Abstract

In the present work, technologically important crystals of barium, calcium, and cadmium iodate were grown. These crystals exhibit nonlinear optical property and piezoelectric property. Crystals of barium, calcium, and cadmium iodate were grown by gel method. Optimum growth conditions for gel grown crystals were established by varying various parameters such as gel density, pH of gel, gel setting time, gel aging time, etc. are reported. These crystals were characterized by XRD analysis, Infrared spectroscopy and Thermal analysis. Powder SHG experiments were carried out to determine nonlinear optical coefficients. Present work deals with study of all these crystals regarding their growth and characterization. All obtained results are presented at a glance.
Study of XRD, FTIR, Thermal Analysis and Nonlinear Optical Properties of Barium, Calcium, Cadmium Iodate Crystals Grown in Silica Hydro Gel

References


Index Terms

Computer Science
Applied Science
Keywords

Gel Growth  Xrd  Ftir  Thermal Analysis  Nlo Property.