

# THE NATIONAL COLLEGE

AUTONOMOUS  
JAYANAGAR, BANGALORE: 70

## List of Publications

**Dr. R. Raja Ramakrishna**

**Coordinator, Department of Post Graduate Studies & Research in Physics**

**2022**

1. White Light Emission of Dy<sup>3+</sup> Doped Oxy-Fluoride Phosphate Glass System for Active Laser Medium, CS Sarumaha, J Rajagukguk, N Wantana, N Chanthima, **R Rajaramakrishna**, J Kaewkhao, Integrated Ferroelectrics(2022) **224** (1), 1-12.
2. Dy<sup>3+</sup>Doped Li<sub>2</sub>O: BaO: Gd<sub>2</sub>O<sub>3</sub>: SiO<sub>2</sub> Glasses for Luminescence Applications, W Boonpa, K Kirdsiri, HJ Kim, **R Rajaramakrishna**, J Kaewkhao, Integrated Ferroelectrics (2022)**224** (1), 71-83 .
3. Neodymium-Doped Multi-Component Borate/Phosphate Glasses for NIR Solid-State Material Applications, J Kaewkhao, BhuvaneshTamilselvan, HL Pavan, Alisha K Biju, Elizabeth Pavithra Meghana, AshithaTomy, **R Rajaramakrishna**, Integrated Ferroelectrics (2022)**224** (1), 13-32.
4. The Radioluminescence Investigation of Lead Sodium Borate Glass Doped with Eu<sup>3+</sup>, P Limkitjaroenporn, S Yonphan, HJ Kim, **R Rajaramakrishna**, N Sangwanateee, J Kaewkhao, Integrated Ferroelectrics (2022)**224** (1), 90-99
5. Spectroscopic Characterization and CIE Coordinate of Pr<sup>3+</sup> Ions Doped PottasiumAluminum Gadolinium Phosphate Glasses, N Kiwsakunkran, N Chanthima, Y Tariwong, **R Rajaramakrishna**, J Kaewkhao, Integrated Ferroelectrics (2022)**224** (1), 52-61.
6. X-ray radiation shielding of CeO<sub>2</sub> doped borosilicate glasses and their luminescence characteristics, S.Kaewjaenga, W.Boonpa, S.Kothan, H.J.Kim, C.Jumpee, **R.Rajaramakrishna**, M.Tungjai, J.Kaewkhao, Radiation Physics and Chemistry (2022)**191**, 109825.
7. White Emission from Li<sub>2</sub>O-BaO-Bi<sub>2</sub>O<sub>3</sub>-P<sub>2</sub>O<sub>5</sub> Glass Doped with Dy<sup>3+</sup> for Optical Condensed Material Applications,J Tongdang, N Chanthima, N Kiwsakunkarn, Y Tariwong, **R Rajaramakrishna**, J Kaewkhao, P Limsuwan, C Kedkaew, Integrated Ferroelectrics(2022)**223** (1), 18-28 .
8. Evaluation of structural, dielectric and LPG gas sensing behavior of porous Ce<sup>3+</sup>-Sm<sup>3+</sup> doped Cobalt nickel ferrite,KM Srinivasamurthy, K Manjunatha, A El-Denglawey, **R**

**Rajaramakrishna**, SP Kubrin, Apsar Pasha, V Jagadeesha Angadi, Materials Chemistry and Physics(2022)**275**, 125222

**2021**

9. Effect of Gd<sub>2</sub>O<sub>3</sub> on the radiation shielding, physical, optical and luminescence behaviors of Gd<sub>2</sub>O<sub>3</sub>-La<sub>2</sub>O<sub>3</sub>-ZnO-B<sub>2</sub>O<sub>3</sub>-Dy<sub>2</sub>O<sub>3</sub> glasses, S Kaewjaeng, N Wantana, S Kothan, **R Rajaramakrishna**, HJ Kim, P Limsuwan, J Kaewkhao, Radiation Physics and Chemistry (2021) **185**, 109500
10. THE LUMINESCENCE PROPERTIES AND LATENT FINGERPRINT IDENTIFICATION APPLICATION OF GD<sub>2</sub>MOB<sub>2</sub>O<sub>9</sub>:SM<sup>3+</sup> PHOSPHOR, Noppadon Chamchoi, Narong Sangwanate, **R Rajaramakrishna**, Suchart Kothan, Onanong Chaemlek, Jakrapong Kaewkhao, Suranaree Journal of Science & Technology(2021)**28** (4)
11. Enhanced non-linear optical properties of Eu<sup>3+</sup> activated glasses by embedding silver nanoparticles, Naseem Fatima, AG Pramod, G Jagannath, **R Rajaramakrishna**, K Keshavamurthy, P Ramesh, KN Sathish, Abdullah MS Alhuthali, MI Sayyed, Vinod Hegde, S Venugopal Rao, YF Nadaf, Ceramics International(2021)**47** (12), 16801-16808
12. Structural and luminescence studies of MnO<sub>2</sub> doped in glass from rice husk ash for green and orange emission material applications, **R Rajaramakrishna**, Yotsakit Ruangtaweep, Kumarswamy Shashikumar, Suparat Tuscharoen, Jakrapong Kaewkhao, Suranaree J. Sci. Technol (2021)**28** (3), 030050
13. Laser Medium for Glass Material, **R. Rajaramakrishna**, J. Kaewkhao, Science and Innovation of Advanced Materials (SIAM)(2021)**1** (1), 64003-64003
14. Nonlinear optical, optical limiting and radiation shielding features of Eu<sup>3+</sup> activated borate glasses, G Jagannath, AG Pramod, K Keshavamurthy, BN Swetha, B Eraiah, **R Rajaramakrishna**, P Ramesh, Vinod Hegde, SC Prashantha, Abdullah MS Alhuthali, MI Sayyed, Optik (2021)**232**, 166563
15. Influence of Trivalent Praseodymium ion on SiO<sub>2</sub>-B<sub>2</sub>O<sub>3</sub>- Al<sub>2</sub>O<sub>3</sub>- BaO-CaO-Sb<sub>2</sub>O<sub>3</sub>-Na<sub>2</sub>O-Pr<sub>2</sub>O<sub>3</sub> Glasses for X-Rays Shielding and Luminescence Materials, S.Kaewjaeng, W.Boonpa, F.Khronchaiyaphum, S.Kothan, H.J.Kim, N.Intachai, **R. Rajaramakrishna**, S.Kiatwattanacharoen, J.Kaewkhao, Radiation physics and chemistry (2021)**184** (109467).
16. Experimental <sup>1</sup>H and <sup>13</sup>C Solid-State NMR Signal Assignment of Paramagnetic Copper (II) 2-Pyrazine-Carboxylate Complex using Density Functional Theory Calculations, Bhargava Hanumanta Patil, Pampa Peraje, Dinesh Naik, **R Rajaramakrishna**, James Dittmer, Shashi Kumar Kumara Swamy, Journal of Physics: Conference Series **1819** (2021), 012032.
17. Comparative Study on Au-Ag composition in Lithium Zinc Calcium Fluoroborate Glasses: Nonlinear Optics Perspective Abhiram J, **R. Rajaramakrishna**, K M Rajashekhara, Jagannath G, J. Kaewkhao, Journal of Physics: Conference Series **1819** (2021), 012022.
18. Spectroscopy Characterization of MWCNT Doped B<sub>2</sub>O<sub>3</sub>-Gd<sub>2</sub>O<sub>3</sub>-ZnO-Er<sub>2</sub>O<sub>3</sub> Glass for NIR Solid State Application, ES Rahayu, **R Rajaramakrishna**, M Djamal, J Kaewkhao

Integrated Ferroelectrics (2021), **214** (1), 136-142

19. LUMINESCENCE PROPERTIES OF DY<sup>3+</sup> IONS DOPED IN B<sub>2</sub>O<sub>3</sub>-AL<sub>2</sub>O<sub>3</sub>-CAO-NA<sub>2</sub>O GLASS FOR SOLID STATE LIGHTING APPLICATIONS, Yotsakit Ruangtaweep, Jakrapong Kaewkhao, **Rajaramakrishna**, Suchart Kothan and Narong Sangwaranatee, Suranaree Journal of Science & Technology (2021) **28** (3), 030064(1-6)
20. Dy<sup>3+</sup> doped B<sub>2</sub>O<sub>3</sub> – Li<sub>2</sub>O – CaO – CaF<sub>2</sub> glass for efficient white light emitting sources, A.R. Venugopal, **Rajaramakrishna**, K.M. Rajashekara, J. Rajaguguk, N.H. Ayachit, S. Kothan, J Kaewkhao, Journal of Non-Crystalline Solids 554 (2021) 120604.(IF:2.929)

## 2020

21. Effect of BaO on Lead Free Zinc Barium Tellurite Glass for Radiation Shielding Materials in Nuclear Application, K. Boonin, P. Yasaka, P. Limkitjaroenporn, **Rajaramakrishna**, A. Askin, M. I. Sayyed, S. Kothan, Jakrapong Kaewkhao, Journal of Non-Crystalline Solids 550 (2020) 120386.(IF:2.929)
22. X-ray induced luminescence, optical, compositional and structural investigations of natural and imitation rubies: Identification technique, Y. Tariwong, N. Chanthima, **Rajaramakrishna**, H.J. Kim, J. Kaewkhao, Radiation Physics and Chemistry 177 (2020) 109089. (IF:2.226)
23. Spectroscopic study of Nd<sup>3+</sup> ion-doped Zn-Al-Ba borate glasses for NIR emitting device applications, M. Djamal, L. Yuliantini, R. Hidayat, N. Rauf, M. Horprathum, **Rajaramakrishna**, K. Boonin, P. Yasaka, J. Kaewkhao, V. Venkatramu, S. Kothan, Optical Materials, Volume 107, (2020) 110018. (IF:2.779)
24. Structural and luminescence study of Dy<sup>3+</sup> doped phosphate glasses for solid state lighting applications, Shoab, **Rajaramakrishna**, G. Rooh, N. Chanthima, H.J. Kim, C. Saiyasombat, R. Botta, N. Nuntawong, S. Kothan, J. Kaewkhao, Optical Materials 109, (2020), Article number 110322.(IF:2.779)
25. Novel plaster waste glass for solid state lighting applications, A. Angnanon, **Rajaramakrishna**, N. Srisittipokakun, B. Damdee, J. Kaewkhao, Optical Materials 109, (2020) 110180.(IF:2.779)
26. Reddish-Orange Emission and Judd-Ofelt Investigation of Sm<sup>3+</sup> Ions Doped in Zinc-Bismuth-Phosphor-Tellurite Glasses for Solid Lighting Application, Sangeeta B. Kolavekar, Narasimha. H. Ayachit, **Rajaramakrishna**, Pramod N G, J. Kaewkhao, Journal of Luminescence, 2020 (Accepted). (IF: 3.280)
27. Role of 5 mol% Mg-Ni on the Structural and Magnetic Properties of Cobalt Chromates Crystallites Prepared by Solution Combustion Technique, K. Manjunatha, V. Jagadeesha Angadi, **Rajaramakrishna** & U. Mahaboob Pasha, Journal of Superconductivity and Novel Magnetism, 2020. (IF:1.244).
28. Effect of SnO<sub>2</sub>/SeO<sub>2</sub> on Au Nano-particles doped Silicate glasses: A Structural study using XAS and EXAFS refinements, **Rajaramakrishna**, C. Saiyasombat, Y. Ruangtaweep, J. Kaewkhao, Optical and Quantum Electronics, 52 (5) (2020). (IF:1.842)

29. Photoluminescence properties and energy transfer investigations of Gd<sup>3+</sup> and Sm<sup>3+</sup> co-doped ZnO–BaO–TeO<sub>2</sub> glasses for solid state laser application, Sangwanatee, P. Yasaka, **R. Rajaramakrishna**, S. Kothan, J. Kaewkhao, *Journal of Luminescence*, 224, (2020)117275. (IF: 3.280)
30. Investigation of XANES study and energy transport phenomenon of Gd<sup>3+</sup> to Ce<sup>3+</sup> in CaO–SiO<sub>2</sub>–B<sub>2</sub>O<sub>3</sub> glasses, **Rajaramakrishna**, S. Kaewjaeng, J. Kaewkhao, S. Kothan, *Optical Materials* 102 (2020) 109826. (IF:2.779)
31. Investigations on nonlinear optical properties of gold nanoparticles doped fluoroborate glasses for optical limiting applications, Abhiram Jagannathan, **Rajaramakrishna R**, Rajashekara K M, Jagannath Gangareddy, Vinayak Pattar K, Venugopal Rao S, Eraiah B, Jagadeesha Angadi V, Kaewkhao J, Kothan S, *Journal of Non-Crystalline Solids*, 538 (2020) 120010. (IF:2.929)
32. Structural analysis and luminescence studies of Ce<sup>3+</sup>: Dy<sup>3+</sup> co-doped calcium zinc gadolinium borate glasses using EXAFS, **Rajaramakrishna**, Y. Ruangtaweepa, S. Sattayaporn, P. Kidkhunthod, S. Kothan, J. Kaewkhao, *Radiation Physics and Chemistry* 171 (2020) 108695.(IF:2.226)
33. MD Simulation and Luminescence properties of Eu<sup>3+</sup> doped Molybdenum Gadolinium Borate glasses for red emission **Rajaramakrishna**, PattarapongNijapai, PinitKidkhunthod, H. J. Kim, J. Kaewkhao, *Journal of Alloys and Compounds*, 813 (2020) 151914. (IF:4.65)
34. Physical, optical properties and radiation shielding studies of xLa<sub>2</sub>O<sub>3</sub>-(100-x) B<sub>2</sub>O<sub>3</sub> glass system, Y. Al-Hadeethi, M.I. Sayyed, J. Kaewkhao, Bahaudin M. Raffah, RahmaAlmalki,**Rajaramakrishna**, Mahmoud A. Hussein, *Ceramics International*, 46 (2020) 5380–5386. <https://doi.org/10.1016/j.ceramint.2019.10.293>(IF: 3.83)
35. Ravangvong, N. Chanthima, **R. Rajaramakrishna**, H.J. Kim, J. Kaewkhao, Effect of sodium oxide and sodium fluoride in gadolinium phosphate glasses doped with Eu<sub>2</sub>O<sub>3</sub> content, *Journal of Luminescence*, 219, (2020), 116950.doi: <https://doi.org/10.1016/j.jlumin.2019.116950>.(IF: 3.280)
36. Comparative study of optical and luminescence properties of Sm<sup>3+</sup>-ions doped Li<sub>2</sub>O–Gd<sub>2</sub>O<sub>3</sub>–PbO–SiO<sub>2</sub> and Li<sub>2</sub>O–Gd<sub>2</sub>F<sub>3</sub>–PbO–SiO<sub>2</sub> glasses for orange emission solid state device application, I Khan, G Rooh, **R Rajaramakrishna**, N Sirsittipokakun, SHJ Kim, S Kothan, J Kaewkhao, K Kirdsiri, *Journal of Luminescence*, 2020, 117136. (IF: 280)Ravangvong, **R. Rajaramakrishna**, N. Chanthima, N. Sangwanatee and J. Kaewkhao, *Journal of Physics: Conference Series*, 1428 (2020) 012029 doi:10.1088/1742-6596/1428/1/012029.
37. Eu<sup>3+</sup> ions doped SrO–CaO–Li<sub>2</sub>O–B<sub>2</sub>O<sub>3</sub>glasses for optical display material application, A.R. Venugopala, J. Kaewkhao,Abhiram J, Rajashekara K M, **Rajaramakrishna**,N. G. Pramod, Chethan Rao, *Journal of Physics: Conf. Series* 1485 (2020) 012053. doi:10.1088/1742-6596/1485/1/012053.

## 2019

38. Impact of solvents on energy gap, photophysical, photometric properties for a new class of 4-HCM coumarin derivative: Nonlinear optical studies and optoelectronic applications, A.G. Pramod, C.G. Renuka, Y.F. Nadaf, **Rajaramakrishna**, Journal of Molecular Liquids, (2019), 111383. (IF: 5.065)
39. 5 $\mu$ m Luminescence Enhancement of Er<sup>3+</sup> by Local Field Surface Plasmon Resonance of Ag Nanoparticles in Silicate Glasses 1.5 $\mu$ m Luminescence Enhancement of Er<sup>3+</sup> by Local Field Surface Plasmon Resonance of Ag Nanoparticles in Silicate Glasses, R. **Rajaramakrishna**, Y. Ruangtawee, N. Sangwaranatee, J. Kaewkhao, Journal of Non-Crystalline Solids, 521, (2019) 119522. (IF:2.929)
40. An extensive investigation of physical, optical and radiation shielding properties for borate glasses modified with gadolinium oxide, Y. Al-Hadeethi, M. I. Sayyed, J. Kaewkhao, Bahaudin M. Raffah, RahmaAlmalki, **Rajaramakrishna**, Applied Physics A, (2019) 125:749, 1-10. (IF:1.810)
41. Physical, structural, optical, and radiation shielding properties of B<sub>2</sub>O<sub>3</sub>-Gd<sub>2</sub>O<sub>3</sub>-Y<sub>2</sub>O<sub>3</sub> glass system, Y. Al-Hadeethi, M. I. Sayyed, J. Kaewkhao, A. Askin, Bahaudin M Raffah, E. M. Mkawi, **Rajaramakrishna**, Applied Physics A (2019) 125:852, 1-7. (IF:1.810)
42. Structural, spectroscopic and optical gain of Nd<sup>3+</sup> doped fluorophosphate glasses for solid state laser application, Juniastel Rajagukguk, Rappel Situmorang, Fitrilawati, Mitra Djamal, **Rajaramakrishna**, J. Kaewkhao, Pham Hong Minh, Journal of Luminescence 216 (2019) 116738. (IF:3.280)
43. Photoluminescence and white light generation of Dy<sub>2</sub>O<sub>3</sub> doped Li<sub>2</sub>O-BaO-Gd<sub>2</sub>O<sub>3</sub>- SiO<sub>2</sub> for white light LED, I. Khan, G. Rooh, **Rajaramakrishna**, N. Srisittipokakun, C. Wongdeeying, N. Kiwsakunkran, N. Wantana, H.J. Kim, J. Kaewkhao, S. Tuscharoen, Journal of Alloys and Compounds, 774 (2019), 244-254. (IF: 4.65)
44. Comparative study of Sm<sup>3+</sup> ions doped phosphate based oxide and oxy-fluoride glasses for solid state lighting applications, Shoaib, G. Rooh, **R.Rajramakrishna**, N. Chanthima, H.J.Kim, J. Kaewkhao, Journal of Rare Earths 37 (2019) 374-382. (IF: 3.104)
45. Energy transfer phenomenon of Gd<sup>3+</sup> to excited ground state of Eu<sup>3+</sup> ions in Li<sub>2</sub>O-BaO-Gd<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub>-Eu<sub>2</sub>O<sub>3</sub> glasses, Khan, G. Rooh, **R. Rajaramakrishna**, N. Sirsittapokakun, H.J.Kim, J. Kaewkhao, K. Kirdsiri, Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy 210 (2019) 21-29. (IF:3.232)
46. Luminescence characteristics of Sm<sup>3+</sup>-doped lithium barium gadolinium silicate glasses for Orange LED's, Khan, G. Rooh, **R. Rajaramakrishna**, N. Sirsittapokakun, H.J.Kim, J. Kaewkhao, K. Kirdsiri, Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy 214 (2019) 14-20. (IF:3.232)
47. Physical and luminescence properties of samarium doped oxide and oxyfluoride phosphate glasses M. Shoaib, G. Rooh, **Rajramakrishna**, N. Chanthima, H.J.Kim, S. Tuscharoen, J. Kaewkhao, Materials Chemistry and Physics (2019). (IF:3.408)

48. Intriguing energy transfer mechanism in Oxide and Oxy-fluoride phosphate glasses, Shoaib, G. Rooh, N. Chanthima, **R. Rajaramakrishna**, H. J. Kim, C. Wongdeeying, J. Kaewkhao, *Optical Materials* 88 (2019) 429–444. (IF:2.779)
49. Development of ZnO-BaO-B<sub>2</sub>O<sub>3</sub>-TeO<sub>2</sub> glass doped with Sm<sup>3+</sup> for orange emitting material, P. Yasaka, **Rajaramakrishna**, W. Wongwan, P. Yamchumporn, H.J. Kim, J. Kaewkhao, *Solid State Sciences*, (2019), <https://doi.org/10.1016/j.solidstatesciences.2019.106041>. (IF: 2.434)
50. Influence of alkaline earth oxides on Eu<sup>3+</sup> doped lithium borate glasses for photonic, laser and radiation detection material applications, K. Kirdsiri, **Rajaramakrishna**, B. Damdee, H.J. Kim, N. Nuntawong, Mati Horphathum, J. Kaewkhao, *Solid State Sciences* 89 (2019) 57–66. (IF:2.434)
51. Dy<sup>3+</sup> Ions doped (Na<sub>2</sub>O/NaF)-Gd<sub>2</sub>O<sub>3</sub>-P<sub>2</sub>O<sub>5</sub> Glasses for Solid State Lighting Material Applications, Ravangvong, N. Chanthima, **R. Rajaramakrishna**, H. J. Kim, N. Sangwanate, J. Kaewkhao, *Solid state sciences*, (2019), 105972.(IF:2.434)
52. High transparency La<sub>2</sub>O<sub>3</sub>-CaO-B<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub> glass for diagnosis x-rays shielding material application, S. Kaewjaeng, S. Kothan, W. Chaiphaksa, N. Chanthima, **Rajaramakrishna**, H.J. Kim, J. Kaewkhao, *Radiation Physics and Chemistry* 160 (2019) 41–47(IF:2.226)
53. Photoluminescence Properties of Dy<sup>3+</sup> Ion-Doped Li<sub>2</sub>O-PbO-Gd<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub> Glasses for White Light Application, I. Khan, G. Rooh, **Rajaramakrishna**, N. Srisittipokakun, H. J. Kim, J. Kaewkhao, Y. Ruangtawee, *Brazilian Journal of Physics*, (2019), 1-10.(IF:0.895)
54. Sm<sup>3+</sup> Doped Lithium Strontium Borate Glasses for Solid State Lighting Applications, A. R. Venugopal, **Rajaramakrishna**, J. Abhiram, Vinayak Pattar, K. M. Rajashekara, and J. Kaewkhao, *Glass Physics and Chemistry*, (2019), Vol. 45 (5),332–343. (IF:0.668)
55. Energy Transfer and Spectroscopic Investigation of Dy<sub>2</sub>O<sub>3</sub> Doped Li<sub>2</sub>O–BaO–GdF<sub>3</sub>–SiO<sub>2</sub> for White Light LED, I. Khan, G. Rooh, **Rajaramakrishna**, N. Srisittipokakun, H. J. Kim, J. Kaewkhao, *Glass Physics and Chemistry*, (2019), Vol. 45 (5),332–343.(IF:0.668)
56. Spectral analysis of Ho<sup>3+</sup> doped barium zinc boro-tellurite glasses for yellow-green luminescent applications, R,C. Wongdeeying, P. Yasaka, P. Limkitjaroenporn, Jakrapong Kaewkhao, *Glass Physics and Chemistry*, Vol:45, No.1 (2019). (IF:0.668)
57. Effect of SnO<sub>2</sub> and SeO<sub>2</sub> in Non-linear optical properties of Au nanoparticle doped self-striking red ruby glasses, Abhiram J, **Rajaramakrishna R**, Y. Ruangtawee, Jakrapong Kaewkhao, *Thai Journal of Nanoscience and Nanotechnology*, Vol.4 Issue.1 (2019).
58. Physical and luminescence properties of rare earth doped phosphate glasses for solid state lighting applications, M. Shoaib, N. Chanthima, G. Rooh, **Rajaramakrishna**, and J. Kaewkhao, *Journal of Thai Interdisciplinary Research*, Volume 14, Number 3, Pages 20 – 26 (2019).

## 2018

59. Sm<sup>3+</sup> doped lithium borate glasses with different modifiers (M = Mg/Ca/Sr/Ba) as a orange light emitting phosphor for WLED's, Kirdsiri, **R. Rajaramakrishna**, B. Damdee,

- H.J. Kim, S. Kaewjaeng, S. Kothan, J. Kaewkhao *Journal of Alloys and Compounds* 749 (2018) 197-204. (IF: 4.175)
60. Development of Eu<sup>3+</sup> doped Li<sub>2</sub>O-BaO-GdF<sub>3</sub>-SiO<sub>2</sub> oxyfluoride glass for efficient energy transfer from Gd<sup>3+</sup> to Eu<sup>3+</sup> in red emission solid state device application, I. Khan, G. Rooh, **Rajaramakrishna**, N. Sirsittipokakun, H. J. Kim, C. Wongdeeying, J. Kaewkhao, *Journal of Luminescence* 203 (2018) 515–524. (IF:2.961)
61. Pr<sup>3+</sup> doped BaO:ZnO:B<sub>2</sub>O<sub>3</sub>:TeO<sub>2</sub> glasses for laser host matrix, **Rajaramakrishna R**, Chananya W, Patarawagee Y, Pruiittipol L, Narong S, and Jakrapong K, *Journal of Metals, Materials and Minerals*, Vol.28 No.2 , (2018), 47-54
62. Sm<sup>3+</sup>-doped molybdenum gadolinium borate glasses for orange emission laser active medium, **Rajaramakrishna**, Y. Ruangtawee, J. Kaewkhao, *Ukrainian Journal of Physics* (2018) Vol. 63, No. 8, 721-732. ISSN 2071-0186, <https://doi.org/10.15407/ujpe63.8.721>.

### 2017

63. "Optical properties of Nd<sup>3+</sup> doped BaF<sub>2</sub>-ZnO-B<sub>2</sub>O<sub>3</sub> Oxyfluoride glasses" N.B. Shighalli, Yogesh Babu. N, Ashoka. G, **Rajaramakrishna**, *International journal of physical and applied sciences*, (2017), ISSN No: 2394-5710.
64. Papers Presented / Attended in International conferences
65. Structural studies of transition metal ions doped in biomass ash as silica source for glass production in Thailand, **Rajaramakrishna**. et. al, *The International Conference on Theoretical and Applied Physics (ICTAP)*, Sept 20th -21st, 2018, Grand Inn Hotel, Medan, Indonesia. <http://ictap.web.id/>
66. Sm<sup>3+</sup> doped Molybdenum Gadolinium Borate glasses for orange emission laser active medium, **Rajaramakrishna**. et. al, *International Conference on Science and Technology of Emerging Materials (STEMa2018)*, July 18th – 20th 2018, Holiday Inn, Pattaya, Thailand, <http://www.nano.kmitl.ac.th/stema2018/programme/>
67. "Spectroscopic properties of BaO-SrO-B<sub>2</sub>O<sub>3</sub>-Nd<sub>2</sub>O<sub>3</sub> glasses for laser host matrix", **Rajaramakrishna**, Jakrapong Kaewkhao and Narong Sangwaranatee, *Poster Presentation, The 9th International Science, Social Science, Engineering and Energy Conference (ISEEC-2018)*, May 2nd- 4th 2018, Ambassador Hotel, Bangkok, Thailand.
68. "Dy<sup>3+</sup> doped borate glasses for White light generation material applications", **Rajaramakrishna**, B. Damdee, K. Kirdsiri and J. Kaewkhao, *Oral presentation in MubanChombueng Rajabhat University (MCRU)*, March 2nd (2018).
69. Structural correlation using XANES, EXAFS and Photoluminescence studies of Ce<sup>3+</sup> : Dy<sup>3+</sup> co-doped calcium zinc gadolinium borate glasses, **Rajaramakrishna**, Y. Ruangtawee, Suchinda Sattayaporn, PinitKidkhunthod, J. Kaewkhao, *ACXAS-2019*, Aug 29th-30th 2019, Chiang Mai, Thailand.
70. "Investigation of XAS study and energy transfer phenomenon of Gd<sup>3+</sup> to Ce<sup>3+</sup> in calcium silicaborate glasses", **Rajaramakrishna**, S. Kaewjeang, W. Klysubun, S. Kothan, J. Kaewkhao, *ACXAS-2019*, Aug 29th-30th 2019, Chiang Mai, Thailand.