STUDY OF THE DISTRIBUTION OF TEMPERATURE PROFILES IN NONSTOICHIOMETRIC SiO_x FILMS AT LASER ANNEALING

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S u m m a r y

The distribution of temperature profiles in nonstoichiometric SiO_x films at the single pulse laser annealing has been studied theoretically. Temperature distributions on the surface of the SiO_x films at irradiation by a laser beam with various intensities have been calculated. Temperature distributions on various depths of the SiO_x films at irradiation by a laser beam with an intensity of 52 MW/cm^2 have been found. During the laser pulse of 10 ns with an intensity of 52 MW/cm^2, the temperature up to 1800 K can be reached on the specimen surface.