

DYNAMICS OF LOW-ENERGY LASER-PRODUCED TIN PLASMA

M.P. Chuchman, L.V. Mesarosh, A.K. Shuaibov

Uzhgorod National University
(46, Pidgirna Str., Uzhgorod 88000, Ukraine;
e-mail: chuchman@univ.uzhgorod.ua)

S u m m a r y

Emission spectroscopy with a high temporal resolution is used to study the initial expansion stages of the erosive laser-produced tin plasma. The time dependences of the population of excited states of tin atoms and ions are examined. The time of ion recombination was evaluated, and the time dependences of the electron temperature and concentration at distances of 1 and 7 mm from the target are determined.