Abstract

This dissertation aims at generating extremely short laser pulses, popularly referred to as UltraShort Pulses (USPs) whose pulse duration ranges from Pico second to a few Femto seconds. In this work, we attempt at a novel design of a class of fiber called photonic crystal fiber (PCF) new wherein the optical properties, namely, dispersion and nonlinearity decrease exponentially along the propagation direction.

References

- H. C. Nguyen, B. T. Kuhlme, E. C. Magi, M. J. Steel, P. Domachuk, C. L. Smith,


**Index Terms**

Computer Science

Communications

**Keywords**

Photonic Crystal Fiber  Pulse compression  Split Step Fourier Method