

LIST OF PUBLICATIONS IN SCI JOURNALS

1. **N. Gopakumar**, P. S. Anjana, P. K. V. Pillai, Chemical bath deposition and characterization of CdSe thin films for optoelectronic applications, *J Mater Sci.*, **45**, 6653–6656 (2010).
2. P. S. Anjana, **N. Gopakumar** and S. Sajan, Effect of borosilicate glasses on the microwave dielectric properties of ZnO–Nb₂O₅–Ta₂O₅, *J. Mater. Sci. Mater. Electron.*, 24, 2035-2042 (2013)
3. S. Biju, **N. Gopakumar**, J. C. G. Bünzli, R. Scopelliti, H. K. Kim and M. L. P. Reddy, , Brilliant Photoluminescence and Triboluminescence from Ternary Complexes of DyIII and TbIII with 3-Phenyl-4-Propanoyl-5-Isoxazolone and a Bidentate Phosphine Oxide Coligand, *Inorganic Chemistry*, 2013, 52, 8750-58
4. S. R. Rejisha, N. Santha, P. S. Anjana, **N. Gopakumar**, Synthesis and Characterization of Strontium and Barium Bismuth Borate Glass-Ceramic, *J Non Crystal. Solids* , 388, 68-74 (2014)
5. S. Sajan, **N. Gopakumar**, P S Anjana and K. Madhukumar, Synthesis, Characterization and Mechanoluminescence of Europium doped Zn_xBa_(1-x)Al₂O₄ (x = 0, 0.4, 0.5, 0.6, 0.8, 1.0) phosphor, *J. Lumin.*, 174, 11-16 (2016)
6. S. Sajan, **N. Gopakumar** and P S Anjana, Synthesis, Characterization and Mechanoluminescence of Europium doped BaAl₂O₄ phosphor, *J. Chemical and Pharmaceutical Sciences.*, 4, 2016
7. S. R. Rejisha, P. S. Anjana, **N. Gopakumar**, Effect of NiO on crystallization and structure of (40-x) ZnO- 60B₂O₃ glass system, *J. Chemical and Pharmaceutical Sciences.*, 4, 2016
8. S. R. Rejisha, P. S. Anjana, **N. Gopakumar**, Effect of cerium oxide on the optical and dielectric properties of strontium borate glasses, *J. Materials Science. Mater. Electron.* 27[5], 5475-5482(2016)
9. T.M. George, M.J. Sajan, **N. Gopakumar**, M.L.P. Reddy, Bright red luminescence and triboluminescence from PMMA-doped polymer film materials supported by Eu³⁺-triphenylphosphine based b-diketone and 4,5-bis(diphenylphosphino)-9,9-dimethylxanthene oxide, *J. Photochemistry and Photobiology A: Chemistry*, 317 (2016) 88–99
10. S Jayasudha, K Madhukumar, T M K Nair, Resmi G Nair, S Rajesh, T S Elias, V M Anandakumar, **N Gopakumar**, TL dosimetric characterization of gamma irradiated SrSO₄:Eu phosphors, *J. Lumin.*, 183, 259-65, 2017
11. Divya R, Lekshmi P Nair, Bijini B R, C.M.K Nair, **Gopakumar N**, Growth, characterization, optical and electrical studies of a novel structure of gel grown mechanoluminescent strontium cyanurate crystal, *Physica B*, 526, 37-44 (2017)

12. R Devika Nath, P S Anjana, N Gopakumar, Study of Glasses in Boro Aluminosilicate System, *Int. J. Adv. Res. Sci. and Engg.*, 6[3], 279-83
13. D G Arya, M S Salinigopal, P S Anjana, N Gopakumar, Synthesis and dielectric properties of vanadate based ceramics, *Int. J. Adv. Res. Sci. and Engg.*, 6[3], 222-227
14. S J Sajan , N Gopakumar, P S Anjana, Effect of Eu doping concentration on Mechanoluminescent (ML) properties of MAl_2O_4 (M = Ba, Mg), *Int. J. Adv. Res. Sci. and Engg.*, 6[3], 199-203
15. S. R. Rejisha , P. S. Anjana , N. Gopakumar, Structural and dielectric studies of copper doped zinc borate glass ceramic system, *Int. J. Adv. Res. Sci. and Engg.*, 6[3], 186-193
16. M R Revupriya , P S Anjana , R Divya , N Gopakumar, Synthesis and characterization of CaAl_2O_4 : Dy^{3+} ceramic, *Int. J. Adv. Res. Sci. and Engg.*, 6[3], 168-173
17. M.S. Salinigopal, N. Gopakumar, P. S. Anjana, Studies of dysprosium doped silicate glass, *Int. J. Adv. Res. Sci. and Engg.*, 6[3], 246-251
18. B.Vasanthi , P. S. Anjana, N. Gopakumar, Study on the luminescent properties of dysprosium doped barium vanadate phosphor, *Int. J. Adv. Res. Sci. and Engg.*, 6[3], 307-315.
19. Sajan S J, Gopakumar, Anjana P S , K Madhukumar, Mechanoluminescence studies of $0.5\text{BaO}.0.5\text{ZnO}-\text{Al}_2\text{O}_3$: $x\text{Eu}$ ($x = 0, 0.02, 0.05, 0.1, 0.2, 0.3, 0.4, 0.5$) phosphor by impulsive deformation technique, *J. Ultra Scientist of Physical Sci.*, [29\[11\]](#), 319-324 2017
20. Sajan S J, Gopakumar N, Anjana P S, Synthesis, Characterization and Mechanoluminescence properties of Europium doped $(1-x) \text{MgO}.x\text{BaO}-\text{Al}_2\text{O}_3$: 0.1Eu ($x = 0, 0.2, 0.4, 0.5, 0.6, 0.8, \text{ and } 1.0$) Phosphors, *Optik – Int.J. Light and Electron Optics*, (in press)
21. S. R. Rejisha , P. S. Anjana , N. Gopakumar, Structural and dielectric studies of $\text{MBi}_2\text{B}_2\text{O}_7$ (M = Sr & Ba) glass- $\text{Bi}_{24}\text{B}_2\text{O}_{39}$ microcrystal composites, *J Non Crystal. Solids (in press)*
22. M.S. Salinigopal, N. Gopakumar, P. S. Anjana, Synthesis and Characterization of Alumino Borosilicate Glasses, *J. Electronic Materials*. (under revision)
23. S. R. Rejisha, P. S. Anjana, **N. Gopakumar**, *J. Alloys and Compounds*. (submitted)

International Conference Proceedings

1. S.R. Rejisha, N. Santha, P. S. Anjana and **N. Gopakumar**, Synthesis and Characterization of Barium Bismuth borate glass-ceramic, *Int. Conf. on Molecular Spectroscopy* held at Bishop Moore College, Mavelikkara, Kerala from 7-9th August, 2012
2. S. R. Rejisha, P. S. Anjana, **N. Gopakumar**, Effect of manganese oxide on properties of zinc borate glass and glass ceramics, *International Conference on Advanced*

Functional Materials– ICAFM-2014 held at Thiruvananthapuram from 19-21, February, 2014

3. S Sajan, **N Gopakumar** and P S Anjana, Synthesis and Luminescence properties of Europium doped Zinc Aluminate Ceramics, International Conference on Perspectives in Vibrational Spectroscopy, 8-12th July, 2014.
4. Salinigopal M S, P. S. Anjana, **N. Gopakumar**, Effect of Lanthanum doping on barium alumino borosilicate glass, International Colloquium on Materials, Manufacturing and Metrology(ICMMM-2014), 8-9th August 2014, IIT Madras, Chennai, INDIA

National Conference Proceedings

5. R. Rejisha, N. Santha, P. S. Anjana, **N. Gopakumar**, Crystallization and Structural Properties of Strontium Bismuth Borate Glass Ceramic, UGC sponsored *National Seminar on Emerging Trends in Physics* held at VTMNSS College, Dhanuvachapuram, Trivandrum from 22-24th September, 2011
6. S. R. Rejisha, N. Santha, P. S. Anjana, **N. Gopakumar**, Optical properties of alkaline earth zinc borate glasses, National Seminar on Advances in Chemistry- Research and Opportunities held at All Saints' College, Trivandrum on 5th August, 2013
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8. S. R. Rejisha, P. S. Anjana, **N. Gopakumar**, Structural studies of Mn doped zinc borate glasses using Fourier Transform Infrared Spectroscopy, UGC sponsored Research Instrumentation for Interdisciplinary Sciences seminar conducted by Peringammala Iqbal College, YMCA Hall, Thiruvananthapuram on 22-23rd January, 2014
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10. Salinigopal M S, P. S. Anjana, N. Gopakumar, Effect of lanthanum doping on barium aluminoborosilicate glass, National Seminar on Nano Materials and Technology, Heera College of Engineering (NSNMN-2015), February, 2015
11. S. Sajan, N. Gopakumar and P S Anjana, Mechanoluminescence properties of Eu doped Barium Strontium Aluminate Phosphors, National Seminar on Nano Materials and Technology, Heera College of Engineering (NSNMN-2015), February, 2015
12. S. Sajan, N. Gopakumar and P S Anjana, Synthesis, Characterization of europium doped BaAl₂O₄ Phosphor, National Seminar on Crystallography: Special Emphasis on Applications in Chemistry” held at NSS College, Manjeri on 6th and 7th January, 2016
13. P. S. Anjana, **N. Gopakumar**, Interpolation Technique for Physicists using computational Method, Numerical Methods in Computer Programming and their Application, All Saints’ College, Trivandrum on 8-10th July, 2015
14. S. R. Rejisha, P. S. Anjana, **N. Gopakumar**, Effect of NiO on crystallization and structure of (40-x) ZnO- 60B₂O₃ glass system, National Seminar on Crystallography: Special Emphasis on Applications in Chemistry” held at NSS College, Manjeri on 6th and 7th January, 2016
15. S. Sajan, **N. Gopakumar** and P S Anjana, Effect of Eu doping concentration on Mechanoluminescent (ML) properties of MA₂O₄ (M = Ba, Mg), National Seminar on “Advances in Functional Materials AFM 2017” held at All Saints’ College from 19-20, September, 2017
16. S. R. Rejisha , P. S. Anjana, **N. Gopakumar**, Structural and dielectric studies of copper doped zinc borate glass ceramic system, National Seminar on “Advances in Functional Materials AFM 2017” held at All Saints’ College from 19-20, September, 2017
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18. S. Sajan, N. Gopakumar and P S Anjana, Mechanoluminescence (ML) studies of xCaO - (1-x) MgO - Al₂O₃: 0.1 Eu (x = 0 to 2), National Seminar on Luminescence and its Applications at NIIST, Trivandrum on February 14-16, 2018

19. S. R. Rejisha , P. S. Anjana, **N. Gopakumar**, Structural and dielectric properties of zinc borate glass systems containing cerium oxide, National Seminar on Interdisciplinary Approaches in Materials and Biological Research (IAMBR- 2018) held at Mahatma Gandhi College, from 16-17, February, 2018
20. M R Revupriya , P S Anjana , M S Anju , N Gopakumar, Optical and dielectric studies of MnO doped CaAl_2O_4 ceramic, National Seminar on Interdisciplinary Approaches in Materials and Biological Research (IAMBR- 2018) held at Mahatma Gandhi College, from 16-17, February, 2018
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22. M.S. Salinigopal, N. Gopakumar, P. S. Anjana, Studies of $50 \text{ BaO} - (5-x) \text{ Al}_2\text{O}_3 - x\text{Gd}_2\text{O}_3 - 30 \text{ B}_2\text{O}_3 - \text{SiO}_2$ glass system, National Seminar on Interdisciplinary Approaches in Materials and Biological Research (IAMBR- 2018) held at Mahatma Gandhi College, from 16-17, February, 2018
23. B.Vasanthi , P. S. Anjana, N. Gopakumar, Gallate based red emitting phosphor for solid state light emitting applications , National Seminar on Interdisciplinary Approaches in Materials and Biological Research (IAMBR- 2018) held at Mahatma Gandhi College, from 16-17, February, 2018
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25. M S Anju , M R Revupriya , N Gopakumar, P S Anjana, Photoluminescence and conductivity studies of $\text{BaGa}_2\text{O}_4:1\% \text{Eu}^{3+}$ prepared by solid state reaction method, National Seminar on Interdisciplinary Approaches in Materials and Biological Research (IAMBR- 2018) held at Mahatma Gandhi College, from 16-17, February, 2018

Regional Conferences

26. S. Sajan, N. Gopakumar and P S Anjana in Annual Research Conference at MG College, Trivandrum on February ,2017

27. S. R. Rejisha , P. S. Anjana, N. Gopakumar, Synthesis and characterization of MnO doped Zinc borate glasses and glass ceramics., Annual Research Conference at MG College, Trivandrum on February , 2017
28. R Devika Nath, P. S. Anjana, N. Gopakumar, Effect of Strontium to Barium ratio on Aluminate Based Glasses for SOFC Applications, Annual Research Conference at MG College, Trivandrum on February , 2017
29. Girija Nair, M S Salini Gopal, P. S. Anjana, N. Gopakumar M.S. Salinigopal, N. Gopakumar¹ and P. S. Anjana, Glass-Ceramics as sealants in Solid Oxide Fuel Cells, Annual Research Conference at MG College, Trivandrum on February , 2017