

SPECTROSCOPIC STUDY
OF LASER-PRODUCED SILVER PLASMA

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S u m m a r y

Time-averaged spectra of a laser plume and the time dynamics of the most intense spectral lines are studied under neodymium laser irradiation ($1.06\ \mu\text{m}$; $(1 \div 3) \times 10^8\ \text{W}/\text{cm}^2$; 20 ns; 12 Hz) in vacuum (3–5 Pa) at distances of 1 and 7 mm from a silver target. The obtained results are used to construct a time-averaged energy distribution of excited states of silver atoms and to estimate the relaxation time and electron temperature.