

ABSTRACT

A second harmonic generator comprising a semiconductor laser as an excitation light source and a resonator having a solid laser crystal excited by the excitation light source, a control element for controlling the wavelength of a first oscillation wave generated from the solid laser crystal and a nonlinear optical crystal for wavelength converting the first oscillation wave as a fundamental wave into a second harmonic wave as a second oscillation wave, wherein the components of the resonator are arranged in the order of a first laser mirror, solid laser crystal, wavelength control element, nonlinear optical crystal and second laser mirror from the input side of the excitation light.