped borate based glasses.	International Journal of Materials Science Volume 6, No. 1 (2011), pp 45-56.
3	Effect of rare-earth ions on the thermoluminescence properties of lithium borate glasses.	International Journal of Emerging Technologies and Applications in Engineering Technology and Sciences”, Volume 4, No. 1 (2011), pp 214-217.
4	Dielectric dispersion in ZnF ₂ -MO-TeO ₂ :Cr ₂ O ₃	“International Journal of Material Science and

	glasses.	Electronics Research” Vol. 2, No. 1(2011), pp. 33-49
5	Thermoluminescence studies on Li ₂ O-MO-B ₂ O ₃ glasses doped with rare-earth ions.	“Asian Journal of Chemistry” Volume 23, No. 6 (2011), pp 2696-2700.
6	Spectroscopic properties and luminescence behaviour of europium doped lithium borate glasses	Physica B: Condensed Matter” (Elsevier) Volume 454 (2014), pp 148-156. DOI information: 10.1016/j.physb.2014.07.070
7	TL properties of X-ray irradiated Li ₂ O-MO-B ₂ O ₃ (MO=ZnO, CaO, CdO) glasses doped with europium ions.	International Journal of Science and Research” Volume 3, No. 8 (2014), pp 418-423.
8	Dosimetric and kinetic parameters of lithium cadmium borate glasses doped with rare earth ions.	Journal of Radiation Research and Applied Sciences (Elsevier) Volume 7 (2014), pp 519-525. DOI: 10.1016/j.jrras.2014.08.009
9	Luminescence studies of Pr ³⁺ ion doped borate based glasses	Journal of Luminescence (Elsevier) Volume 161(2015), pp 147–153. DOI: 10.1016/j.jlumin.2015.01.007
10	Infrared luminescence and thermoluminescence of lithium borate glasses doped with Sm ³⁺ ions	Materials Science-Poland (Springer) Volume 33(1), (2015), pp. 144-151. DOI: 10.1515/msp-2015-0028
11	Influence of Nd ³⁺ ions on TL characteristics of Li ₂ O-MO-B ₂ O ₃ (MO=ZnO, CaO, CdO) glass system	Journal of Theoretical and Applied Physics (Springer) Volume 9 (2015), pp. 119–125 DOI: 10.1007/s40094-015-0169-5
12	Luminescence and spectroscopic properties of ZnF ₂ -MO-TeO ₂ glasses doped with Ho ³⁺ ions	Journal of molecular structure (Elsevier) Volume 1093 (2015), pp 166-17110.1016/j.molstruc.2015.03.018
13	Influence of Modifier Oxide on thermoluminescence and Dosimetric Characteristics of Lithium Borate Glasses Doped with Pr ³⁺ ions	Journal of Basic and Applied Engineering Research, 2 (17) (2015) 1543-1548
14	Luminescence Properties of Some Tellurium Based Glasses Doped with Pr ³⁺ Ions	International Journal of Advances in Science, Engineering and Technology, 4(4) (2016) 109-115
15	Symmetric and asymmetric wavelet techniques for minor fault detection in transformer windings	International Journal of Industrial Electronics and Electrical Engineering, 4 (10) (2016) 69-72
16	FTIR spectra of Li ₂ O-B ₂ O ₃ glasses doped with ZnO, CaO and CdO modifier ions	Universal Review (Scientific Information and Technological Board of Sadhana) 10 (04) 2019 1-7
17	Influence of modifier oxide on spectroscopic characteristics of neodymium ion in lithium borate glass system	International Journal of Research in Advent Technology, 7 (3) 2019 1-8; 10.32622/ijrat.732019186
18	Preparation and Characterization of Red Emitting Yttrium Vanadate Phosphor Doped with Eu(III): Y ₁ -XVO ₄ : Eux	AIP Conference Proceedings G. Neeraja Rani, J. Shankar, J. Anjaiah, B. Mamatha, and N. H. Ayachit 2162, 020117 (2019)
19	Study of Microstructure and Dielectric Properties of PbTiO ₃ based Glass Ceramics	AIP Conference Proceedings J. Shankar, G. Neeraja Rani, J. Anjaiah, P. Raju, and V. K. Deshpande 2162, 020045 (2019)
20	Thermoluminescence Characteristics and dosimetric aspects of Li ₂ O-CaO-B ₂ O ₃ glasses doped with rare earth ions	AIP Conference Proceedings J. Anjaiah, G. Neeraja Rani, J. Shankar, and P. Raju 2162, 020043 (2019)
21	Shielding effectiveness studies of NiCuZn ferrite –Polyanalline nanocomposites for EMI suppression applications	AIP Conference Proceedings P. Raju, J. Shankar, J. Anjaiah, and S. R. Murthy 2162, 020027 (2019)
22	Preface: International Conference on Multifunctional Materials (ICMM-2019)	IOP: Journal of Physics Conference Series J Anjaiah*, G Neeraja Rani, J. Shankar, M. Aruna Bharathi 1495 (2020) 011001

23	Complex permittivity and permeability properties analysis of NiCuZn Ferrite-Polymer nanocomposites” to	IOP: Journal of Physics Conference Series P Raju, J Shankar, J Anjaiah*, Ch Kalyani and G Neeraja Rani 1495 (2020) 012001
24	Solid State Root Preparation, Characterization and Electrical Properties of NiCuZnFe ₂ O ₄ /Paraformaldehyde Nanocomposites	IOP: Journal of Physics Conference Series P Raju, S Rajesham, J Shankar, J Anjaiah and G Neeraja Rani 1495 (2020) 012004
25	Preface: International Conference on Multifunctional Materials (ICMM-2019)	AIP Conference Proceedings, Volume 2269, pp 010001, 2020 G Neeraja Rani, J Anjaiah, P. Raju
26	Study of Microstructure and Thermal Properties of PbTiO ₃ Based Glass Ceramics	AIP Conference Proceedings, Volume 2269, pp 0300631-0300636, 2020
27	Quenching Effect of co-dopant Pr ³⁺ on Red Emitting Yttrium Vanadate Phosphor Doped with Eu(III)	AIP Conference Proceedings, Volume 2269, pp 0300631-0300636, 2020
28	Review of the book Lasers: Fundamentals and Applications	Current Science, Vol. 122, No. 3, 10 February 2022
29	Synthesis, microstructure and ferroelectric properties of PbO-TiO ₂ -B ₂ O ₃ based glass ceramics	Materials Today: Proceedings (Elsevier) 64 585-589 January 2022
30	Influence of Bi ⁺ ions on photoluminescence properties of Tm ₂ O ₃ doped borotellurite glasses for the near-infrared emission applications	Optical Materials (Elsevier) 125, 112140 March 2022
31	Evaluation of absorbance for crude and purified natural dyes using Senna singueana, Bougainvillea glabra bracts, and Ximenia caffra on DSSC performance parameters	Energy Sources, Part A: Recovery, Utilization, and Environmental Effects (Taylor & Francis) 44, 379-392 March 2022
32	Influence of rare-earth ion doping on dielectric properties of lithium zinc borate glasses	Optical Materials (Elsevier) 131, 112718 J Anjaiah , C Laxmikanth, Stanley Ferdinand Mwangi, P Raju, SK Mohammad Ali, J Shankar, G Neeraja Rani, Benard Mwanemwa September 2022
33	Impact of Rare-Earth Ion Doping on Dielectric Properties of Li ₂ O-CaO-B ₂ O ₃ Glass System	ECS Journal of Solid State Science and Technology 11 (10), 103006 October 2022 J Anjaiah
34	Editorial Preface on the Proceedings of the 2nd International Conference on Multifunctional Materials (ICMM-2022)	Materials Today: Proceedings (Elsevier) GN Rani, J Anjaiah , K Kumar June 2023
35	Synthesis and thermal stability of ferrites added polymers nanocomposites	Materials Today: Proceedings (Elsevier) 92, pp. 1671-1675 P Raju, A Thirupathi, Ch Kalyani, Sk Mahammed Ali, J Shankar, G Neeraja Rani, J Anjaiah , M Kanaka Durga July 2023
36	Ultrasonic velocity studies in pure and adulterated edible oils	AIP Conference Proceedings, 2764, 040005 SK Mahammad Ali, P Raju, TV Prashanthi, J Shankar, J Anjaiah , SK Nuslin Bibi, S Rajesham September, 2023
37	Effect of Rare Earth Ion Doping on ac Conductivity and Dielectric Properties of Lithium Cadmium Borate Glasses	Glass Physics and Chemistry Vol. 49 (6), pp. 584–592 J. Anjaiah December, 2023
38	Impact on Structural and Radiation Shielding Features of 60B ₂ O ₃ -20CdO-5Al ₂ O ₃ -(15-x) CaF ₂ -xMoO ₃	ECS Journal of Solid State Science and Technology 14 (2025) 056004 R Siddouju, CS Kotagiri, S Jakkula, J Anjaiah

39	Optical and Photoluminescence Characterizations of Li ₂ O-MO (M= Zn, Ca and Cd)-B ₂ O ₃ Glasses Doped with Ho ³⁺ Ions	ECS Journal of Solid State Science and Technology 14 (2025) adee45 J Anjaiah , Shiva Kumar Ale, C. Laxmikanth, Rajesham Siddoju, Shankar Jakkula, V Kamalakar and Mahammad Ali SK
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Books/Book Chapters Published/Edited

- 1. Relationship between the structural modifications and luminescence efficiencies of ZnF₂-MO-TeO₂ glasses Doped with Ho³⁺ and Er³⁺ ions**

C. Laxmikanth, J. Anjaiah

Current Trends on Lanthanide Glasses and Materials

TTP publishers, Switzerland/USA. (2016)

DOI: <http://dx.doi.org/10.21741/9781945291159-6>

Print ISBN [978-1-945291-14-2](#)

ePDF ISBN [978-1-945291-15-9](#)

- 2. Spectroscopic Properties and Energy Transfer Parameters of Nd³⁺ and Sm³⁺ Doped Lithium Borate Glasses**

J. Anjaiah, C. Laxmikanth

DOI: <http://dx.doi.org/10.21741/9781945291159-5>

Current Trends on Lanthanide Glasses and Materials

TTP publishers, Switzerland/USA. (2016)

DOI: 10.21741/9781945291159

Print ISBN [978-1-945291-14-2](#)

ePDF ISBN [978-1-945291-15-9](#)

- 3. *Experiments in Engineering Physics*, ISBN: 9781312888968**

J. Anjaiah

Lulu publications, USA (February, 2015)

- 4. *Book of Abstracts: International Conference on Multifunctional Materials*, ISBN: 978-93-5396-620-1**

G. Neeraja Rani, **J. Anjaiah**, P. Raju, M. Aruna Bharathi

- 5. Editor for the Journal of Physics: Conference Series (JPCS): *International Conference on Multifunctional Materials***

J. Anjaiah, G. Neeraja Rani, J. Shankar, M. Aruna Bharathi

doi:10.1088/issn.1742-6596

Online ISSN: 1742-6596

IOP Science Publishing, USA (June, 2020)

- 6. Editor for the Journal AIP Conference Proceedings: *International Conference on Multifunctional Materials***

G. Neeraja Rani, **J. Anjaiah**, P. Raju, M. Aruna Bharathi

ISSN: 0094-243X (print); 1551-7616 (web)

The American Institute of Physics, USA (June, 2020)

7. **Editor for the Materials Today Proceedings: International Conference on Multifunctional Materials-2022**
G. Neeraja Rani, **J. Anjaiah**, M. Aruna Bharathi
ISSN: 2214-7853 (online)
Elsevier Publishers (June, 2023)
8. **Book of Abstracts: International Conference on Multifunctional Materials**, ISBN: 978-93-5779-784-9
G. Neeraja Rani, **J. Anjaiah**, P. Raju (2023)
9. **Materials For Advanced Applications**, ISBN: **978-93-6252-500-0**
Dr. Raju Panthagani, Dr. G. Neeraja Rani, **Anjaiah Juluru**, Dr. J. Shankar (2024)
10. **Multifunctional Multiferroic Nanocomposites for Novel Device Applications**
M. Kanaka Durga, G. Neeraja Rani, **J. Anjaiah**, P. Raju
Doi: <https://doi.org/10.1201/9781003479239>
Multifunctional Inorganic Nanomaterials for Energy Applications, **CRC Press**, 2024
eBook ISBN: 9781003479239

Experience:

Teaching	26 Years
Industry	Nil
Research	20 Years (includes teaching)
Total Experience	26 Years