

Japanese Journal of Applied Physics, Part 2: Letters 1997 vol.36 N10 SUPPL. B, pages L1384-L1386

Subnanosecond tunable ultraviolet pulse generation from a low-Q, short-cavity Ce:LiCAF laser

Liu Z., Ohtake H., Sarukura N., Dubinskii M., Semashko V., Naumov A., Korableva S., Abdulsabirov R.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

We have developed an all-solid-state tunable ultraviolet laser system employing recently developed Ce:LiCAF, a new degradation-free tunable ultraviolet laser medium pumped by the fourth harmonic of a conventional Q-switched Nd:YAG laser. The low-Q, short-cavity Ce:LiCAF laser produced satellite-free subnanosecond pulses in a tuning range of 281 nm to 297 nm under appropriate pumping-fluence control.

Keywords

All-solid-state, Low-Q, Short-cavity, Short-pulse, Tunable, Ultraviolet