

List of Publications arising from the thesis

Journals

1. “Growth of CsI:Tl Crystals in Carbon Coated Silica Crucibles by Gradient Freeze Technique”, **S.G. Singh**, D.G. Desai, A.K. Singh, M. Tyagi, Shashwati Sen, A.K. Sinha, S.C. Gadkari and S.K. Gupta, *J. of Crystal Growth*, **351** (2012) 88–92.
2. “Photoluminescence and photoconductivity studies on NaBi(WO₄)₂ single crystals: A promising Cherenkov radiator”, Mohit Tyagi, **S.G. Singh**, Shashwati Sen, A.K. Singh, S.C. Gadkari, *J. of Luminescence*, **132** (2011) 41-45.
3. “Fabrication, properties and thermo-luminescent dosimetric application of CaF₂:Mn transparent ceramic”, **S.G. Singh**, Shashwati Sen, G.D. Patra, S. Bhattacharya, A.K. Singh, Seema Shinde, S.C. Gadkari, *Nuclear Instruments and Methods in Physics Research B* **287** (2012) 51–55.
4. “Luminescence properties of CaF₂:Mn transparent ceramic”, **S. G. Singh**, Shashwati Sen, G. D. Patra, S. C. Gadkari, *J. of Luminescence*, **166** (2015) 222-226.

Conferences

1. “Single crystal growth of Yb doped NaGd(WO₄)₂ and structural and spectroscopic studies”, S. G. Singh, A. K. Singh, D. G. Desai, B. Tiwari and M. Tyagi, *American Institute of Physics Conf. Proc.* **1591** (2014) 1262-1264.
2. “Scintillation yield uniformity studies on single crystals of Tl doped CsI”, D. G. Desai , **S. G. Singh** , A. K. Singh , Shashwati Sen , Seema Shinde and S. C. Gadkari, *American Institute of Physics Conf. Proc.* **1512** (2012) 864-866.
3. “Performance of Indigenously Developed CsI(Tl)-Photodiode Detector for Gamma-ray Spectroscopy”, **S.G. Singh**, Arvind Singh, Anita Topkar and S.C. Gadkari, *American Institute of Physics Conf. Proc.* **1349** (2011) 481-482.
4. “Photoluminescence studies on NaBi(WO₄)₂ single crystals at low temperatures”, M. Tyagi, **S. G. Singh**, A. K. Chauhan, S. C. Gadkari and V. K. Handu, *American Institute of Physics Conf. Proc.* **1349** (2011) 477-478.
5. “Synthesis of optically transparent ceramic of CaF₂ doped with Mn and Ce for thermoluminescent dosimetry”, Shashwati Sen, **S. G. Singh**, G. D. Patra, S. Shinde, S. Bhattacharya, S. C. Gadkari, *American Institute of Physics Conf. Proc.* **1447** (2011)11279.

6. "Development of technologically important crystals and devices", **S.G. Singh**, M. Tyagi, D.G. Desai, A.K. Singh, Babita Tiwari, Shashwati Sen, A.K. Chauhan and S.C. Gadkari, *BARC News Letter*, Issue No. **318** (2011) 16-27.
7. "Influence of after-growth thermal treatments on crystal defects revealed by daylight induced coloration and afterglow in CsI: Tl scintillators", **S.G. Singh**, M. Tyagi, D.G. Desai, A.K. Chauhan and S.C. Gadkari, *American Institute of Physics Conf. Proc.* **1313** (2010) 337-339.
8. "Synthesis And Luminescence Studies Of Mn doped CaF₂", **S.G. Singh**, A.K. Singh, Shashwati Sen and S.C. Gadkari, *American Institute of Physics Conf. Proc.* **1313** (2010) 340-342.
9. "Growth, structural and optical properties of NaGd(WO₄)₂:Yb crystals"; **S.G. Singh**, M. Tyagi, D.G. Desai, A.K. Singh and S.C. Gadkari; *XIV National Symposium on Crystal Growth*, March 10-12, 2010.
10. "Synthesis of Mn Doped CaF₂ Nanoparticles", **S.G. Singh**, Shashwati Sen, S.C. Gadkari, *International Symposium on Materials Chemistry*, BARC, (2010).
11. "Photoluminescence and Photoconductivity Studies of NaBi(WO₄)₂ Single Crystals: A promising Cherenkov radiator", M. Tyagi, **S. G. Singh**, A. K. Singh, D. G. Desai, A. K. Chauhan, S. C. Gadkari, *Proceedings of the DAE Symposium on Nuclear Physics, BITS, Pilani*, (2010).
12. "Growth of detector-grade CsI:Tl scintillator crystals by gradient freeze technique", D.G. Desai, **S.G. Singh**, A.K. Singh, Shashwati Sen, M. Tyagi, A.K. Chauhan and S.C. Gadkari, *Proceedings of the DAE Symposium on Nuclear Physics*, BITS, Pilani, (2010).
13. "Growth of detector-grade CsI(Tl) crystals in graphite crucibles"; D.G. Desai, **S.G. Singh**, M. Tyagi, S.C. Gadkari; *Proceedings of the National Symposium on Growth of Device-Grade Single Crystals-2009*, 79-80.