

Research Topics 1999



Novel Structures Using Rotating Masks

Objectives

To develop new machining strategies based upon the use of a rotating mask and excimer laser microprojection.

Expected Outcomes

This new machining technique is able to produce complex 3D structures very rapidly. Ablation through a rotating mask onto a stationary workpiece produces spiral structures which have applications in micro optics. When the workpiece also moves during ablation unique channels are carved that may be useful for micro fluidic applications.

Researcher

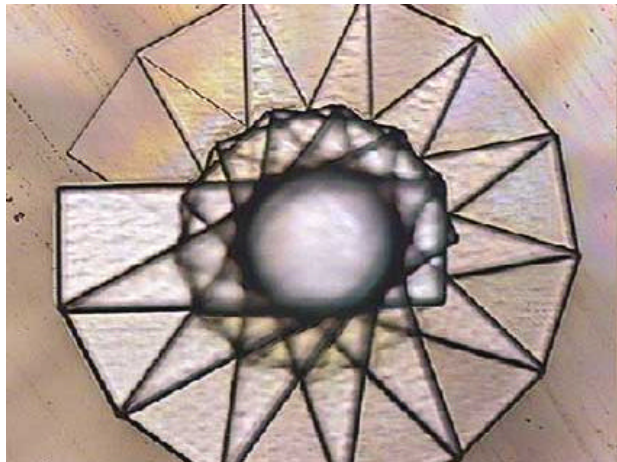
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A structured fluidic channel 70 micrometers wide used to create turbulent flow.



A 1mm diameter multi-level optical structure ablated using a rotating mask.