

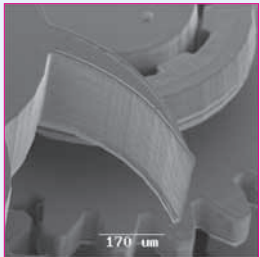
The μ -stereo Lithography Setup

Layer-by-Layer 3D micro patterning with ORMOCER[®]s

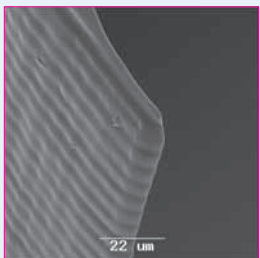
micro mechanical demonstrators, developed within the PRONTO project:



Windmill for fluidic media with a gearwheel connection



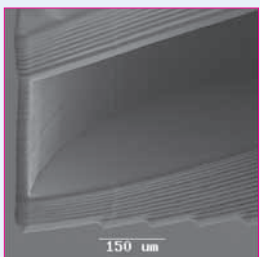
Detail view of a windmill sail



Detail view of the 10 μ m layers of a windmill sail



Windmill with cavities



Detail view of the windmill cavity

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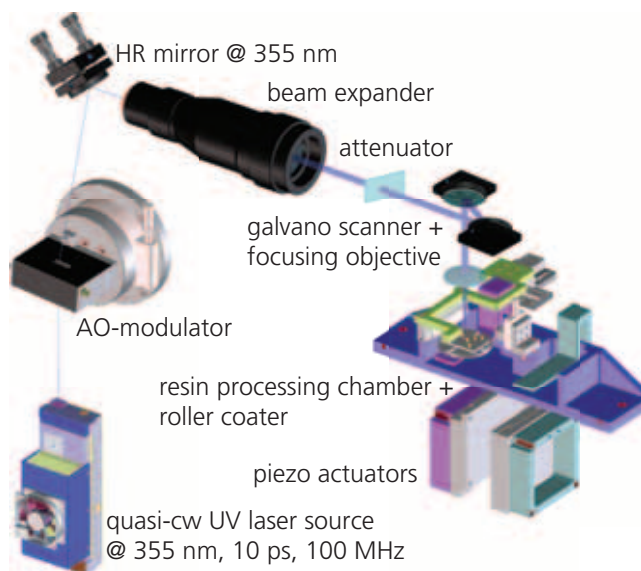
Unique features

- Laser: 355 nm, 20 mW, 100 MHz
- Scanner: 100 mm focal distance, scanning area 50 x 50 mm
- Resolution: < 10 μ m vertical 5 μ m lateral
- Positioning with piezo actuators

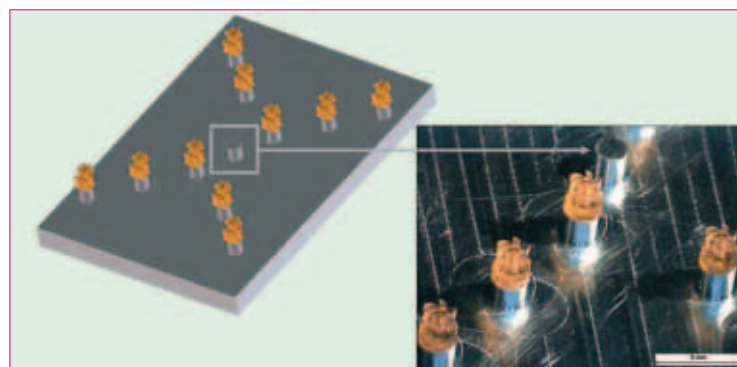
Applications

- Micro mechanical systems
- Micro sensors
- Micro fluidics
- Medicine and bio applications

Principle Setup



Photograph of the μ -stereo lithography setup



Substrate with 10 windmills built simultaneously

