

DEPARTMENT OF PHYSICS, SSNCE (2016-17)

Journal publications (2016-2017)

1. G.Latha , **P. Nair**, “Solid Core Photonic Crystal Fiber Based Optical Studies of Transformer Oil Through Near Field Imaging”, *Optik - Int. J. Light Electron Opt*, Vol 127, September, 2016, pp.10991-10998
2. S. Sadhasivam, **N.P. Rajesh**, Structural and optical effects induced by gamma irradiation on NdPO₄: X-ray diffraction, spectroscopic and luminescence study, *Materials Research Bulletin*, Volume 74, February 2016 , pg 117-123.
3. S. Sadhasivam, and **Rajesh Narayana Perumal** , “Translation effects on vertical Bridgman growth and optical, mechanical and surface analysis of 2-phenylphenol single crystal, , AIP Conference Proceedings, 1728, 020609 (2016).
4. S. Sadhasivam, **Rajesh Narayana Perumal**, P. Ramasamy, Growth, structural, thermal, electrical and nonlinear optical properties of Yb³⁺ doped KTiOPO₄, *Journal of Crystal Growth*, Volume 445, 1 July 2016, 84-89.
5. R.P. Jebin, T. Suthan, **N.P. Rajesh**, G.Vinitha, S.A. Britto Dhas, Studies on crystal growth and physical properties of 4-(dimethylamino) benzaldehyde-2,4-dinitroaniline single crystal, , *Optical Materials* Volume 57, July 2016, pg 163-168.
6. **Rajesh Narayana Perumal**, G. Subalakshmi, Near-infrared down-conversion in Yb³⁺:TiO₂ for solar cell applications, *J Mater Sci: Mater Electron*, 3 october 2016, volume 28.
7. S. Sadhasivam, P. Manivel, K. Jeganathan, C.K.Jayasankar, **N.P. Rajesh** “Bright blue cooperative upconversion emission of Yb³⁺ from langbeinite K₂Ti_{1.887}Yb_{0.113}(PO₄)₃ single crystal, , *Materials Letters*, 24 November 2016
8. Sivakumar S, **Chandrasekaran A**, G.Balaji, *Ravisankar R.*, Assessment of heavy metal enrichment and the degree of contamination in coastal Sediments from South East Coast of Tamilnadu, India, *Journal of Heavy metal Toxicity and Diseases*, 1 (2:11), July-2016, 01-08
9. Raghu Y, *Ravisankar R.*, **Chandrasekaran A**, Vijayagopal P and Venkatraman B.. “Assessment of natural radioactivity and radiological hazards in Brick samples, used in Tiruvannamalai Dist, Tamilnadu, India with statistical approach. *Health Physics*, Vol.111, issue 3, Sep. 2016, pp.265-280.
10. **Chandrasekaran. A**, Naseerutheen.A, Ravisankar.R Data set on elemental concentration and group identification of ancient potteries from TamilNadu, India. *Data in Brief*, Vol.10, February 2017, pp.215–220.

11. Harikrishnan.N **Chandrasekaran.A**, Elango.G, Eswaran.P, Ravisankar.R. An Evaluation of Natural Radioactivity and Its Associated Health Hazards Indices of Coastal Sediments from Rameshwaram Island, Tamilnadu, India Journal of Radiation and Nuclear Applications. Vol. 2, issue 1, January 2017, pp.23-27.
12. Chandramohan,J, **Chandrasekaran. A**, Prince Prakash Jebakumar.J., Elango.G., Ravisankar.R. Assessment of contamination by metals in coastal sediments from South East Coast of Tamilnadu, India with Statistical Approach. Iranian Journal of Science and Technology, Transactions A: Science. Vol.41, issue 1 April 2017 pp. 1-16
13. Sivakumar,S, **Chandrasekaran.A**, Senthilkumar.G, Suresh Gandhi.M, Ravisankar.R Determination of radioactivity levels and associated hazards of Coastal Sediment from South East Coast of Tamilnadu with Statistical Approach. Iranian Journal of Science and Technology, Transactions A: Science. Vol.41, issue 1, April 2017, pp1-14
14. Tholkappian.M, **Chandrasekaran.A**, Harikrishnan.N, Durai Ganesh, Elango.G, Ravisankar.R. Measurement of natural radioactivity in and around Chennai Coast, East Coast of Tamil Nadu, India, using gamma ray spectrometry. Radiation protection and Environment Vol.40 issue 1, April 2017, pp.9-12.
15. **Julie Charles**, S. Gunasekaran, “Experimental and theoretical investigations of natural rubber(cis-1,4-polyisoprene) using Coloumb attenuating and Hartree–Focktheoretical methods”, Optik- International Journal for Light and Electron optics, Volume127, No.1, 279-287, October2016.
16. A.Silambarasan, **P. Rajesh**, R Bhatt, I Bhaumik,AK Karnal, P. Ramasamy,” Investigation on crystalline perfection, optical transmittance, birefringence, temperature-dependent refractive index, laser damage threshold and pyroelectric characteristics of inversely soluble lithium”, Applied Physics A: Material Science and Processing, 122, 736 (1-9), July 2016.
17. Senthilkumar Chandran, **Rajesh Paulraj, P. Ramasamy**, “Effect of amaranth on dielectric, thermal and optical properties of KDP single crystal”, Materials Research Bulletin, 186, 365-371, Jan 2017
18. Nirmal Prashanth M, **Rajesh Paulraj**, Ramasamy P, Vijayan N, “One step synthesis of tin oxide nanomaterials and their sintering effect in dye degradation”, Optik - International Journal for Light and Electron Optics, 135, April 2017
19. G. Annadurai, M. Jayachandiran, **S. Masilla Moses Kennedy**, V. Sivakumar, “Synthesis and photoluminescence properties of Ba₂CaZn₂Si₆O₁₇:Tb³⁺ green phosphor”, Materials Science and Engineering B, 208, 47–52, June 2016
20. G. Annadurai, **S. Masilla Moses Kennedy**, V. Sivakumar Photoluminescence properties of a novel orange-red emitting Ba₂CaZn₂Si₆O₁₇:Sm³⁺ phosphor”, J. of Rare Earths, 34, 576-582, June 2016.

21. **G. Anandha babu**, I. Takahashi, T. Muramatsu, N. Usami, "Towards optimized nucleation control in multicrystalline silicon ingot for solar cells", J. Crystal Growth, Vol. 468, pp. 620-624, June 2017
22. T. Muramatsu, I. Takahashi, **G. Anandha babu**, N. Usami, "On the growth mechanism of multicrystalline silicon ingots with small grains fabricated using single-layer silicon beads", Japanese Journal of Applied Physics, Vol 56, pp. 075502-1-075502-4, July 2017
23. **S. Singaravadivelu**, A. Uthayakumar, and Saju T. Abraham, Ultrasonic study of elastic anisotropy of unidirectional Rochelle salt single crystals grown using the Sankaranarayanan-Ramasamy method, Journal of Crystal Growth, Vol.- 478, August 2017, p.146-151.

Conference Publications (2016-2017)

1. Silambarasan, A, **Rajesh, P** & Ramasamy, P, Effect of Transition Metal Ions (Cd and Mn) on Solubility, Growth, Linear, Nonlinear Optical and Electrical Properties of Li₂SO₄.H₂O Single Crystals, The 18th International Conference on Crystal Growth and Epitaxy (ICCGE18) Nagoya, Japan, August 7-12, 2016.
2. Silambarasan, A, **Rajesh P**, Ramasamy, P, Growth Kinetics and Bulk Growth of Inversely Soluble Lithium Sulfate Monohydrate Single Crystals and its Optical Characterization, The 18th International Conference on Crystal Growth and Epitaxy (ICCGE18), Nagoya, Japan, August 7-12, 2016.
3. Silambarasan, A, **Rajesh, P** & Ramasamy, P, Karnal, AK, Rajeev Bhatt, Indranil Bhaumik & Gupta, PK, Fabrication of Optical Element from Inversely Soluble Lithium Sulfate Monohydrate Single Crystals for SHG Applications, The 18th International Conference on Crystal Growth and Epitaxy (ICCGE18) Nagoya, Japan, August 7-12, 2016.
4. C.Senthilkumar, **P. Rajesh**, P.Ramasamy, Crystal growth, nucleation kinetics and optical characterization of lithium hydrogen oxalate monohydrate single crystal, The 18th International Conference on Crystal Growth and Epitaxy (ICCGE18), Nagoya, August, Japan, 7-12, 2016.
5. **P.Rajesh**, C.Senthilkumar, P.Ramasamy, Influence of amaranth dye on the growth, optical, thermal, mechanical and electrical properties of KDP crystal, The 18th International Conference on Crystal Growth and Epitaxy (ICCGE18), Nagoya, Japan, August 7-12, 2016.
6. C.Senthilkumar, **P.Rajesh**, P.Ramasamy, Determination of nucleation kinetics and optical properties of semi- organic NLO single crystal-sodium acid phthalate, The 18th International Conference on Crystal Growth and Epitaxy (ICCGE18), Nagoya, Japan, August 7-12, 2016.

7. Senthilkumar Chandran, **Rajesh Paulraj**, P. Ramasamy, Crystal Growth, Piezoelectric, Non-Linear Optical and Mechanical Properties of Lithium Hydrogen Oxalate Monohydrate Single crystal, 61 st DAE-SSPS, KIIT University, Bhubaneswar. December 26-30, 2016.
8. G. Annadurai, M. Jayachandiran, **S. M. Moses Kennedy**, V. Sivakumar, "Preparation and Photoluminescence Characteristics of Novel Dy³⁺ activated Ba₂CaZn₂Si₆O₁₇ phosphors", presented at the NATIONAL CONFERENCE ON LUMINESCENCE AND ITS APPLICATIONS (NCLA), R.T.M. Nagpur University & Taywade College, Koradi, Nagpur, 18-20 Feb. 2016
9. **Julie Charles**, Suganthi M, "Comparitive study of butyl rubber (IIR) and bromobutyl rubber (BIIR) based on FTIR, dielectric and thermal studies", International conference on recent advances in Applied Sciences (ICRAAS-2016), St. Peter's University, Avadi, Chennai, 11-12, Feb, 2016.
10. **Julie Charles**, Suganthi M, "FTIR and impedance spectroscopic studies on butyl rubber (IIR) and bromobutyl rubber (BIIR)", National conference on Advanced Materials (NCAM-2016), SSN College of Engineering, Chennai, 21-22, March, 2016.
11. G.Babu Rao, **P.Rajesh** and P.Ramasamy monohydrate single crystal", NSCGA-2016, BARC, 19th -21st January, 2016.
12. C.Senthilkumar, **P.Rajesh**,P.Ramasamy, "Influence of amaranth dye on the growth and properties of KDP single crystal", NSCGA-2016, BARC, 19th -21th January, 2016
13. A. Silambarasan, **P. Rajesh**, P. Ramasamy, "Fabrication of Optical Element from Inverted Solubility Lithium Sulfate Monohydrate Single Crystal for SHG Applications", NSCGA-2016, BARC, 19th -21th January, 2016.
14. A. Silambarasan, **P. Rajesh**, P. Ramasamy, "An Investigation to Overcome the Problems in Growing Bulk Size α -LiIO₃ Single Crystals", NSCGA-2016, BARC, 19th -21th January, 2016.
15. Y.Raghu R.Ravisankar **A.Chandrasekararn**, P.Vijayagopal B.Venkatraman,"Measurement of Natural gamma radiation in building materials from Thellar of Tiruvannamalai Dist, Tamilnadu, India by Gamma Ray spectrometry", IARP International Conference on Radiological Safety in Workplace, Nuclear Facilities and Environment IGCAR, Kalpakkam, 23-25, February 2016.
16. N. Harikrishnan, R. Ravisankar, **A. Chandrasekaran**, K.V. Kanagasabapathy M.V.R Prasad ,K.K. Satapathy, "Assessment of heavy metal pollution in sediments of East Coast of Tamilnadu using Energy dispersive X-ray fluorescence

spectroscopy (EDXRF)", IARP International Conference on Radiological Safety in Workplace, Nuclear Facilities and Environment IGCAR, Kalpakkam, 23-25, February 2016.

17. R.Ravisankar, B.Tholkappian, **A.Chandrasekaran** Duraiganesh, M.T.Jose, B.Venkatraman, "Measurement of natural radioactivity in and around Chennai coast, East Coast of Tamilnadu using Gamma ray spectrometry", IARP International Conference on Radiological Safety in Workplace, Nuclear Facilities and Environment IGCAR, Kalpakkam, 23-25, February 2016.
18. **A.Rajalakshmi, A. Chandrasekaran**, R. Ravisankar, "Function of Physico-chemical properties on Natural radioactivity in soils of Salt field area, Kelambakkam, Tamilnadu", International Conference on Material science and Ionizing radiation safety & Awareness, Shivaji University, Maharashtra, 28-30, January 2016.
19. **A. Chandrasekaran**, R. Ravisankar, D. Chinni Krishna, G. Elango, "Characterization of Kidney stone by TG-DTA and SEM-EDS Analysis", International Conference on Material science and Ionizing radiation safety & Awareness, Shivaji University, Maharashtra, 28-30, January 2016.
20. Senthilkumar Chandran, **Rajesh Paulraj, P.** Ramasamy , K. K. Maurya, Crystal growth, crystal perfection, optical and photoconductivity properties of semi-organic NLO single crystal-sodium acid phthalate, 25th National Laser Symposium, KIIT University, Bhubaneswar. December 20-23, 2016.
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22. Silambarasan, A, **Rajesh, P** & Ramasamy, P, Bulk Crystal Growth and Linear-Nonlinear Optical Characteristics of Inversely soluble Lithium Sulfate Monohydrate Single Crystals, 25th National Laser Symposium, KIIT University, Bhubaneswar. December 20-23, 2016.
23. 11. M. Senthil Pandian, A. Silambarasan, **P. Rajesh**, Sunil Verma, A.K. Karnal, P.Ramasamy, Optical Imaging During Unidirectional Crystal Growth And Development of High Quality Nonlinear Optical (NLO) Single Crystals For Device Applications, 25th National Laser Symposium, KIIT University, Bhubaneswar. December 20-23, 2016.
24. Silambarasan, A, **Rajesh, P** & Ramasamy, P, Karnal, AK, Rajeev Bhatt, Indranil Bhaumik & Gupta, PK, An Investigation to Overcome the Problems in Growing Bulk Size α -LiIO₃ Single Crystals, 61st DAE-SSPS, KIIT University, Bhubaneswar. December 26-30, 2016.

25. **P. Rajesh**, G. Babu Rao and P. Ramasamy, Effect of Rochelle salt on the growth, piezoelectric, optical, mechanical and Photoluminescence properties of the Triglycine Sulphate Single Crystal, The 18th International Conference on Crystal Growth and Epitaxy (ICCGE18), Nagoya, Japan, August 7-12, 2016.
26. Silambarasan A, **Rajesh, P** & Ramasamy, P, Karnal, AK, Rajeev Bhatt, Indranil Bhaumik & Gupta, PK, Investigation on the bulk growth of inversely soluble α – LiIO₃ single crystals and the influence of pH on its structural, morphological and optical characteristics, The 18th International Conference on Crystal Growth and Epitaxy (ICCGE18), Nagoya, Japan, August 7-12, 2016.
27. G. Babu Rao , **P. Rajesh** and P. Ramasamy, Enhanced optical, thermal and piezoelectric behavior in dye doped potassium acid phthalate (KAP) single crystals, 25th National Laser Symposium, KIIT University, Bhubaneswar. December 20-23, 2016.
28. Nirmal Prashanth M, P **Rajesh, P.** Ramasamy, Sintering effect on tin oxide electrode for supercapacitor applications, 61 st DAE-SSPS, KIIT University, Bhubaneswar. December 26-30, 2016.
29. **P. Rajesh**, A. Silambarasan, P. Ramasamy, A. K. Karnal, Rajeev Bhatt, Indranil Bhaumik and P. K. Gupta, Fabrication of Type I and Type II Optical Elements from Lithium Sulfate Monohydrate Single Crystals for frequency doubling applications, International Conference on Functional Materials (ICFM-2016) PSN College of Engineering, Tirunelveli, September 7 & 8, 2016.
30. Balasubramaniam M , Resmi K.S, **Prita Nair**, “1-D Photonic Crystal Based Dynamic Encoder/Decoder for 2DW-T OCDMA System”, 3rd International Conference on Optronics and Applied Optics, (Optronix 2016), 18th –20th August 2016, University of Engineering and Management, Kolkatta, India (**Best Student Paper award**) Advances in Optical Science and Engineering, Springer Proceedings in Physics 194, ISBN 978-981-10-3907-2
31. Dhakshinamoorthy T, **Prita Nair**, “Modeling 3-Dimensional Electro Thermal Actuation of MEMS Mirrors”, International Conference on NextGen Electronic Technologies: Silicon to Software, VIT Chennai, 23-25 March 2017
32. Suganthi M, **Julie Charles**, T.V. Rajendran, “Synthesis, Characterisation and Conductivity studies of ternary polyaniline- prussian blue-zinc oxide nanocomposite”, International Conference on SUSTAINABLE ENVIRONMENT AND ENERGY (ICSEE‘17), Hindustan University, Chennai, 6-7 April, 2017
33. **A.Rajalakshmi**, **A.Chandrasekaran**, R.Ravisankar, M.Balaji, Sathesh kumar Annamalai, Kantha Devi Arunachalam. Determination of natural radioactivity in soils of salt field area of Kelambakkam, Tamilnadu after Chennai floods in December - 2015, International conference on Radiation Biology-2016, (ICRB-2016), SRM University, Chennai, November 09-11, pp.267, 2016.

34. **A.Rajalakshmi, A.Chandrasekaran,** R.Ravisankar, M.Balaji, Sathesh kumar Annamalai, Kantha Devi Arunachalam. Measurment of natural radioactivity and associated radiation hazards in Kovalam, Chennai, International conference on Radiation Biology-2016, (ICRB-2016), SRM University, Chennai, November 09-11, pp.145, 2016.
35. N.Harikrishnan, Jebasingh Kores, **A.Chandrasekaran,** S.Sivakumar, Measurment of natural radioactivity in sand samples of Manaloorpet Riverbed area, Tamilnadu. International conference on Radiation Biology-2016, (ICRB-2016), SRM University, Chennai, November 09-11, pp.320, 2016.
36. **A.Chandrasekaran A.Rajalakshmi,** R.Ravisankar. Potential contamination and contamination degree analysis of heavy metals in soils of Yelagiri Hills, Tamilnadu. 13th DAE-BRNS Nuclear and Radiochemistry Symposium-2017 (NUCAR-2017), KIIT University, Bhubaneswar, Odisha, India. February, 6-10. pp.546-547, 2017.
37. B. Tholkappian, Duraiganesh, E.Devanesan, **A.Chandrasekaran,** R.Ravisankar Determination radioactivity and the associated radiation hazards in sediments in and around Chennai Coast13th DAE-BRNS Nuclear and Radiochemistry Symposium-2017 (NUCAR-2017), KIIT University, Bhubaneswar, Odisha, India. February, 6-10. pp.656-657, 2017.

DEPARTMENT OF PHYSICS, SSNCE 2015-2016

JOURNAL PUBLICATIONS (2015-2016)

1. G. Annadurai and **S. M. M. Kennedy** Synthesis and Photoluminescence Properties of Ba₂CaZn₂Si₆O₁₇: Eu Red Phosphors for White LED Applications, J. Lumin. 169, 690 – 694 **January 2016** [ISSN Number: 0022-2313 / ISSN 0953-4075]
2. G. Annadurai a, **S. Masilla Moses Kennedy**, V. Sivakumar, Luminescence properties of a novel green emitting Ba₂CaZn₂Si₆O₁₇:Eu²⁺ phosphor for white light e Emitting diodes applications "Superlattices and Microstructures " 93, 57-66 May 2016 [ISSN: 0749-6036 (Print); 1096-3677 (Online)]
3. G.Latha , P. Nair, "Feasibility Study of a PCF Sensor for In-situ Monitoring of Silicone Oil Contamination in Transformers", Journal of Applied Sciences Research, Vol 11(22), December, 82-86, 2015
4. SenthilKumar Chandran, **Rajesh Paulraj**, P. Ramasamy, Structural,optical,thermal, photoconductivity, laser damage threshold and fluorescence analysis of an organic material: β -P-amino benzoic acid single crystal , Optical Materials ISSN 0925-3467 Vol 52 pp. 49-55 February 2016
5. A.Silambarasan,E. Nageswara Rao,S. Venugopal Rao,**P. Rajesh** and P. Ramasamy, Bulk growth, crystalline perfection and optical characteristics of inversely soluble lithium sulfate monohydrate single crystals grown by the conventional solvent evaporation and modified Sankaranarayanan–Ramasamy method, Crystal Engineering Communications, RSC Publications, pp.1466-8033 Vol 18, pp.2072-2080, February 2016 .
6. G. Babu Rao, **P. Rajesh** and P. Ramasamy , Investigations on the growth, optical, thermal, dielectric, and laser damage threshold properties of crystal violet dye-doped potassium acid phthalate single crystal, Applied Physics A: Material Science and Processing ISSN 1432-0630 Vol. 122 pp. 175 (1-8) February 2016.
7. A.Silambarasan, **P.Rajesh**, U.Madhusoodanan,P.Ramasamy Investigation on the solubility,crystal growth,optical,laser damage threshold, NLO, photoluminescence and dielectric properties of pure and cadmium(cd²⁺) doped lithium sulfate monohydrate single crystal , Material Research Innovations Vol 21, pp.1-6 April 2016
8. G. Babu Rao, **P. Rajesh** and P. Ramasamy Unidirectional growth of non-linear optical Triglycine calcium dibromide single crystal by Sankaranaryanan–Ramasamy method Journals of Crystal Growth , ISSN 0022-0248, Vol. 440 pp. 47-54 April 2016.
9. Senthilkumar Chandran, **Rajesh Paulraj**, P. Ramasamy, Crystal growth, spectral, optical, laser damage, photoconductivity and dielectric properties of semi organic L-cystine hydrochloride single crystal, Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, Vol. 151, pp 432-437, July 2015.

10. Senthilkumar Chandran, R. Jagan, **Rajesh Paulraj**, P. Ramasamy, Spectral, mechanical, thermal, optical and solid state parameters, of metal-organic bis(hydrogenmaleate)-CO(II) tetrahydrate crystal, Journals of solid state chemistry, Vol. 230, pp 135 -142, July 2015.
11. **P. Rajesh**, P. Ramasamy Growth and characterization of large size ADP single crystals and the effect of glycine on their growth and properties, Optical Materials, Volume42, Pages87-93, .August 2015
12. Purusothaman, **P. Rajesh**, P. Ramasamy, “Growth and characterization of organic NLO material: Clobetasol propionate”, Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, 145, 235-238, June 2015
13. **Rajesh Paulraj**, Senthil Kumar Chandran, , P. Ramasamy, “Effect of impurities on the optical properties of unidirectional ADP crystals”, Indian Journals of Research Foundation, Vol2, August 2015.
14. Silambarasan, **P. Rajesh**, P. Ramasamy, “Growth, structural, piezoelectric, ferroelectric and thermal properties of lead nitrate orthophosphate hydrate single crystals grown in silica gel”, Indian Journals of Research Foundation, 4, 39-42, August 2015.
15. G. Babu Rao, **P. Rajesh** and P. Ramasamy, “Concentration of crystal violet dye on the growth, optical, photoluminescence and laser damage threshold properties of potassium acid phthalate single crystal”, Indian Journals of Research Foundation,3, 21-23, October 2015
16. **Rajesh Paulraj**, Rama Seshan C, Srihari P V, Ramasamy P, “Growth, luminescence, dielectric and photoconductive properties of γ -Nickel sulphate hexahydrate for UV filter applications” Indian Journals of Research Foundation , 2, October 2015.
17. Senthil Kumar Chandran, **Rajesh Paulraj**, P. Ramasamy , “Crystal growth, optical, thermal and analysis of β -p-aminobenzoic acid single crystal”, Indian Journals of Research Foundation 3, 7-9, October 2015.
18. S. Sadhasivam, **Rajesh Narayana Perumal** , P. Ramasamy Structural, thermal and optical properties of $\text{KTi}_{0.92}\text{La}_{0.08}\text{OPO}_4$ and $\text{KTi}_{0.94}\text{Nd}_{0.06}\text{OPO}_4$, 149, 183-189, October 2015.
19. S. Siva Bala Solanki, **Rajesh Narayana Perumal**, T. Suthan, G. Bhagavannarayana, "Growth and characterization of organic single crystal benzyl carbamate, Journal of Crystal Growth, 427, 24-28 October 2015
20. S. Sadhasivam, **Rajesh Narayana Perumal**, P. Ramasamy, "Flux growth and grey colouration characteristics in $\text{KTiOPO}_4:\text{Ln}$ ($\text{Ln} = \text{Yb}, \text{Nd}, \text{Ho}, \text{Er}, \text{La}$), Journal of Crystal Growth, 431, 32-38, December 2015
21. S. Sadhasivam, **N.P. Rajesh**, "Structural and optical effects induced by gamma irradiation on NdPO_4 : X-ray diffraction, spectroscopic and luminescence study", Materials Research Bulletin, 74, 117–123, February 2016

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23. R.P. Jebin, T. Suthan, **N.P. Rajesh**, G. Vinitha, S.A. Britto Dhas, "Studies on crystal growth and physical properties of 4(dimethylamino)benzaldehyde-2,4-dinitroaniline single crystal, Optical Materials, 57, 163-168 July 2016
24. T. Arivazhagan, S. Siva Bala Solanki, **Narayana Perumal Rajesh** "Growth and characterization of butyl 4-hydroxybenzoate single crystal by vertical Bridgman technique for third order nonlinear optical applications", Optics & Laser Technology, 88, 188-193, August 2016
25. **Rajesh Narayana Perumal**, G. Subalakshmi "Near-infrared down-conversion in Yb³⁺:TiO₂ for solar cell applications", J Mater Sci: Mater Electron, 27, 1-7, October 2016
26. **Julie Charles**, "Dielectric and Microwave Properties of Cured and Uncured Natural Rubber Composites, International Journal of Chemical Engineering– IJCE, Volume 2, No. 1, 182-188, October, 2015
27. **A.Chandrasekaran, A. Rajalakshmi**, R. Ravisankar, P. Vijayagopal, B.Venkatraman Measurements of Natural Gamma Radiations and Effects of, Physico-Chemical Properties in Soils of Yelagiri Hills, Tamilnadu India with Statistical Approach, Proceedia Earth and Planetary Science, 11,531-538, July 2015
28. **A.Chandrasekaran**, R.Ravisankar Spatial distribution of physico-chemical properties and function of heavy metals in soils of Yelagiri hills, Tamilnadu, India by Energy dispersive X-ray fluorescence spectroscopy with statistical approach. Spectrochimica acta part A . 150, Aug (2015) pp.586-601.
29. R.Ravisankar, J.Chandramohan, **A.Chandrasekaran**, J.Prince Prakash Jebakumar, I.Vijayalakshmi, P.Vijayagopal, B.Venkatraman.. Assessments of Radioactivity concentration of natural radionuclides and Radiological hazard indices in sediment samples from the East coast of Tamilnadu, India with statistical approach, Marine Pollution Bulletin, 97, Aug 2015, pp.419-430
30. R.Ravisankar, S.Sivakumar, **A.Chandrasekaran**, K. K. Satapathy M. V. R. Prasad, K. V. Kanagasabapathy, Statistical assessment of heavy metal pollution in sediments of East Coast of Tamilnadu using Energy dispersive X-ray fluorescence spectroscopy (EDXRF), Applied Radiation Isotopes. 102 Aug 2015, pp. 42-47.
31. Y.Raghu, N.Harikrishnan, **A.Chandrasekaran**, R.Ravisankar Assessment of natural radioactivity and associated radiation hazards in some building materials used in Kadaladi, Tiruvannamalai dist, Tamilnadu, India. International Journal of Frontiers in science and Technology, 3(3) July-Sep 2015, pp.143-151.

32. R. Ravisankar Y. Raghu , **A. Chandrasekaran** , M. Suresh Gandhi, P. Vijayagopal B. Venkatraman Determination of natural radioactivity and the associated radiation hazards in building materials used in Polur, Tiruvannamalai District, Tamilnadu, India using gamma ray spectrometry with statistical approach. Journal of Geochemical Exploration, 163 April-2016, pp.41–52.
33. Y. Raghu, R. Ravisankar, **A. Chandrasekaran**, P. Vijayagopal, B. Venkatraman Assessment of Natural Radioactivity in clay Samples of Tiruvannamalai Dist, Tamilnadu, India And Their Associated Radiation Hazards. Int. J. Chem. Sci.: 14(S1), May-2016,pp. 235-240.
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35. J.Chandramohan, **A.Chandrasekaran** , G.Senthilkumar, G. Elango, R.Ravisankar. Heavy Metal Assessment in Sediment Samples Collected From Pattipulam to Dhevanampattinam along the East Coast of Tamil Nadu Using EDXRF Technique. Journal of Heavy Metal Toxicity and Diseases 1(2:8) April 2016, pp.1-6.

CONFERENCE PUBLICATIONS (2015-2016)

1. M Balasubramanian, **Prita Nair**, “Design And Analysis of Optical QAM Scheme Using an Electro-optic Microring Resonator”, IEEE Workshop on Recent Advances in Photonics (WRAP 2015), Indian Institute of science, Bangalore, Dec 16-17, 2015. (**Best Paper Award**)
2. Resmi K.S, **Prita Nair**, “Design of a Si-EO Polymer Hybrid WH/TS Encoder with Transformation Optics Based Waveguide Coupler” IEEE Workshop on Recent Advances in Photonics (WRAP 2015), Indian Institute of science, Bangalore, Dec 16-17, 2015. (**Best Paper Award**)
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