

### **Recent Publications:**

1. Das A; Hazarika C; Hazarika S. (2022). Spatial evolution leading to multiple filament formation of higher order super Gaussian beam in bulk medium at input power  $P > P_{cr}$ , *Optik*. Elsevier. 251(12) .
2. Hazarika. C; Das. A; Hazarika. S. (2019). Multiple filamentation and control properties of self-guided elliptical Gaussian laser beam, *Journal of physics*. Springer. 48(4).
3. Hazarika. C; Das. A; Hazarika. S. (2019). Investigation of paraxial and nonparaxial self-focusing of Gaussian beam in chalcogenide glass medium using NLSE, *Journal of physics conference series*. IOP Science. 1330(1):012020.
4. Hazarika. S; Hazarika. C; Das. A. (2017). Multiple filamentation and control properties of self-guided super Gaussian laser beam, *Optik*. Elsevier. **141**: 124-129.
5. Hazarika. C; Das. A; Hazarika. S. (2015). A study of beam parameters using NLSE in chalcogenide glass through variational method with a gaussian trial function, *American journal of optics and photonics*. Science PG . **3(4)**: 43-47.

### **Book chapter/Conference proceeding Publications**

1. Hazarika S; Das A; Hazarika C. (2021). Multiple filamentation at different orders of a super Gaussian beam, *Proc. OPAL-4, IFSA Publishing, Corfu, Greece*, ISBN: 978-84-09-34187-0.
2. Hazarika. C; Das. A; Hazarika. S. (2016). Multiple filamentation of super gaussian beam in chalcogenide glass and role of noise, *Proc. DAE-BRNS NLS-25, KIIT, Bhubaneswar*. ISBN: 978-81-903321-7-0.
3. Hazarika C; Das A ; Hazarika S. (2017). Multiple filamentation due to variation in beam ellipticity of an elliptical Gaussian beam in fluoride glass medium, *Recent advances in physics research and its relevance*, Excel India Publishers, ISBN: 978-93-86256-85-0