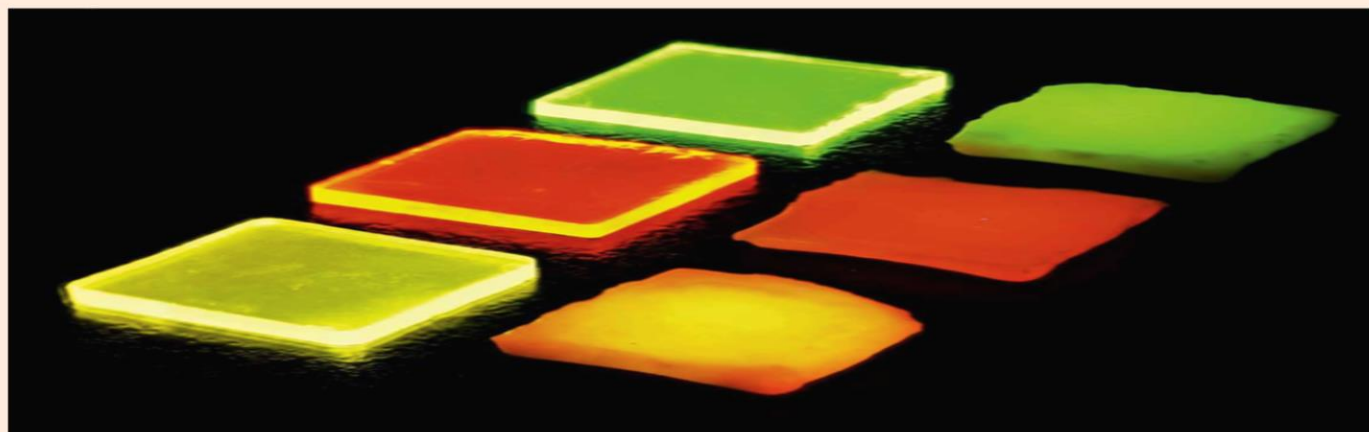




Advanced Materials Research Lab (AMRL)



Contents



- **Overview of AMRL**



- **Faculty Associated with AMRL**



- **Details of Equipment**



- **Sponsored Projects**



- **Ph.D's Awarded**



- **Awards & Recognitions**



- **National & International Collaborators**



- **Events Organized**



- **Scholars associated with AMRL**



- **PG students associated with AMRL**



- **Publications**

Overview of AMRL

**AMRL Established in
2012**

**with aim of developing
Novel Glasses, Glass
ceramics, Phosphors
and Nano Phosphors for
Photonic and Bio-
imaging Applications**

Establishment

Research Areas

**Glasses & Glass
Ceramics**



**Lasers & Optical
Fibers**

Phosphors



LED Applications

Nano-Phosphors



**Photonics & Bio-
Imaging Applications**

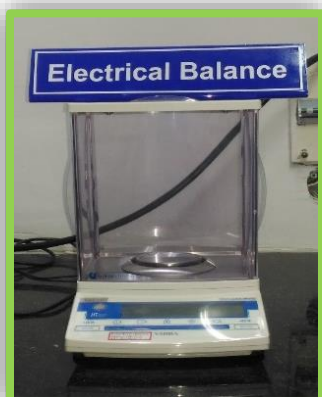
Department of Physics, DST-FIST (Level-I) Sponsored

Faculty Associated with AMRL



Details of Equipment Available in AMRL

Electronic Balance with density measurements



Description: For Weighing materials as per their stoichiometric proportions

Users: All Students, Scholars, faculty and all departments can use it for weighing the chemicals for research

Electrical Furnaces at Different Temperatures (1000°C, 1400°C & 1700°C



Description: For Synthesizing and annealing the various materials

Users: All students, scholars, faculty of all departments can use it for heating, calcining and sintering of their synthesized materials.

Details of Equipment Available in AMRL

Magnetic Stirrer with Hot Plate (500°C)



Description: For the synthesis of Phosphors, Nano-phosphors and thinfilms

Users: All Students, Scholars, faculty and all departments can use it for synthesizing the materials for research.

Hot Air Oven (250°C)



Description: In the synthesis of nano materials, hot air oven is used to dry the material that is obtained after stirring, filtering and washing

Users: All students, scholars, faculty of all departments can use it for heating, their synthesized materials.

Vacuum Oven (250°C)



Description: Vacuum oven is required to free the sample from Moisture

Users: All students, scholars, faculty of all departments can use it for heating, their synthesized materials

Details of Equipment Available in AMRL

ANATEK Abbe Refractometer



Description: Measurement of Refractive indices of synthesized samples

Users: All students, scholars, faculty of all departments can use it for measuring refractive index materials..

JASCO UV-Vis-NIR Spectrophotometer (200-2700 nm)



Description: Absorption measurements for all types of materials

Users: All scholars, faculty of Physics, Chemistry, BT, ME, ECE departments are using it for measuring absorption of materials.

JASCO PL Spectrofluorometer (200-900nm)



Description: PL and decay measurement in visible region for solid and powder samples.

Users: All scholars, faculty of Physics, Chemistry, BT, ME, ECE departments are using it for measuring PL and lifetime of materials.

Details of Equipment Available in AMRL

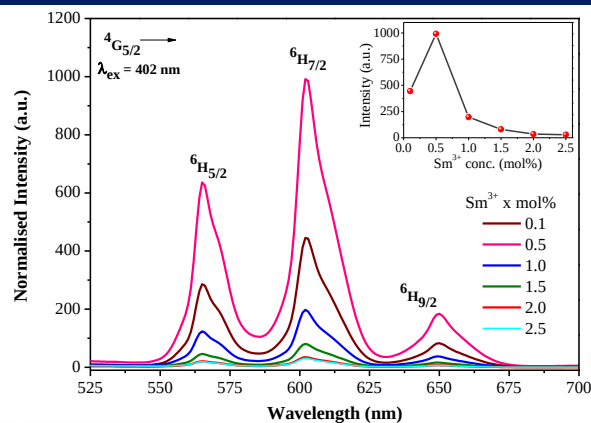
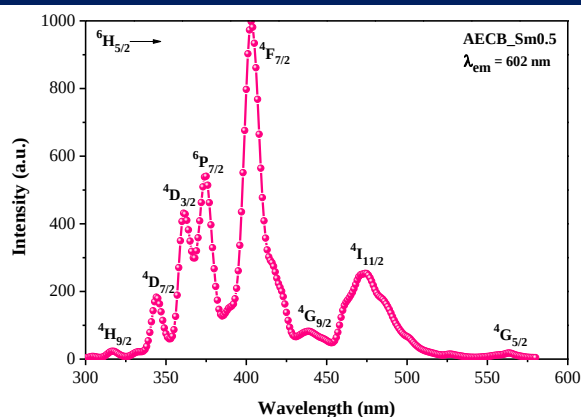
ACTON PL Spectrofluorometer (200-1700nm)



Description: PL measurements in visible & NIR region for solid and powder samples.

Users: All scholars, faculty of Physics, Chemistry, BT, ME, ECE departments are using it for measuring PL and lifetime of materials.

PLE & PL Spectra of Samples



Sponsored Projects - 05

Project Title	: Fabrication of Rare Earth ions doped Up-Conversion Nano-phosphors - A fluorescent probe for Bio-imaging Applications
Name of the PI	: Dr. Mahamuda Shaik
Name of the Co-PI	: Dr. K.Swapna
Funding Agency	: DST-SERB under CRG Scheme
Sanctioned Amount	: Rs.31,02,000/-
Duration	: 3 years / 2023-2026
Status of the Project	: Ongoing

Project Title	: Preparation and Characterization of Rare Earth ions doped Oxide, Fluoride and Oxy-fluoride Glasses/Glassy Ceramics for Fiber Lasers and Optical Fiber Amplifiers
Name of the PI	: Dr. Mahamuda Shaik
Funding Agency	: DST-SERB under ECR Scheme
Sanctioned Amount	: Rs.52,03,000/-
Duration	: 3 years / 2016-2019

Project Title	: Spectral Characterization of RE ion doped telluride glasses for opto electronic device applications
Name of the PI	: Dr. K.Swapna
Funding Agency	: DST-SERB under ECR Scheme
Sanctioned Amount	: Rs.44, 70,000/-
Duration	: 3 years / 2016-2019

Sponsored Projects - 05

Project Title	:	Spectral Studies of Neodymium doped glass and glass ceramics for efficient laser action
Name of the PI	:	Dr. Mahamuda Shaik
Funding Agency	:	DST- under WOS-A Scheme
Sanctioned Amount	:	Rs.14,68,000/-
Duration	:	3 years / 2012-2015

Project Title	:	Absorption and Emission Characteristics of rare-earth doped glasses for efficient lasers
Name of the PI	:	Dr. K.Swapna
Funding Agency	:	DST- under WOS-A Scheme
Sanctioned Amount	:	Rs.22, 70,000/-
Duration	:	3 years / 2011-2014

Ph.D's Awarded -12

S.No	Name Of the Scholar	ID Number	Name of the Supervisor	Year of Registration	Year of Award
1	Mahamuda Shaik	10322004	Dr.A.Srinivasa Rao	2010	2015
2	Koneru Swapna	10322002	Dr.A Srinivasa Rao	2010	2015
3	M. Venkateswarlu	10322005	Dr.A. Srinivasa Rao	2010	2016
4	Ch.B.Annapurna Devi	12322003	Dr.A.Srinivasa Rao	2012	2018
5	Rupesh A Talewar	173220002	Dr.Sk. Mahamuda	2017	2021
6	P Rekha Rani	163220003	Dr. M.Venkateswarlu	2016	2021
7	KSR krishna Reddy	163220007	Dr. K. Swapna	2017	2022
8	P.Sailaja	163220013	Dr. Sk. Mahamuda	2017	2022
9	Y. Anantha Lakshmi	163220004	Dr. K. Swapna	2016	2022
10	P Surendra Reddy	14322013	Dr. K. Swapna	2014	2023
11	M.Chandrika	163220009	Dr. K. Swapna	2016	2024
12	V Murali Krishna	15322005	Dr. Sk. Mahamuda	2015	2024

Department of Physics, DST-FIST (Level-I) Sponsored

Awards & Recognitions

1

- Women Scientist Fellowships

2

- Research Excellence Awards

3

- Early Career Research Award

4

- Core Research Grant

5

- Reviewers for International Journals

6

- Best Teacher Awards

Collaborators

Prof. A.S.Rao
DTU



Prof. Haranadh
NIT Warangal



Prof. G.V. Prakash
IIT Delhi



Dr.Aman Prasad
DEI, Agra



Dr.D. Ramachari
Vietnam



Prof. Al. Buraihi
Sakarya University, Turkey



Department of Physics, DST-FIST (Level-I) Sponsored

Events Organized



International Conference (ICAFMSA-2023) 3rd-5th Dec 2023

December 08, 2023 | Guntur

కేవల యూలో అంతర్జాతీయ సదస్సు ప్రారంభం



అంతర్జాతీయ సదస్సును ప్రారంభిస్తున్న ప్రొ. చాన్సలర్ జగన్మోహన్ రావు, డిసెంబరు 7, శాడవల్లి మండలం వజ్రేశ్వరంలోని కేవల యూనివర్సిటీలో జరిగిన అంతర్జాతీయ సదస్సును ప్రత్యేక ప్రాధాన్యతతో కేవల యూనివర్సిటీ ప్రతినిధుల సమేతంగా ప్రారంభించారు. ఈ సందర్భంగా అయితే మాట్లాడుతూ విద్యుత్తును నిల్వ చేయడంలో జాతికత్తావు సమాచారం ఎంతో అవసరమన్నారు. సదస్సుకు వచ్చిన తర్వాత నుండి వజ్రేశ్వర విద్యార్థులకు డిజి విజ్ఞానం చేస్తున్నారు. ఈ అంతర్జాతీయ సదస్సు నిర్వహణ బాధ్యత పరిష్కారాల కోసం అన్నివేలలో ఒక స్టూడెంట్ను చేరుకుంటున్నారని ప్రకటించి విద్యార్థులను విద్యుత్తు సమాచారం పరిష్కారంలో అయినా తన వంతున చేతులు పెట్టాలని కోరారు. కేవల యూనివర్సిటీ సమాచారం కేంద్రీకృతమై ఉండవచ్చు. ఈ కార్యక్రమంలో జాతీయతా విభాగాధిపతి జి.ఎస్.ఎస్. సదస్సు కమిటీ సభ్యులు, ప్రొ. వీ.ఎస్. ప్రసాద్, వెంకట రామ్, డి.ఎస్. సావదత్తు, రిజిస్ట్రార్ సుబ్బారావు, సైన్స్ కళాశాల ప్రెసిడెంట్ ప్రొఫెసర్ కె.సుబ్బారావు, ఎన్టీఆర్ కాలనీలలో ప్రొఫెసర్ కె.వెంకటేశ్వరం, సెంటర్ ఫర్ సాఫ్ట్వేర్ ఎన్జనీర్ ప్రొఫెసర్ కె.వెంకటేశ్వరం, పాల్గొన్నారు.

విద్యుత్ నిల్వలో భౌతిక శాస్త్ర సహకార మొత్తం అవసరం

అంతర్జాతీయ సదస్సును ప్రారంభించిన కేవల యూనివర్సిటీ ప్రతినిధుల సమేతంగా ప్రారంభించారు. ఈ సందర్భంగా అయితే మాట్లాడుతూ విద్యుత్తును నిల్వ చేయడంలో జాతీయతావు సమాచారం ఎంతో అవసరమన్నారు. సదస్సుకు వచ్చిన తర్వాత నుండి వజ్రేశ్వర విద్యార్థులకు డిజి విజ్ఞానం చేస్తున్నారు. ఈ అంతర్జాతీయ సదస్సు నిర్వహణ బాధ్యత పరిష్కారాల కోసం అన్నివేలలో ఒక స్టూడెంట్ను చేరుకుంటున్నారని ప్రకటించి విద్యార్థులను విద్యుత్తు సమాచారం పరిష్కారంలో అయినా తన వంతున చేతులు పెట్టాలని కోరారు. కేవల యూనివర్సిటీ సమాచారం కేంద్రీకృతమై ఉండవచ్చు. ఈ కార్యక్రమంలో జాతీయతా విభాగాధిపతి జి.ఎస్.ఎస్. సదస్సు కమిటీ సభ్యులు, ప్రొ. వీ.ఎస్. ప్రసాద్, వెంకట రామ్, డి.ఎస్. సావదత్తు, రిజిస్ట్రార్ సుబ్బారావు, సైన్స్ కళాశాల ప్రెసిడెంట్ ప్రొఫెసర్ కె.సుబ్బారావు, ఎన్టీఆర్ కాలనీలలో ప్రొఫెసర్ కె.వెంకటేశ్వరం, సెంటర్ ఫర్ సాఫ్ట్వేర్ ఎన్జనీర్ ప్రొఫెసర్ కె.వెంకటేశ్వరం, పాల్గొన్నారు.



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National Conference (NAFP-2024) 5th-6th Jan 2024



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Current Ph.D Scholars



Ch.Pravallika



G. Dedeepya



Gunjan M



Seshulatha M



Ch. Sumalatha



G. Prasad

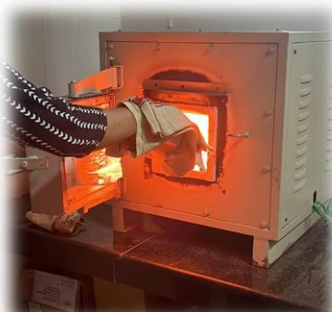


A.Naveen



VRL Murthy

M.Sc Students Projects work



Department of Physics, DST-FIST (Level-I) Sponsored

Novel Glasses Prepared from AMRL

Rare Earth Ions

1. $\text{ZnO-Al}_2\text{O}_3\text{-Bi}_2\text{O}_3\text{-B}_2\text{O}_3$
2. $\text{ZnO-Al}_2\text{O}_3\text{-BaF}_2\text{-CaF}_2\text{-B}_2\text{O}_3$
3. $\text{PbF}_2\text{-WO}_3\text{-TeO}_2$
4. $\text{CaO-MgO-Al}_2\text{O}_3\text{-TiO}_2\text{-B}_2\text{O}_3\text{-TeO}_2$
5. $\text{CaO-SrO-BaCl}_2\text{-B}_2\text{O}_3$
6. $\text{BaF}_2\text{-PbF}_2\text{-Al}_2\text{O}_3\text{-B}_2\text{O}_3$
7. $\text{SrO-CaF}_2\text{-Bi}_2\text{O}_3\text{-B}_2\text{O}_3\text{-TeO}_2$
8. $\text{Na}_2\text{O-5BaF}_2\text{-CaF}_2\text{-B}_2\text{O}_3\text{-TeO}_2$
9. $\text{SrO-Al}_2\text{O}_3\text{-BaCl}_2\text{-B}_2\text{O}_3\text{-TeO}_2$
10. $\text{ZnO-Bi}_2\text{O}_3\text{-BaF}_2\text{-B}_2\text{O}_3\text{-TeO}_2$
11. $\text{TeO}_2\text{-WO}_3\text{-LiF}$
12. $\text{TeO}_2\text{-WO}_3\text{-NaF}$
13. $\text{TeO}_2\text{-WO}_3\text{-KF}$
14. $\text{TeO}_2\text{-WO}_3\text{-LiF-NaF}$
15. $\text{TeO}_2\text{-WO}_3\text{-NaF-KF}$
16. $\text{TeO}_2\text{-WO}_3\text{-LiF-10KF}$

Dy^{3+}

Sm^{3+}

Pr^{3+}

Eu^{3+}

Tb^{3+}

Ho^{3+}

Tm^{3+}

Er^{3+}

Nd^{3+}

Yb^{3+}

Dr. Mahamuda Shaik, Dr. K.Swapna, Dr. M.Venkateswarlu and Dr. MVVKS Prasad are working on “Spectroscopic studies of rare earth doped glasses/glass ceramics/phosphors/nano-phosphors for optoelectronic device applications”. The prime focus of this group is to synthesize the rare earth doped glasses/glassy ceramics/phosphors/Nano Phosphors using various possible techniques and characterizing them for their physical, structural, morphological, absorption and luminescence. Though there are many reports on rare earth doped glasses for fiber amplifiers, still there is a great need for the identification and optimization of efficient host materials. In order to develop/prepare more and more fiber lasers and fiber amplifier materials, there is a lot of requirements to investigate/optimize the different glasses/glassy ceramics doped with certain rare earths for practical device applications.

LIST OF PUBLICATIONS

2024

1. **Optical and radiation shielding properties of Europium doped Alkaline-Earth Boro Tellurite glasses.**

Authors: Ch. Pravallika, K. Swapna, Sk. Mahamuda, M. Venkateswarlu, A.S. Rao,

Journal: Optical Materials

Publisher: Elsevier

Volume, Year and PP:154 (2024) 115669

Impact Factor: 3.8

2. **Colour tunable photoluminescence studies of Dy³⁺/Eu³⁺ co-doped BaPbAlFB glasses for epoxy-free w-LED applications.**

Authors: P. Rekha Rani, M. Venkateswarlu, K. Swapna, Sk. Mahamuda, A.S. Rao,

Journal: Spectrochimica Acta PartA: Molecular and Biomolecular Spectroscopy

Publisher: Elsevier

Volume, Year and PP: 320(2024)124438

Impact Factor:4.3

3. **Visible emission studies by UV light conversion in (Dy³⁺/Tb³⁺) ions pair activated zinc-bismuth-barium borotellurite glasses for achieving intense green and white light.**

Authors: C. Sumalatha, Ramachari Doddoji, M. Venkateswarlu, K. Swapna, Sk Mahamuda, A.S. Rao

Journal: Optical Materials

Publisher: Elsevier

Volume, Year and PP: 152(2024)115451

Impact Factor: 3.8

4. **Visible and NIR spectral analysis of Er³⁺ doped LIBiAlBSi glasses for laser applications.**

Authors: Mohit Kumar, Mukesh K. Sahu, Sumandeep Kaur, Aman Prasad, Rajat Bajaj, Rupesh A. Talewar, Yasha Tayal, K. Swapna, and A.S. Rao,

Journal: Journal of Material Science- Materials in Electronics

Publisher: Springer

Volume, Year and PP:504(2024)35

Impact Factor: 2.8

5. White light emission and spectroscopic studies of dysprosium doped bismuth antimony fluoroborate glasses for optoelectronic devices.

Authors: Gunjan Mahajan, M.V.V.K Srinivas Prasad, **K.Swapna**, K.Seshulatha, G.G.Dhar, A.S.Rao.

Journal: Optical Materials

Publisher: Elsevier

Volume, Year and PP:149 (2024) 115067

Impact Factor: 3.8

6. Structural investigation and optical properties of Dysprosium (Dy^{3+}) ions doped Oxyfluoro Antimony borate glasses for Photonics applications

Authors: Ch. Pravallika, **K. Swapna**, Ib Singh Deo, **Sk. Mahamuda**, **M. Venkateswarlu**, A. S. Rao & Vijaya Prakash G.

Journal: Journal of Fluorescence

Publisher: Springer

Volume, Year and PP: (2023)10985

Impact Factor: 3.8

7. Investigation of radiation shielding and optical properties of neodymium doped Bismuth Boro tellurite glasses for solid state device applications.

Authors: **K. Swapna**, Anantha lakshmi, Y, Ch.Pravallika, **Sk. Mahamuda**, **M. Venkateswarlu**, Sarat.K.Kotamraju, K.Ch. Sri Avya, A.S. Rao.

Journal: Journal of Luminescence

Publisher: Elsevier

Volume, Year and PP: 267 (2023) 120339

Impact Factor: 3.8

8. Effect of Eu^{3+} ions concentration on visible red luminescence and radiative shielding properties of $SrO-Al_2O_3-BaCl_2-B_2O_3-TeO_2$ glasses

Authors: P. Sailaja, **Sk. Mahamuda**, G. Dedeepya, Jamila S. Alzahrani, **K. Swapna**, **M. Venkateswarlu**, A.S. Rao, Z.A. Alrowaili, I.O. Olarinoye, M.S. Al-Buriah.

Journal: Radiation Physics and Chemistry

Publisher: Elsevier

Volume, Year and PP: 216 (2024) 111467

Impact Factor: 3.8

9. Luminescence and photometric activity of an intense green emitting $ZnBiBaBFTe: Tb^{3+}$ glasses

Authors: C.Sumalatha, R Doddoji, **M.Venkateswarlu**, Swapna, **Sk.Mahamuda**, AS Rao.

Journal: Radiation Physics and Chemistry

Publisher: Elsevier

Volume, Year and PP: 208(2023),110894

Impact Factor: 3.8

10. Optical and spectroscopic studies of Dy³⁺ ions doped Alumino tungsten borate glasses for w-LEDs applications

Authors: V.R. L Murty, **M. Venkateswarlu**, **K. Swapna**, P. Rekha Rani, A.S. Rao.

Journal: Polyhedron

Publisher: Elsevier

Volume, Year and PP:227(2022),116137

Impact Factor: 3.8

11. Spectroscopic and electrical properties of europium doped bismuth antimony fluoroborate glasses.

Authors: Gunjan Mahajan, M.V.V.K Srinivas Prasad, **K. Swapna**, **Sk Mahamuda**, **M. Venkateswarulu**, G.G. Dhar, A.S. Rao.

Journal: Radiation Physics and Chemistry

Publisher: Elsevier

Volume, Year and PP:221(2024)111708

Impact Factor: 3.8

2023

12. Novel Mn⁴⁺ activated NaLiTi₃O₇ far red emitting phosphors.

Authors: Rupesh A. Talewar, **Sk. Mahamuda***, A.S. Rao, S.V. Moharil.

Journal: Journal of Luminescence

Publisher: Elsevier

Volume, Year and PP:255 (2023) 119591.

Impact Factor: 3.8

13. Luminescence and photometric activity of an intense green emitting ZnBiBaBFTe:Tb³⁺ glasses.

Authors:

C. Sumalatha, Ramachari Doddaji, **M. Venkateswarlu**, **K. Swapna**, **Sk Mahamuda**, A.S. Rao.

Journal: Radiation Physics and Chemistry

Publisher: Elsevier

Volume, Year and PP: 2023, 110894

Impact Factor: 3.8

14. Spectral characterization and energy transfer study of Nd³⁺/Yb³⁺ in borosilicate glasses.

Authors: Yasha Tayal, Rupesh A. Talewar, **Sk. Mahamuda**, Aman Prasad, Kartika Maheswari, Mohit Kumar, A.S. Rao.

Journal: Optical Materials.

Publisher: Elsevier

Volume, Year and PP: 142 (2023) 114049.

Impact Factor: 3.8

15. Luminescence and photometric activity of an intense green emitting ZnBiBaBFTe: Tb³⁺ glasses.

Authors:

C. Sumalatha, Ramachari Doddoji, **M. Venkateswarlu**, K. Swapna, Sk Mahamuda, A.S. Rao.

Journal: Radiation Physics and Chemistry

Publisher: Elsevier

Volume, Year and PP: 2023, 110894

Impact Factor: 3.8

2022

16. Near-infrared photoluminescence studies of neodymium ions doped SrO-Al₂O₃-BaCl₂-B₂O₃-TeO₂ glasses for laser and fiber amplifier applications.

Authors: P. Sailaja, **Sk. Mahamuda***, K. Swapna, M.Venkateswarlu, A.S.Rao.

Journal: Optics and Laser Technology

Publisher: Elsevier

Volume, Year and PP: 156 (2022)108569.

Impact Factor: 4.6

17. Synthesis and characterization of B₂O₃-Bi₂O₃-SrO-Al₂O₃-PbO-Dy₂O₃ glass system: The role of Bi₂O₃/Dy₂O₃ on the optical, structural, and radiation absorption parameters.

Authors: A. Heera Durga Prakash, **Sk. Mahamuda***, Jamila S. Alzahrani, P. Sailaja, **K. Swapna, M. Venkateswarlu**, A.S. Rao, Z.A. Alrowaili, I.O. Olarinoye, M.S. Al-Buriahi.

Journal: Materials Research Bulletin

Publisher: Elsevier

Volume, Year and PP:155 (2022) 111952.

Impact Factor: 5.3

18. Near-IR luminescence in Nd³⁺ ions doped Na₂O-BaF₂-CaF₂-B₂O₃-TeO₂ glasses for 1064 nm laser and fiber amplifier applications.

Authors: V.Murali Krishna, **Sk. Mahamuda***, P.Sailaja, **K. Swapna, M. Venkateswarlu**, Ch.B. Annapurna Devi, A.S. Rao.

Journal: Journal of Non-Crystalline Solids

Publisher: Elsevier

Volume, Year and PP:590 (2022) 121671.

Impact Factor: 3.2

19. Optical and spectroscopic studies of Dy³⁺ ions doped Alumino tungsten borate glasses for w-LEDs applications.

Authors: V.R.L. Murty, **M. Venkateswarlu, K. Swapna, Sk. Mahamuda**, P. Rekha Rani, A.S. Rao.

Journal: Polyhedron.

Publisher: Elsevier

Volume, Year and PP: (2022)116137.

Impact Factor: 3.8

20. Spectroscopic Studies of Eu³⁺ Ion-Doped Antimony-Lead-Oxyfluoroborate Glasses for Visible Red Photonic Device Applications.

Authors: D. Shanmukha Sai, **K. Swapna**, K. Deepthi, J. V. Shanmukh Kumar, **Sk. Mahamuda, M. Venkateswarlu**, P. Sruthi, D. Amer, A. S. Rao.

Journal: Journal of Electronic Materials

Publisher: Elsevier

Volume, Year and PP: (2022)

Impact Factor: 2.2

21. Intense infrared emission of Er^{3+} in ZnB_2O_4 phosphors from energy transfer of Bi^{3+} by broadband UV excitation.

Authors: Rupesh A. Talewar, **Sk. Mahamuda***, A.S. Rao, S.V. Moharil

Journal: Journal of Luminescence

Publisher: Elsevier

Volume, Year and PP:244 (2022) 118706.

Impact Factor: 3.8

22. Enhanced red emission in Eu^{3+} ions doped $\text{ZnO-Al}_2\text{O}_3\text{-BaF}_2\text{-CaF}_2\text{-B}_2\text{O}_3$ glasses for visible laser applications.

Authors: **Sk. Mahamuda***, P.Sailaja, **K. Swapna**, **M.Venkateswarlu**, A.S.Rao,

Journal: Journal of Non-Crystalline Solids

Publisher: Elsevier

Volume, Year and PP:277(2022) 121306.

Impact Factor: 3.2

23. Influence of Sm^{3+} ion concentration on the photoluminescence behavior of antimony lead oxy fluoro borate glasses.

Authors: D.Amer, **K.Swapna**, J.V.Shanmukh Kumar, **Sk.Mahamuda**, **M.Venkateswarulu**, P.Sruthi, D.Shanmukh Sai, A.S.Rao.

Journal: Materials Research Bulletin.

Publisher: Elsevier

Volume, Year and PP: 146 (2022) 111597.

Impact Factor: 5.3

24. Physical and spectroscopic studies of Sm^{3+} ions doped Alumino Tungsten Borate glasses for photonic applications.

Authors: V.R.L. Murty, **M. Venkateswarlu**, **K.Swapna**, **Sk.Mahamuda**, P. Rekha Rani, A.S.Rao.

Journal: Radiation Physics and Chemistry

Publisher: Elsevier

Volume, Year and PP :2022, 109806.

Impact Factor: 3.8

25. Dysprosium concentration-dependent fluorescent properties of antimony lead Oxyfluoroborate glasses.

Authors: P.Sruthi, **K. Swapna**, J.V. Shanmukh Kumar, **Sk. Mahamuda**, **M. Venkateswarulu**, D. Amer, D. Shanmukha sai, A.S. Rao.

Journal: Chemical Physics Letters

Publisher: Elsevier

Volume, Year and PP: 787 (2022) 139210.

Impact Factor: 2.8

2021

26. Broadband NIR emission at 1.53 μm in trivalent erbium ions doped SrO-Al₂O₃-B₂O₃-BaCl₂-10TeO₂ glasses for optical fiber and NIR laser applications.

Authors: P. Sailaja, **Sk. Mahamuda**, **K. Swapna**, **M. Venkateswarlu**, Mohini Gupta, A.S.Rao.

Journal: Journal of Non-Crystalline Solids.

Publisher: Elsevier

Volume, Year and PP: 567 (2021) 120937.

Impact Factor: 3.2

27. Concentration dependent neodymium doped oxy fluoroborate glasses for 1.08 μm laser applications.

Journal: **M. Venkateswarlu**, **K.Swapna**, **Sk. Mahamuda**, P. Rekha Rani, J.V. Shanmukha Kumar, M.V.V.K. Srinivas, Prasad, A.S.Rao.

Journal: Solid State Sciences.

Publisher: Elsevier

Volume, Year and PP: 113(2021) 106543

Impact Factor: 3.4

28. Dysprosium concentration-dependent fluorescent properties of antimony lead Oxyfluoroborate glasses.

Authors: P.Sruthi, **K.Swapna**, J.V.Shanmukh Kumar, **Sk.Mahamuda**, **M.Venkateswarulu**, D.Amer, D.Shanmukh Sai, A.S.Rao.

Journal: Chemical Physics Letter

Publisher: Elsevier

Volume, Year and PP: (2021)139210 (I.F.2.328).

Impact Factor: 2.8

29. Effective sensitization of Yb³⁺ ions on Yb³⁺/Nd³⁺ co-doped fluoroborate glasses for NIR luminescence applications.

Authors: K. Sriramulu, K. Swapna , M. Venkateswarlu , Sk. Mahamuda , A.S. Rao

Journal: Optical Materials

Publisher: Elsevier

Volume, Year and PP: 121 (2021) 111592.

Impact Factor: 3.8

30. Sensitization of Er³⁺ NIR emission using Yb³⁺ ions in alkaline-earth chloro borate glasses for fiber laser and optical fiber amplifier applications.

Authors: Rupesh A. Talewar , Sk. Mahamuda*, K. Swapna, M. Venkateswarlu, A.S. Rao.

Journal: Materials Research Bulletin

Publisher: Elsevier

Volume, Year and PP: 136(2021)111144

Impact Factor: 5.3

31. Optical properties of Sm³⁺ ions doped 10SrO-(10-x) Al₂O₃-10BaCl₂-60B₂O₃-10TeO₂ glasses for reddish orange laser applications.

Authors: P. Sailaja, Sk. Mahamuda*, K. Swapna, M. Venkateswarlu, A.S. Rao,

Journal: Materials Science and Engineering B

Publisher: Elsevier

Volume, Year and PP: 270 (2021) 115198

Impact Factor: 3.9

32. Photoluminescence properties of Sm³⁺ ions doped Bismuth Boro tellurite glasses

Authors: Y. Anantha Lakshmi, K. Swapna, Sk. Mahamuda, M. Venkateswarlu, A.S. Rao.

Journal: Solid State Sciences.

Publisher: Elsevier

Volume, Year and PP: 116 (2021) 106609.

Impact Factor: 3.4

33. Spectroscopic studies of Dy³⁺ ions doped Phosphate glasses for visible photonic device applications.

Authors: Sk. Mahamuda*, S. Farooq, Ch. B. Annapurna Devi, K. Swapna, M. Venkaeswarlu, M V V K S Prasad, A.S. Rao

Journal: Journal of Non-Crystalline Solids

Publisher: Elsevier

Volume, Year and PP: 555(2021)120538.

Impact Factor: 3.2

34. Structural, optical and photoluminescence properties of alkaline-earth boro tellurite glasses doped with trivalent Neodymium for 1.06 μm optoelectronic devices.

Authors: K. Siva Rama Krishna Reddy, K. Swapna, Sk. Mahamuda, M. Venkateswarlu, A.S. Rao.

Journal: Optical materials

Publisher: Elsevier

Volume, Year and PP: 111(2021)110615.

Impact Factor: 3.8

35. NIR luminescence and laser properties of Nd^{3+} doped $\text{B}_2\text{O}_3\text{-BaF}_2\text{-PbF}_2\text{-Al}_2\text{O}_3$ glasses for 1.063 μm laser applications.

Authors: P. Rekha Rani, M. Venkateswarlu, K. Swapna, Sk. Mahamuda, Rupesh A Talewar and A. S. Rao.

Journal: Journal of Luminescence.

Publisher: Elsevier

Volume, Year and PP: 229 (2021) 117701.

Impact Factor: 3.8

2021

36. Broadband NIR emission at 1.53 μm in trivalent erbium ions doped $\text{SrO-Al}_2\text{O}_3\text{-B}_2\text{O}_3\text{-BaCl}_2\text{-10TeO}_2$ glasses for optical fiber and NIR laser applications.

Authors: P. Sailaja, Sk. Mahamuda, K. Swapna, M. Venkateswarlu, Mohini Gupta, A.S.Rao.

Journal: Journal of Non-Crystalline Solids

Publisher: Elsevier

Volume, Year and PP: 567 (2021) 120937.

Impact Factor: 3.2

37. Concentration dependent neodymium doped oxy fluoroborate glasses for 1.08 μm laser applications.

Authors: M. Venkateswarlu, K.Swapna, Sk. Mahamuda, P. Rekha Rani, J.V. Shanmukha Kumar, M.V.V.K. Srinivas, Prasad, A.S.Rao

Journal: Solid State Sciences

Publisher: Elsevier

Volume, Year and PP: 113(2021) 106543

Impact Factor: 3.4

38. Dysprosium concentration-dependent fluorescent properties of antimony lead Oxyfluoroborate glasses.

Authors: P. Sruthi, K. Swapna, J.V. Shanmukh Kumar, Sk. Mahamuda, M. Venkateswarulu, D. Amer, D. Shanmukh Sai, A.S. Rao.

Journal: Chemical Physics Letter

Publisher: Elsevier

Volume, Year and PP: (2021) 139210

Impact Factor: 2.8

39. Effective sensitization of Yb^{3+} ions on $\text{Yb}^{3+}/\text{Nd}^{3+}$ co-doped fluoroborate glasses for NIR luminescence applications.

Authors: K. Sriramulu, K. Swapna, M. Venkateswarlu, Sk. Mahamuda, A.S. Rao

Journal: Optical Materials

Publisher: Elsevier

Volume, Year and PP: 121 (2021) 111592.

Impact Factor: 3.8

40. Sensitization of Er^{3+} NIR emission using Yb^{3+} ions in alkaline-earth chloro borate glasses for fiber laser and optical fiber amplifier applications.

Authors: Rupesh A. Talewar, Sk. Mahamuda*, K. Swapna, M. Venkateswarlu, A.S. Rao

Journal: Materials Research Bulletin,

Publisher: Elsevier

Volume, Year and PP: 136(2021) 111144

Impact Factor: 5.3

41. Optical properties of Sm^{3+} ions doped $10\text{SrO}-(10-x)\text{Al}_2\text{O}_3-10\text{BaCl}_2-60\text{B}_2\text{O}_3-10\text{TeO}_2$ glasses for reddish orange laser applications.

Authors: P. Sailaja, **Sk. Mahamuda***, K. Swapna, M. Venkateswarlu, A.S. Rao,

Journal: Materials Science and Engineering B

Publisher: Elsevier

Volume, Year and PP:270 (2021) 115198

Impact Factor: 3.9

42. Photoluminescence properties of Sm³⁺ ions doped Bismuth Boro tellurite glasses.

Authors: Y. Anantha Lakshmi, K. Swapna, Sk. Mahamuda, M. Venkateswarlu, A.S. Rao,

Journal: Solid State Sciences

Publisher: Elsevier

Volume, Year and PP:116 (2021) 106609.

Impact Factor: 3.4

43. Spectroscopic studies of Dy³⁺ ions doped Phosphate glasses for visible photonic device applications.

Authors: Sk. Mahamuda*, S. Farooq, Ch. B. Annapurna Devi, K. Swapna, M. Venkaeswarlu, M V V K S Prasad, A.S. Rao.

Journal: Journal of Non-Crystalline Solids

Publisher: Elsevier

Volume, Year and PP:555(2021)120538.

Impact Factor: 3.2

44. Structural, optical and photoluminescence properties of alkaline-earth boro tellurite glasses doped with trivalent Neodymium for 1.06 μm optoelectronic devices.

Authors: K. Siva Rama Krishna Reddy, K. Swapna, Sk. Mahamuda, M. Venkateswarlu, A.S. Rao.

Journal: Optical materials

Publisher: Elsevier

Volume, Year and PP:111(2021)110615.

Impact Factor: 3.8

45. NIR luminescence and laser properties of Nd³⁺ doped B₂O₃-BaF₂-PbF₂-Al₂O₃ glasses for 1.063 μm laser applications.

Authors: P. Rekha Rani, **M. Venkateswarlu**, **K. Swapna**, **Sk. Mahamuda**, Rupesh A Talewar and A. S. Rao,

Journal: Journal of Luminescence

Publisher: Elsevier

Volume, Year and PP: 229 (2021) 117701

Impact Factor: 3.8

2020

46. Effect of Samarium ions concentration on Physical, Optical and Photoluminescence Properties of Oxy-Fluoro Boro Tellurite Glasses,

Authors: V. Murali Krishna, **Sk. Mahamuda***, P. Rekha Rani, **K. Swapna**, **M. Venkateswarlu**, A.S. Rao.

Journal: Optical Materials

Publisher: Elsevier

Volume, Year and PP:109 (2020) 110368.

Impact Factor: 3.8

47. Concentration dependent photoluminescence studies of Dy³⁺ doped Bismuth Boro-Tellurite glasses for lasers and wLEDs.

Authors: Y. Anantha Lakshmi, **K. Swapna**, K.S. Rama Krishna Reddy, **Sk. Mahamuda**, **M. Venkateswarulu**, A.S. Rao.

Journal: Optical Materials

Publisher: Elsevier

Volume, Year and PP:109 (2020) 110328.

Impact Factor: 3.8

48. White light emission from Dy³⁺ doped ZnO + Bi₂O₃ + BaF₂ + B₂O₃ + TeO₂ glasses: Structural and spectroscopic properties.

Authors: C. Sumalatha, Ramachari Doddoji, **M. Venkateswarlu**, P. RekhaRani, **K. Swapna**, **Sk. Mahamuda**, A. S. Rao.

Journal: Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy

Publisher: Elsevier

Volume, Year and PP: (2020), 118568.

Impact Factor: 4.3

49. Photoluminescence and EPR studies of narrowband ultraviolet B emitting trivalent gadolinium activated $\text{CaLaAl}_3\text{O}_7$ phosphors.

Authors: Vijay Singh, Sk. Mahamuda, A.S.Rao, J.L.Rao, S.Kokate, Muhammad Irfan

Journal: OPTIK

Publisher: Elsevier

Volume, Year and PP: 206 (2020)163986.

50. Broadband excited Nd^{3+} NIR emission in $\text{Sr}_5(\text{PO}_4)_3\text{Cl}:\text{Eu}^{2+}$, Nd^{3+} phosphor for solar spectral modification

Authors: Rupesh A. Talewar, Sk. Mahamuda, A.S. Rao, Vishwajit M. Gaikwad, P.D. Belsare, S.V. Moharil

Journal: Journal of Luminescence

Publisher: Elsevier

Volume, Year and PP: 222 (2020) 117118

Impact Factor: 3.3

51. Spectroscopic and luminescence properties of Ho^{3+} ions doped Barium Lead Alumino Fluoro Borate glasses for green laser applications

Authors: P. Rekha Rani, M. Venkateswarlu, K. Swapna, Sk. Mahamuda, M. V. V. K. S. Prasad and A. S. Rao

Journal: Solid State Sciences

Publisher: Elsevier

Volume, Year and PP: 102 (2020) 106175

Impact Factor: 3.4

52. Ultraviolet (UV)-B radiation from Gd^{3+} activated $\text{Li}_2\text{MgSiO}_4$ ceramics

Authors: Vijay Singh, Sk. Mahamuda, A. S. Rao, J. L. Rao, N.Singh, Muhammad Irfan

Journal: OPTIK

Publisher: Elsevier

Volume, Year and PP: 207 (2020)164475

53. Luminescence and EPR properties of UVB emitting Gd doped NaBaPO_4 phosphor prepared by co-precipitation method.

Authors: Vijay Singh, **Sk. Mahamuda**, A. S. Rao, J. L. Rao, S.Kokate, Muhammad Irfan,

Journal: OPTIK

Publisher: Elsevier

Volume, Year and PP: 206 (2020)164086.

2019

54. Near UV based Dy³⁺ ions doped alkaline earth chloro borate glasses for white LED's and visible Lasers

Authors: Rupesh A. Talewar, **Sk. Mahamuda**, **K. Swapna**, A.S. Rao

Journal: Journal of Optics and Laser Technology

Publisher: Elsevier

Volume, Year and PP: 119 (2019) 105646

Impact Factor: 4.6

55. Thermal, Up-Conversion and Near Infrared Luminescence studies of Erbium ions doped Alkaline-Earth Boro Tellurite Glasses

Authors: K. Siva Rama Krishna Reddy, **K. Swapna**, **Sk. Mahamuda**, **M. Venkateswarlu**, A.S. Rao

Journal: Solid State Sciences

Publisher: Elsevier

Volume, Year and PP: 97(2019)106016

Impact Factor: 3.4

56. Spectroscopic Investigations of Dysprosium ions doped Oxy Chloro Boro Tellurite Glasses for Visible Photonic device Applications

Authors: P. Sailaja, **Sk. Mahamuda**, Rupesh A Talewar, K. Swapna and A. S. Rao

Journal: Journal of Alloys and Compounds

Publisher: Elsevier

Volume, Year and PP: 789 (2019) 744-754

Impact Factor: 5.8

57. Structural and optical NIR studies of Er³⁺ ions doped bismuth boro tellurite glasses for luminescence materials applications

Authors: Y. Anantha Lakshmi, **K. Swapna**, K. Siva Rama Krishna Reddy, **M. Venkateswarlu**, **Sk. Mahamuda**, A. S. Rao

Journal: Journal of Luminescence

Publisher: Elsevier

Volume, Year and PP: 211 (2019) 39-47

Impact Factor: 3.3

58. Spectroscopic studies of Dy³⁺ ions doped barium lead alumino fluoro borate glasses.

Authors: P. Rekha Rani, M. Venkateswarlu, **Sk. Mahamuda**, K. Swapna, Nisha Deopa and A. S. Rao

Journal: Journal of Alloys and Compounds

Publisher: Elsevier

Volume, Year and PP: 787 (2019) 503-518

Impact Factor: 5.8

59. Sensitization of Yb³⁺ by Nd³⁺ emission in alkaline-earth chloro borate glasses for laser and fiber amplifier applications

Authors: Rupesh A Talewar, **Sk. Mahamuda**, K. Swapna and A. S. Rao

Journal: Journal of Alloys and Compounds

Publisher: Elsevier

Volume, Year and PP: 771 (2019) 980-986

Impact Factor: 5.8

60. Enhancement of 1.54 μ m emission in Ce³⁺-Er³⁺ codoped Ca₄Si₂O₇F₂ phosphor

Authors: Rupesh A. Talewar, **Sk. Mahamuda**, Arpita Vyas, A. S. Rao, S. V. Moharil

Journal: Journal of Alloys and Compounds

Publisher: Elsevier

Volume, Year and PP: 775 (2019) 810-817

Impact Factor: 5.8

61. Spectroscopic studies and lasing potentialities of Sm³⁺ ions doped single alkali and mixed alkali fluoro tungstentellurite glasses.

Authors: Ch.B. Annapurna Devi, **Sk. Mahamuda**, **K. Swapna**, **M. Venkateswarlu**,
M.V.V.K. Srinivas Prasad, K. Siva Rama Krishna Reddy, Nisha Deopa, A.S. Rao

Journal: Journal of Optics and Laser Technology

Publisher: Elsevier

Volume, Year and PP: 111(2019)176-183

Impact Factor: 4.6

62. Structural, absorption and photoluminescence studies of Sm³⁺ ions doped barium lead alumino fluoro borate glasses for optoelectronic device applications

Authors: P. RekhaRani, **M.Venkateswarlu**, **Sk. Mahamuda**, **K. Swapna**, Nisha Deopa, A. S. Rao, G. Vijaya Prakash

Journal: Materials Research Bulletin

Publisher: Elsevier

Volume, Year and PP: 110 (2019) 159-168

Impact Factor: 5.3

2018

63. Photoluminescence of dysprosium doped antimony-magnesium-strontium-oxyfluoroborate glasses

Authors: S. Farooq, Y. Munikrishna Reddy, R. Padmasuvarna, Venkata Krishnaiah Kummar, C. S. Dwaraka Viswanath, **Sk. Mahamuda**

Journal: Ceramic International

Publisher: Elsevier

Volume, Year and PP: 44 (2018) 21303-21308

Impact Factor: 5.1

64. Investigation on structural and luminescence features of Dy³⁺ ions doped alkaline-earth boro tellurite glasses for optoelectronic devices.

Authors: K. Siva Rama Krishna Reddy, **K. Swapna**, **Sk. Mahamuda**, **M. Venkateswarlu**, A.S. Rao, and G. Vijaya Prakash

Journal: Optical Materials

Publisher: Elsevier

Volume, Year and PP: 85 (2018) 200-218

Impact Factor: 3.8

65. Dy³⁺ ions doped Oxy-Fluoro Boro Tellurite Glasses for the Prospective Optoelectronic Device Applications.

Authors: V. Murali Krishna, **Sk. Mahamuda**, Rupesh A Talewar, **K. Swapna**, **M. Venkateswarlu** and A. S. Rao

Journal: Journal of Alloys and Compounds

Publisher: Elsevier

Volume, Year and PP: 762 (2018) 814-826

Impact Factor: 5.8

66. Sensitization of Nd³⁺ by 4f-5d transition of Ce³⁺ in Ba₂Y(BO₃)₂Cl Phosphor for the Prospective NIR Applications.

Authors: R. A. Talewar, **Sk. Mahamuda**, A. S. Rao, C. P. Joshi, S.V. Moharil

Journal: Journal of Luminescence

Publisher: Elsevier

Volume, Year and PP: 202 (2018) 1-6

Impact Factor: 3.3

67. Spectroscopic Studies of Sm³⁺ ions doped Alkaline-Earth Chloro Borate glasses for Visible Photonic Applications.

Authors: Rupesh A Talewar, **Sk. Mahamuda**, **K. Swapna**, **M. Venkateswarlu** and A. S. Rao

Journal: Materials Research Bulletin

Publisher: Elsevier

Volume, Year and PP: 105 (2018) 45-54

Impact Factor: 5.3

68. Pr³⁺ ions doped Single Alkali and Mixed Alkali Fluoro Tungsten Tellurite Glasses for Visible Red Luminescent Devices.

Authors: Ch.B. Annapurna Devi, **Sk. Mahamuda**, **K. Swapna**, **M. Venkateswarlu**, A. Srinivasa Rao and G. Vijaya Prakash

Journal: Journal of Non-Crystalline Solids

Publisher: Elsevier

Volume, Year and PP: 498, 2018, 345-351

Impact Factor: 3.2

69. Structural, optical absorption and photoluminescence spectral studies of Sm³⁺ ions in Alkaline-Earth Boro Tellurite glasses.

Authors: K. Siva Rama Krishna Reddy, K. Swapna, Sk. Mahamuda, M. Venkateswarlu, M.V.V.K. Srinivas Prasad, A.S. Rao, and G. Vijaya Prakash

Journal: Optical Materials

Publisher: Elsevier

Volume, Year and PP: 79 (2018) 21-32

Impact Factor: 3.8

2017

70. Compositional dependence of red luminescence from Eu³⁺ ions doped single and mixed alkali fluoro tungsten tellurite glasses

Authors: Ch. B. Annapurna Devi, Sk. Mahamuda, K. Swapna, M. Venkateswarlu, A. Srinivasa Rao and G. Vijaya Prakash

Journal: Optical Materials

Publisher: Elsevier

Volume, Year and PP: 73 (2017) 260 – 267

Impact Factor: 3.8

71. Spectroscopic studies of Pr³⁺ doped lithium lead alumino borateglasses for visible reddish orange luminescent device applications.

Authors: Nisha Deopa, A.S. Rao, Sk. Mahamuda, Mohini Gupta, M. Jayasimhadri, D. Haranath, G. Vijaya Prakash

Journal: Journal of Alloys and Compounds

Publisher: Elsevier

Volume, Year and PP: 708 (2017) 911-921

Impact Factor: 5.8

72. Dy³⁺ ions doped single and mixed alkali fluoro tungsten tellurite glasses for LASER and white LED applications

Authors: Ch. B. Annapurna Devi, Sk. Mahamuda, M. Venkateswarlu, K. Swapna, A. Srinivasa Rao and G. Vijaya Prakash

Journal: Optical Materials

Publisher: Elsevier

Volume, Year and PP: 62 (2016) 569 – 577

Impact Factor: 3.8

73. Luminescence Spectral Studies of Tm³⁺ ions doped Lead Tungsten Tellurite Glasses for Visible Red and NIR applications

Authors: M. Venkateswarlu, Sk. Mahamuda, K. Swapna, A. Srinivasa Rao, A. Mohan Babu, Suman Shakya and G. Vijaya Prakash

Journal: Journal of Luminescence

Publisher: Elsevier

Volume, Year and PP: 175 (2016) 225-231

Impact Factor: 3.3

2015

74. Holmium doped Lead Tungsten Tellurite Glasses for Green Luminescent Applications

Authors: M. Venkateswarlu, Sk. Mahamuda, K. Swapna, M. V. V. K. S. Prasad, A. Srinivasa Rao, A. Mohan Babu, Suman Shakya and G. Vijaya Prakash

Journal: Journal of Luminescence

Publisher: Elsevier

Volume, Year and PP: 163 (2015) 64-71

Impact Factor: 3.3

75. Visible, Up-Conversion and NIR (~ 1.5 µm) Luminescence Studies of Er³⁺ doped Zinc Alumino Bismuth Borate Glasses

Authors: K. Swapna, Sk. Mahamuda, M. Venkateswarlu, A. Srinivasa Rao, M. Jayasimhadri, Suman Shakya and G. Vijaya Prakash

Journal: Journal of Luminescence

Publisher: Elsevier

Volume, Year and PP: 163 (2015) 55-63

Impact Factor: 3.3

76. Spectroscopic studies of Nd³⁺ doped Lead Tungstun Tellurite glasses for the NIR emission at 1062nm

Authors: M. Venkateswarlu, Sk. Mahamuda, K. Swapna, M. V. V. K. S. Prasad, A. Srinivasa Rao, A. Mohan Babu, Suman Shakya and G. Vijaya Prakash

Journal: Optical materials

Publisher: Elsevier

Volume, Year and PP: 39 (2015) 8-15

Impact Factor: 3.8

2014

77. Spectral characterization of Sm³⁺ ions doped Oxy-fluoroborate glasses for visible orange luminescent applications

Authors: Sk. Mahamuda, K. Swapna, M. Venkateswarlu, A. Srinivasa Rao, Suman Shakya and G. Vijaya Prakash

Journal: Journal of Luminescence

Publisher: Elsevier

Volume, Year and PP: 154 (2014) 410-424

Impact Factor: 3.3

78. Lasing potentialities and White Light Generation Capabilities of Dy³⁺ doped Oxy-fluoroborate Glasses.

Authors: Sk. Mahamuda, K. Swapna, P. Packiyaraj, A. Srinivasa Rao and G. Vijaya Prakash

Journal: Journal of Luminescence

Publisher: Elsevier

Volume, Year and PP: 153(2014) 382-392

Impact Factor: 3.3

79. Visible Luminescence characteristics of Sm³⁺ doped Zinc Alumino Bismuth Borate glasses

Authors: K. Swapna, Sk. Mahamuda, A. Srinivasa Rao, T. Sasikala and L. Rama Moorthy

Journal: Journal of Luminescence

Publisher: Elsevier

Volume, Year and PP: 146 (2014) 288-294

Impact Factor: 3.3

80. Pr³⁺ doped Lead Tungsten Tellurite Glasses for Visible Red Lasers

Authors: M. Venkateswarlu, M.V.V.K.S. Prasad, K. Swapna, Sk. Mahamuda, A. Srinivasa Rao, A. Mohan Babu and D. Haranath

Journal: Ceramics International

Publisher: Elsevier

Volume, Year and PP: 40 (2014) 6261-6269.

Impact Factor: 5.1

81. Optical Studies of Sm³⁺ ions doped Zinc Alumino Bismuth Borate Glasses

Authors: K. Swapna, Sk. Mahamuda, A. Srinivasa Rao, S. Shakya, T. Sasikala, D. Haranath and G. Vijaya Prakash

Journal: Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy

Publisher: Elsevier

Volume, Year and PP: 125 (2014) 53-60

Impact Factor: 4.3

82. Luminescence Characterization of Eu³⁺ doped Zinc Alumino Bismuth Borate Glasses for Visible Red Emission Applications.

Authors: K. Swapna, Sk. Mahamuda, A. Srinivasa Rao, P. Packiya Raj, T. Sasikala and L. Rama Moorthy

Journal: Journal of Luminescence

Publisher: Elsevier

Volume, Year and PP: 156 (2014) 80-86

Impact Factor: 3.3

83. Tb³⁺ doped Zinc Alumino Bismuth Borate Glasses for Green Emitting Luminescent Devices.

Authors: K. Swapna, Sk. Mahamuda, A. Srinivasa Rao, M. Jayasimhadri, Suman Shakya and G. Vijaya Prakash

Journal: Journal of Luminescence

Publisher: Elsevier

Volume, Year and PP: 156 (2014) 180-187

Impact Factor: 3.3

2013

84. Visible red, NIR and Mid-IR emission studies of Ho³⁺ doped Zinc Alumino Bismuth Borate glasses.

Authors: Sk. Mahamuda, K. Swapna, P. Packiyaraj, A. Srinivasa Rao, G. Vijaya Prakash.

Journal: Optical Materials

Publisher: Elsevier

Volume, Year and PP: 36 (2013) 362-371

Impact Factor: 3.8

85. Reddish-Orange emission from Pr³⁺ doped Zinc Alumino Bismuth Borate Glasses.

Authors: Sk. Mahamuda, K. Swapna, A. Srinivasa Rao, T. Sasikala and L.Rama Moorthy

Journal: Physica B

Publisher: Elsevier

Volume, Year and PP: 428 (2013) 36-42

Impact Factor: 2.8

86. Spectroscopic properties and luminescence behavior of Nd³⁺ doped Zinc Alumino Bismuth Borate glasses.

Authors: Sk. Mahamuda, K. Swapna, A. Srinivasa Rao, M. Jayasimhadri, T. Sasikala, K. Pavani and L.Rama Moorthy

Journal: Journal of Physics and Chemistry of Solids

Publisher: Elsevier

Volume, Year and PP: 74 (2013) 1308-1315

Impact Factor: 4.3

87. Optical absorption and luminescence characteristics of Dy³⁺ doped Zinc Alumino Bismuth Borate glasses for lasing materials and white LEDs.

Authors: K. Swapna, Sk. Mahamuda, A. Srinivasa Rao, M. Jayasimhadri, T. Sasikala and L. Rama Moorthy.

Journal: Journal of Luminescence

Publisher: Elsevier

Volume, Year and PP: 139 (2013) 119-124

Impact Factor: 3.3

88. Visible fluorescence characteristics of Dy³⁺ doped Zinc Alumino Bismuth Borate glasses for opto electronic devices.

Authors: K. Swapna, Sk. Mahamuda, A. Srinivasa Rao, M. Jayasimhadri, T. Sasikala and L. Rama Moorthy.

Journal: Ceramics International

Publisher: Elsevier

Volume, Year and PP: 39 (2013) 8459-8465

Impact Factor: 5.1