



Keys to your expectation in Optics

# Dilase 3D

## 3D High Resolution Direct Laser Printer

- ▶ High Resolution 3D photolithography  $< 10\mu\text{m}$
- ▶ Large volume fabrication  $100\times 100\times 50\text{ mm}^3$
- ▶ 375 nm and 405 nm laser available
- ▶ Different resolution available
- ▶ Large depth of focus



# Dilase 3D

Dilase 3D is a tabletop 3D direct laser printer. This system, dedicated to photolithography, is a high performance laser processing tool, offering high resolution 3D patterning lower than  $10\mu\text{m}$ . It is a perfect system for fast prototyping. Powered by fast and accurate stages, Dilase 3D allows writing 3D patterns in photosensitive resists on planar substrates up to  $100\times 100\text{mm}$  and thickness of patterns until  $50\text{mm}$ . This covers a very large volume of 3D objects.

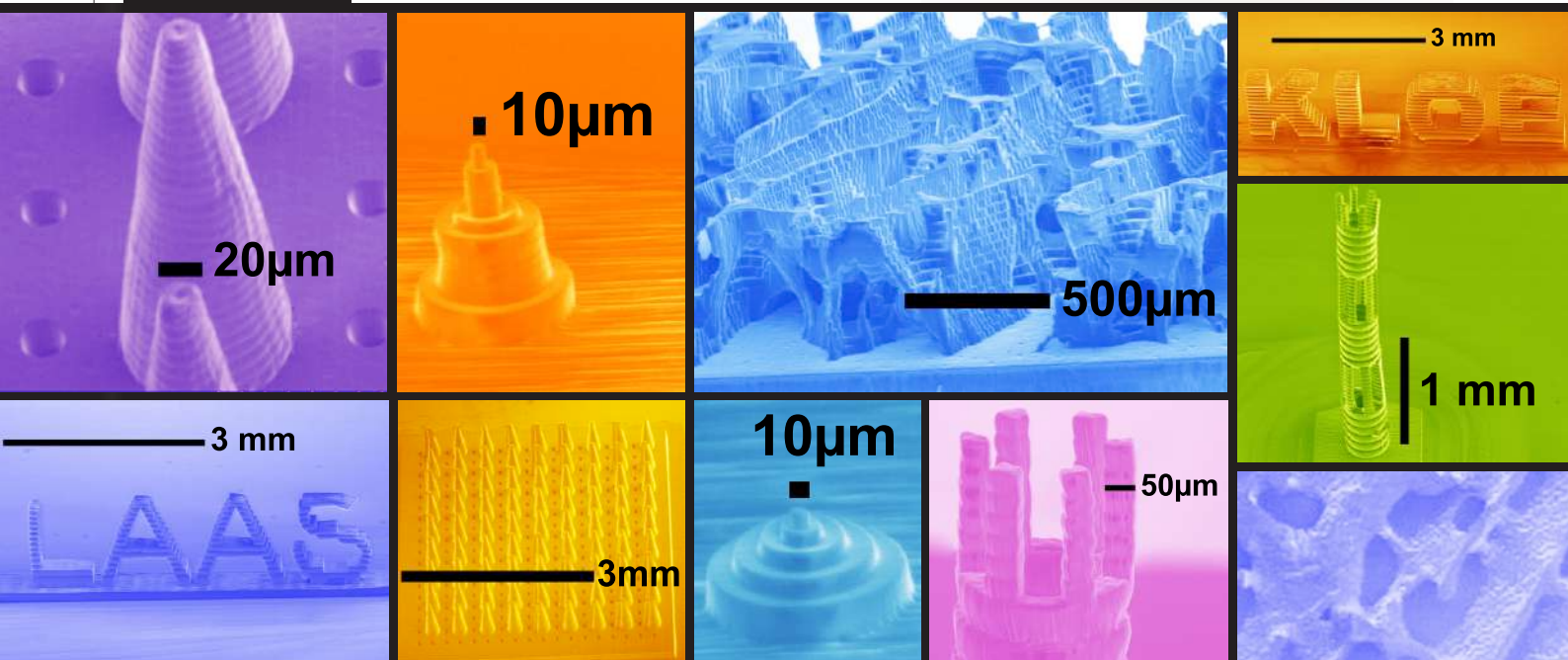
Dilase 3D is fully compatible with most of the commercially available photoresists and materials used for 3D photolithography. It can be equipped with a  $375\text{nm}$  laser or  $405\text{nm}$  laser sources.

## Features

- Size :
- 1 laser source  $375\text{nm}$  or  $405\text{nm}$
- 1 beam size minimum  $5\mu\text{m}$
- Data formats: stl
- Writing step adjustable
- Integrated software: 3D slicer
- 2 modes of writing: vectorial and scanning



## Applications



## Performances

Linear writing speed	$> 50 \text{ mm.s}^{-1}$
Stage travel resolution	100 nm
Repeatability	100 nm
Wafer writing area	1 to 4 inches
Substrate thickness	$250 \mu\text{m}$ to 10 mm
Laser spot size (1 or 2)	$5 \mu\text{m}$ to $50 \mu\text{m}$
Form factor	Minimum 10

Courtesy of Laurent Malaquin - Renatech - LAAS