

# Automated device for substrate surface cleanliness estimation from the dynamic state of a liquid drop deposited on its surface

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## Abstract

The article discusses the methods for assessing the surface cleanliness factor of the substrates intended to form a microrelief of diffractive optical elements (DOEs). An automated device is proposed to control the surface cleanliness factor by the dynamic state of a liquid droplet. The experimental results on evaluation of a liquid droplet behavior obtained using a high-speed video camera are presented.

**Keywords:** liquid drop, diffractive optical elements, DOEs, microrelief, high-speed video camera.

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