

Spatiotemporal visualization of the dynamics of absorbing layers in a two-stage atomizer

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Abstract

This paper describes an experimental apparatus for studying the dynamics of the variation of the spatial distribution of the absorbing layers in a two-stage atomizer. An optical system with a telecentric beam, using a diode laser as the radiation source, is proposed and analyzed. The spatiotemporal resolution and the contribution of refraction effects to the resulting absorption pattern are estimated. The dynamics of the evaporation and condensation processes are visualized in a two-stage atomizer of Cd atoms and NaCl molecules.
