

INFLUENCE OF TRAP STATES ON THE KINETICS
OF LUMINESCENCE AND INDUCED LIGHT
ABSORPTION BY Si NANOPARTICLES
IN A SiO₂ MATRIX AT THEIR EXCITATION
WITH FEMTOSECOND LASER PULSES

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S u m m a r y

We report on the results of our researches dealing with nonlinearities caused by trap states in the lux-intensity characteristics of the intrinsic emission band of Si nanoparticles embedded into a SiO₂ matrix and the dependence of the temporal characteristics of induced absorption on the pump femtosecond pulse fluence.