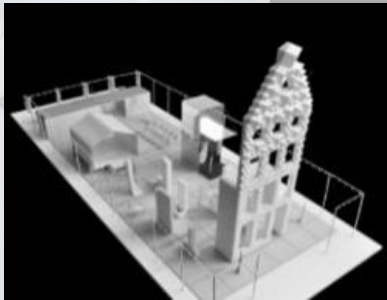
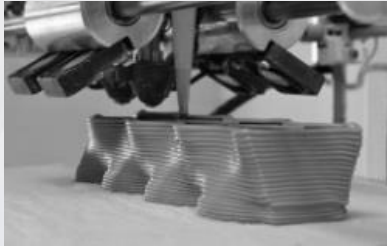






# THE 3D PRINTING WORLD

# 3D PRINTING



Additive  
manufacturing

Subtractive  
manufacturing



# 3D PRINTING



FEMTOprint

Pillar  $\phi 20\ \mu\text{m}$

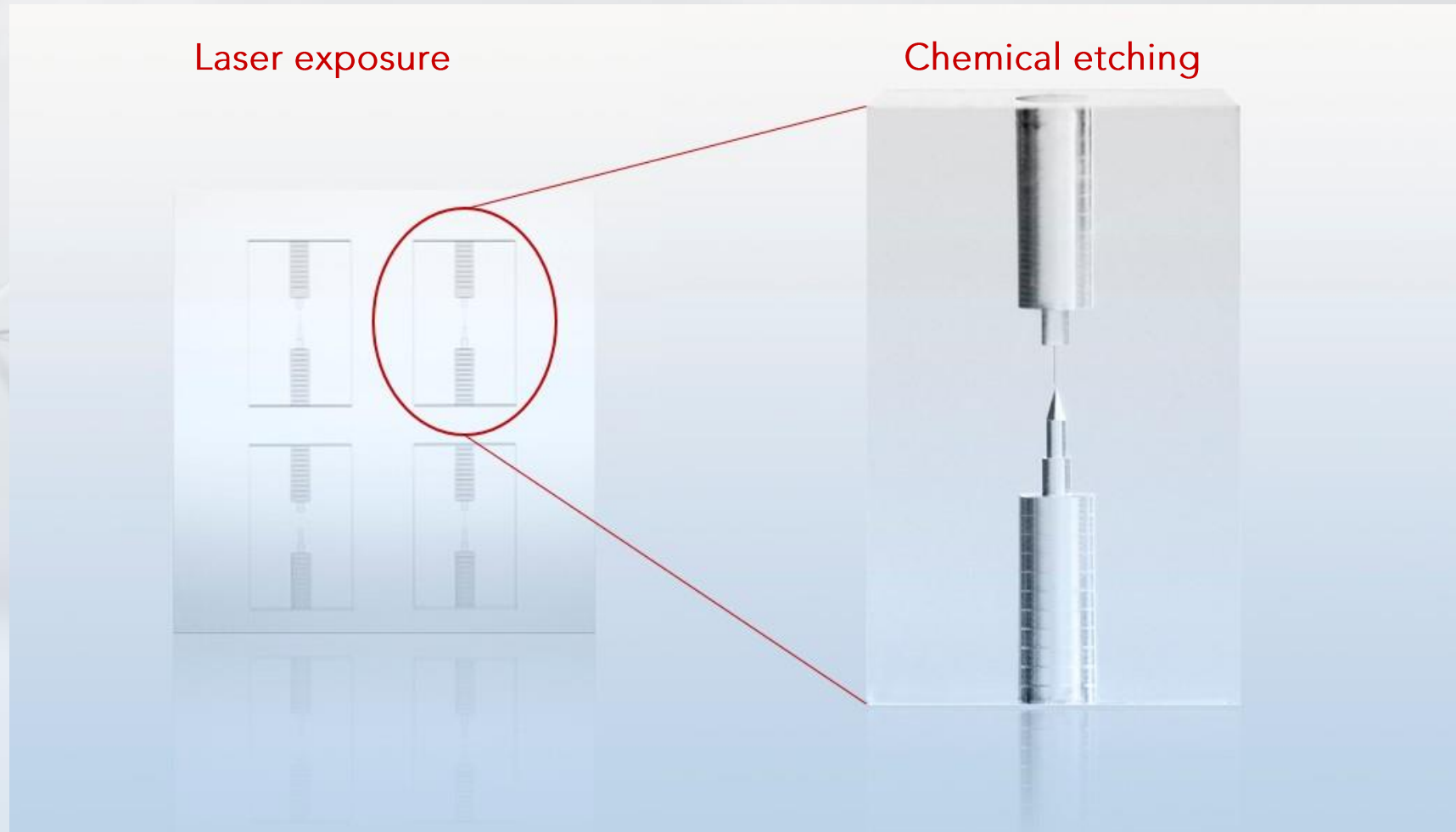


Subtractive  
manufacturing



# FEMTOPRINT® TECHNOLOGY

Selective subtracting manufacturing

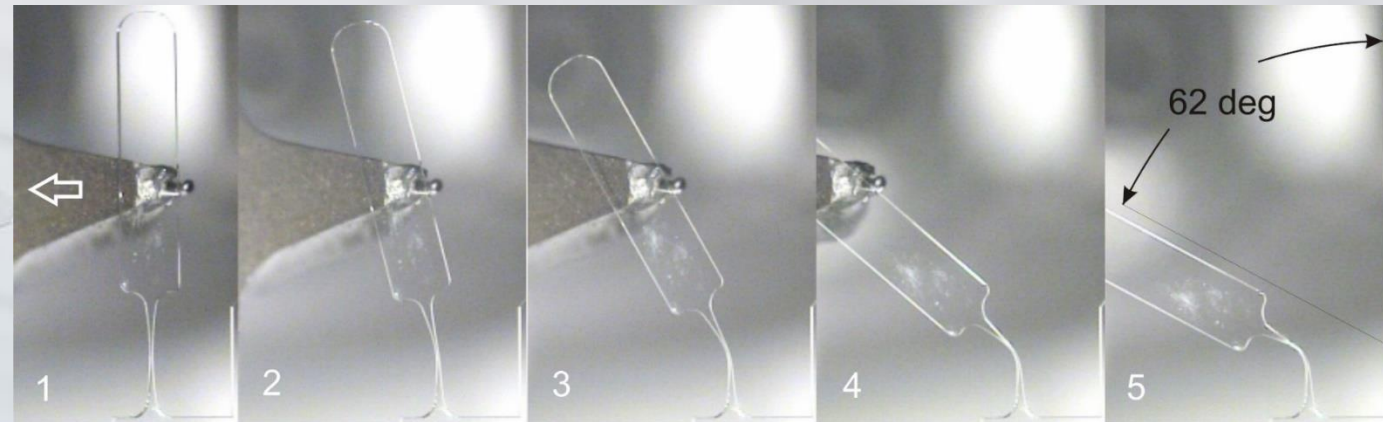


6mm

# WHY NOT GLASS?

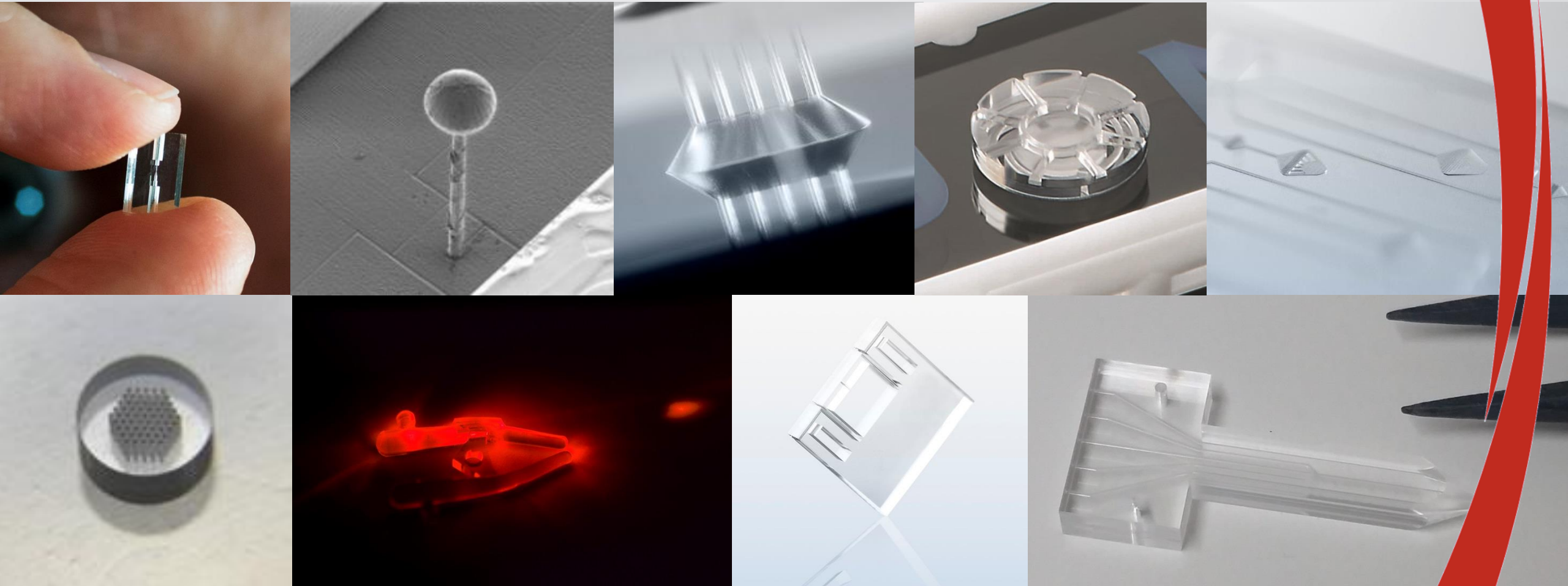
Main advantages

- 01 TRANSPARENT AND ISOTROPIC
- 02 STABLE AND ELECTRICALLY INSULATING
- 03 BIOCOMPATIBLE
- 04 RESISTANT TO CORROSION, ABRASION AND SCRATCHES
- 05 ELEVATED THERMAL PROPERTIES
- 06 ELASTIC



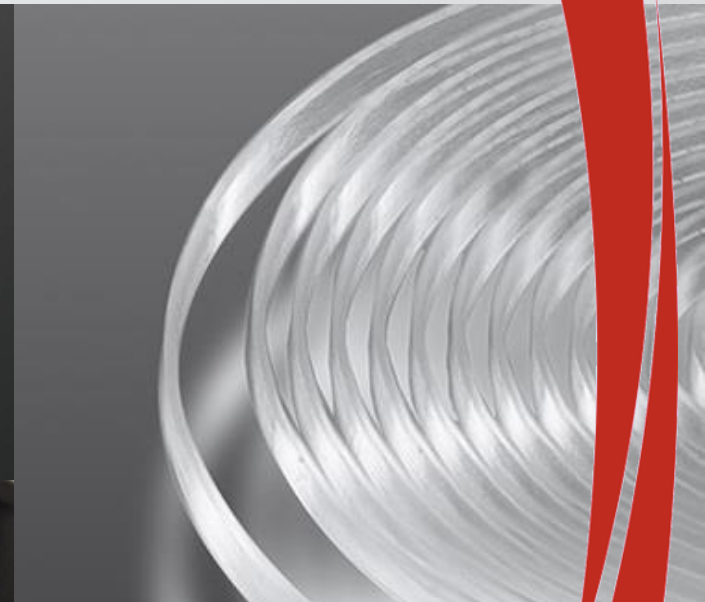


# A WIDE RANGE OF APPLICATIONS



# WATCHMAKERS

2.5D Micromechanics Devices  
Transparent movements for watches



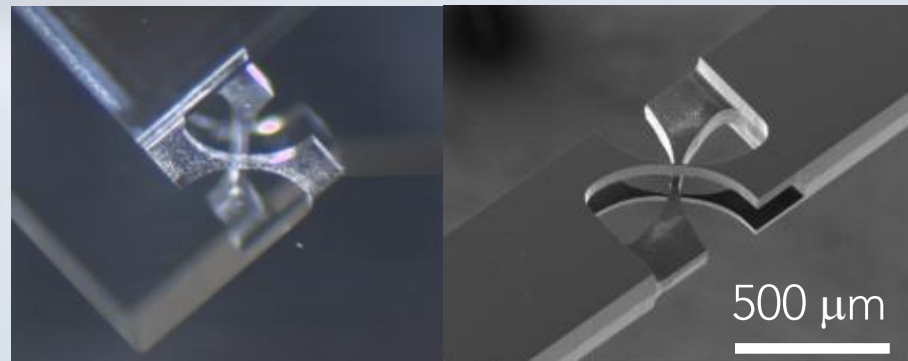
*Ulysse Nardin*



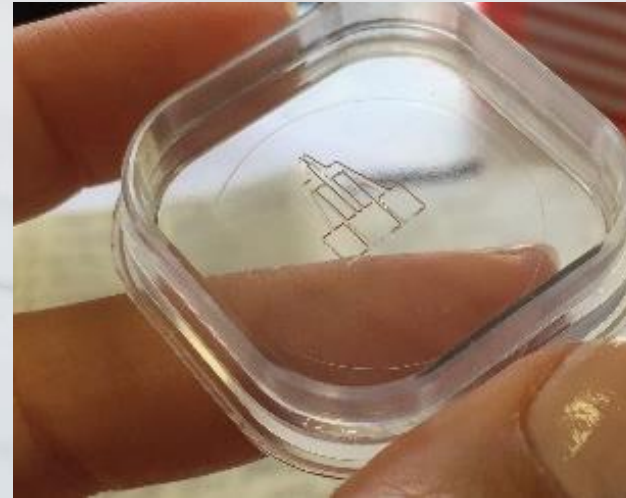
# MICROMECHANICS

3D Mechanical devices

Hinges



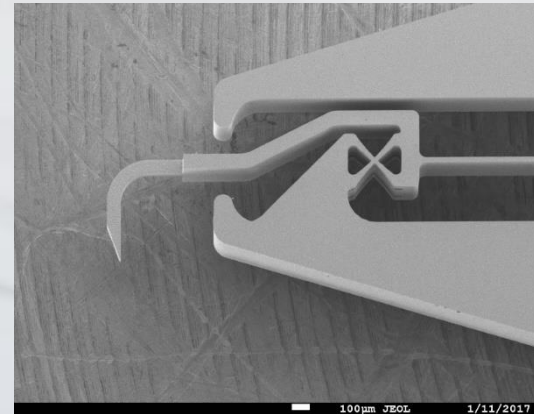
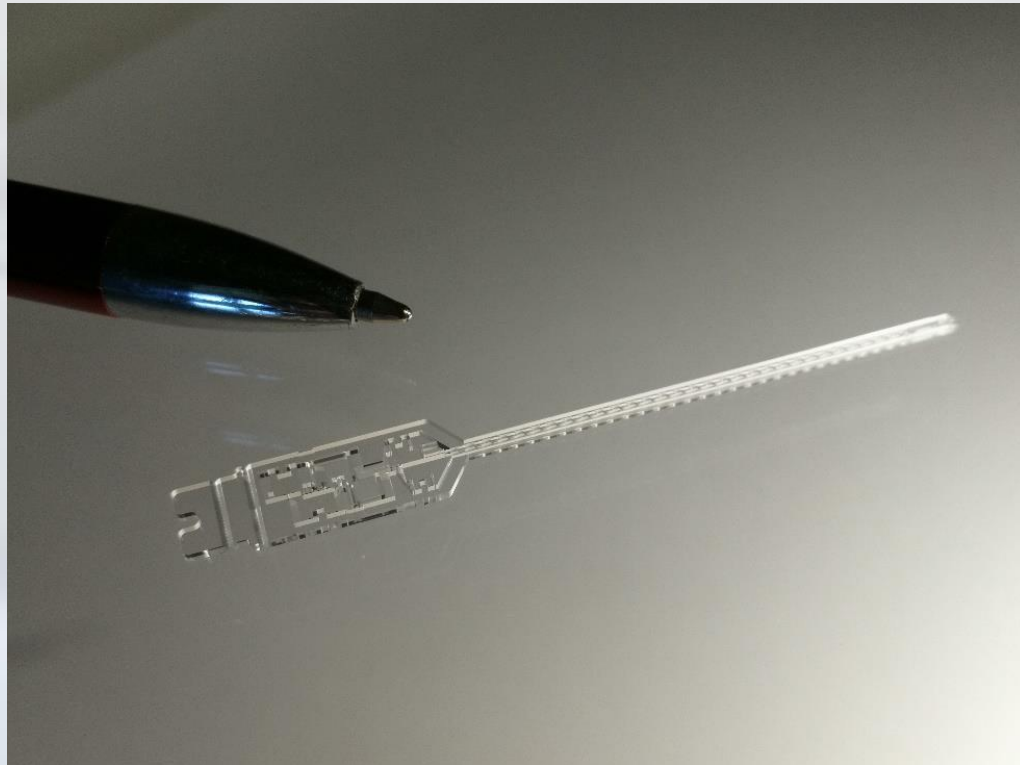
Flexure



# MEDTECH & LIFE SCIENCE

Surgical tools

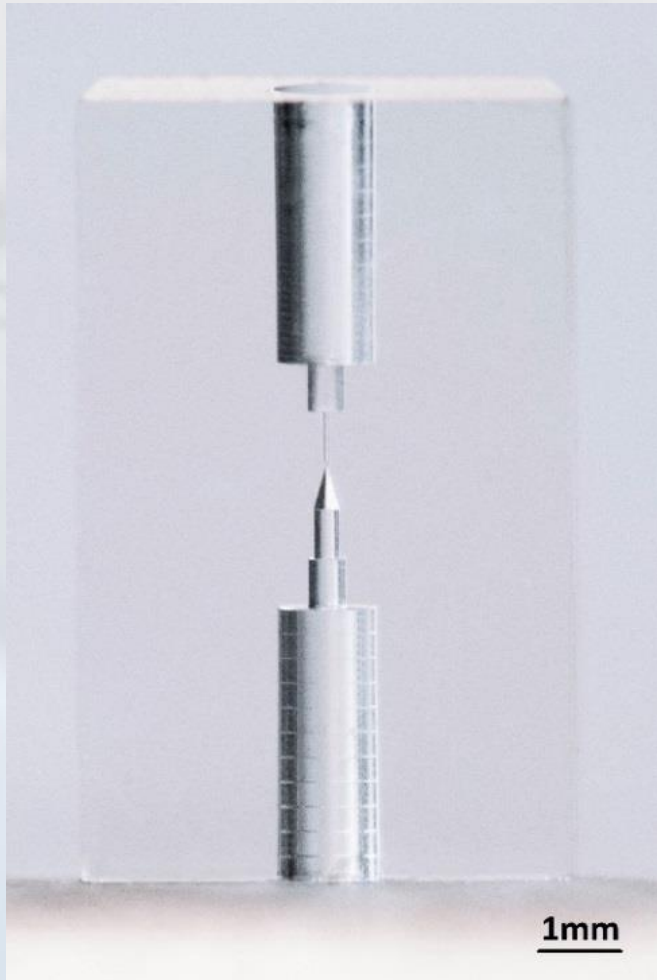
Micro needle integrating fluidic channels for minimal invasive surgery



Hospital  
J. Gonin

# MEDTECH & LIFE SCIENCE

3D Medical Device  
Fluidic connector

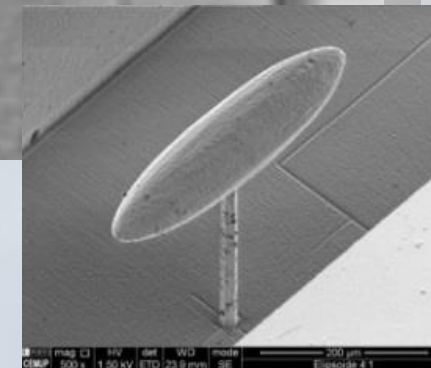
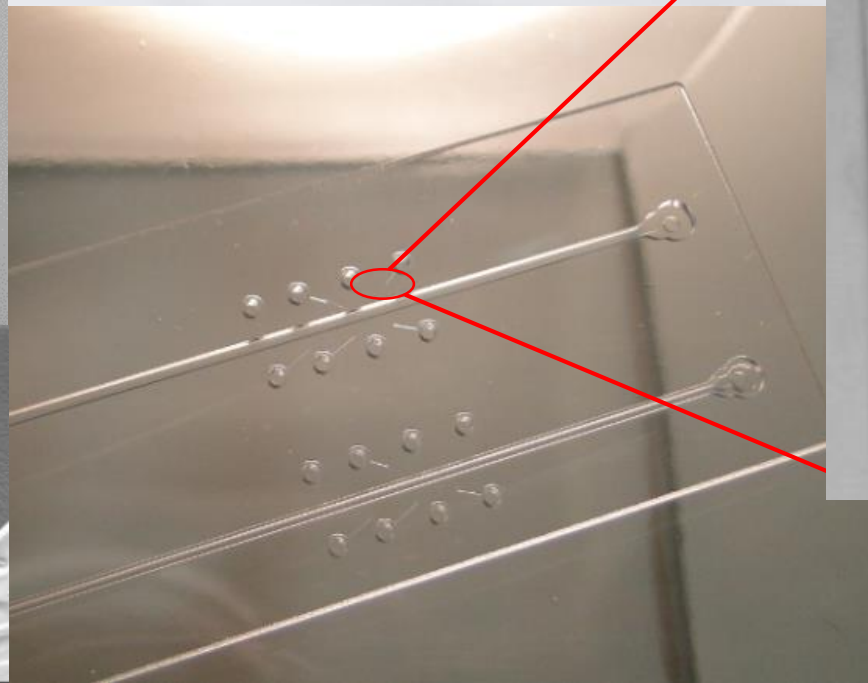
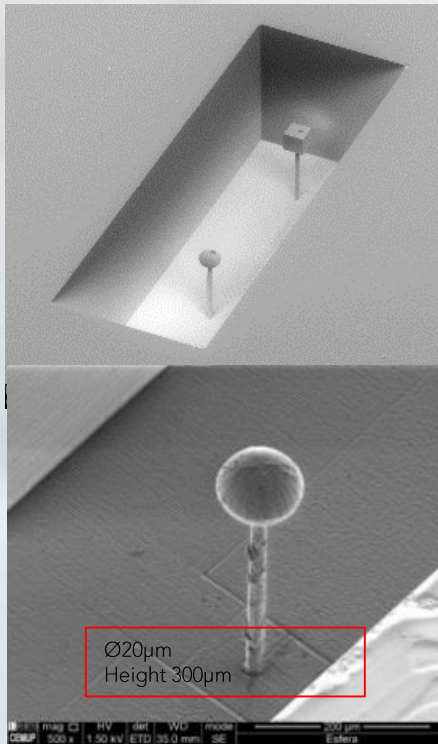


Thickness: 4mm  
Length: 10mm  
Cavity diameter: 20um  
Material: fused silica

# MEDTECH & LIFE SCIENCE

3D Microfluidic Device

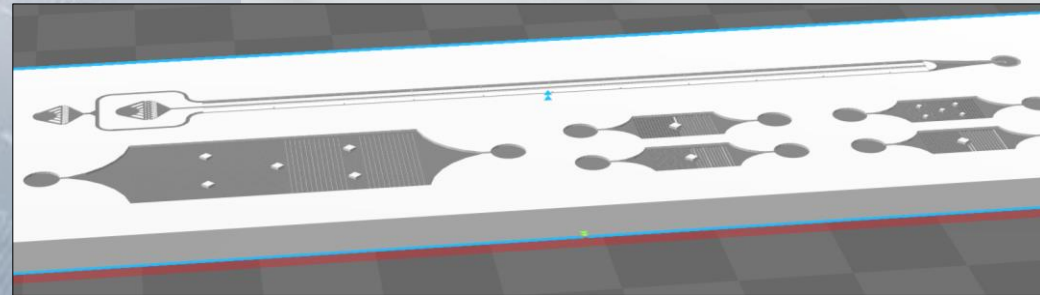
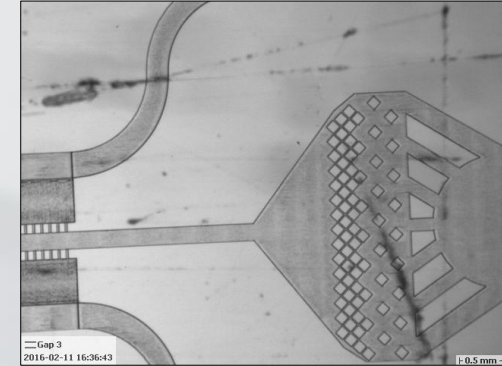
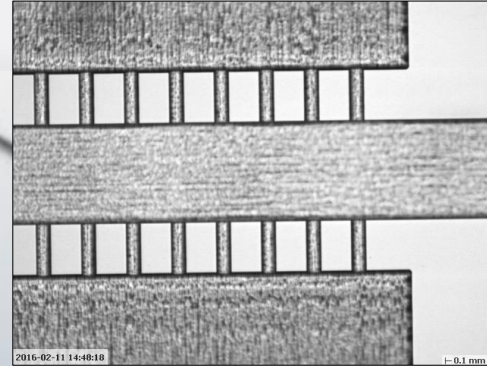
Different 3D targets (MICROBOTS) inside a microfluidic device





# MEDTECH & LIFE SCIENCE

3D complex lab-on-a-chip



Overall channel length : ~15 cm  
Smallest channel diameter: 3  $\mu\text{m}$   
Surface quality: Ra < 100 nm  
Material: fused silica

Courtesy of Leibniz Institute – HKI in Jena, Germany – Dr. Oksana Schvydkiv

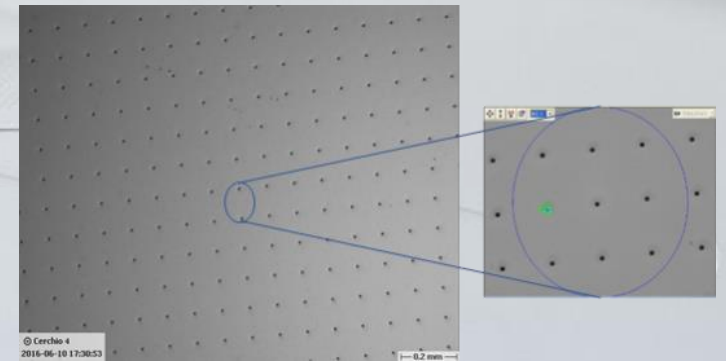
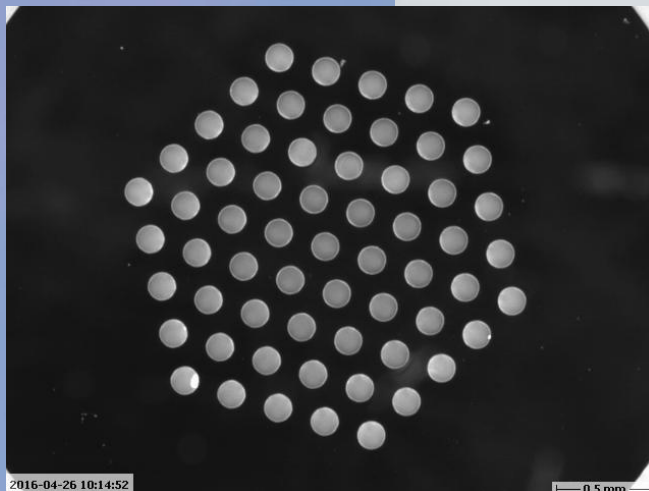
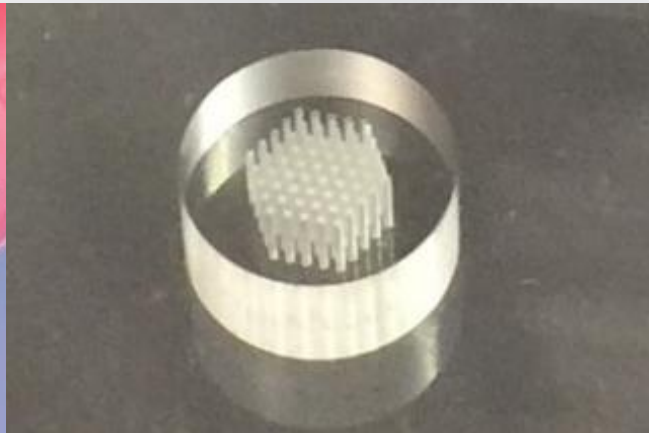


# OPTICS & PHOTONICS

Passive alignment plates

Aperture grid

Passive alignment systems, pinholes



Thickness: 3 mm

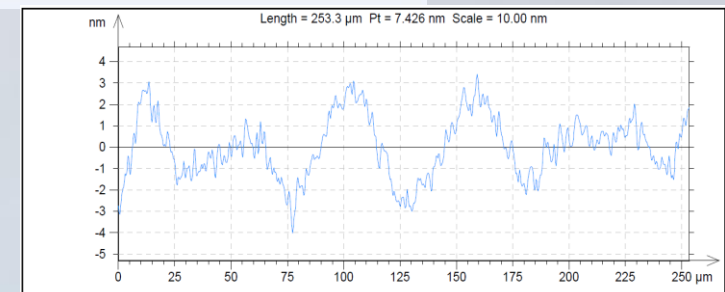
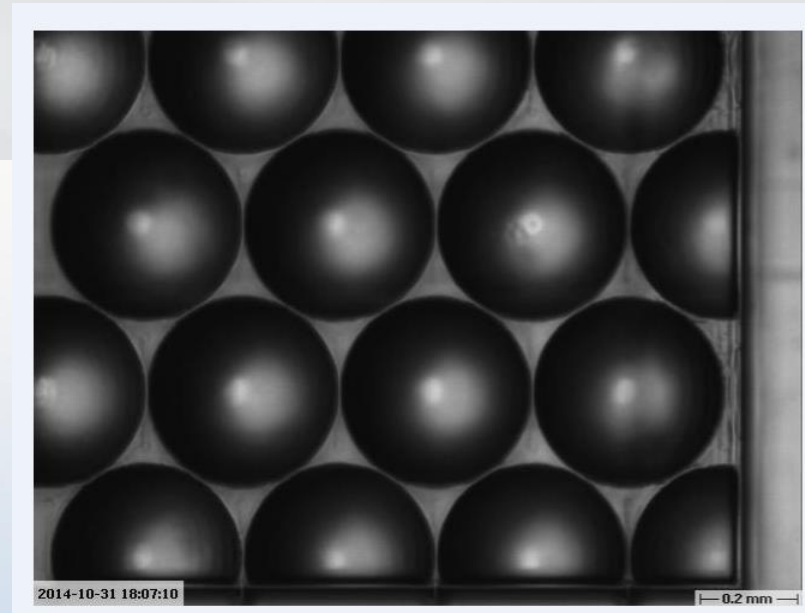
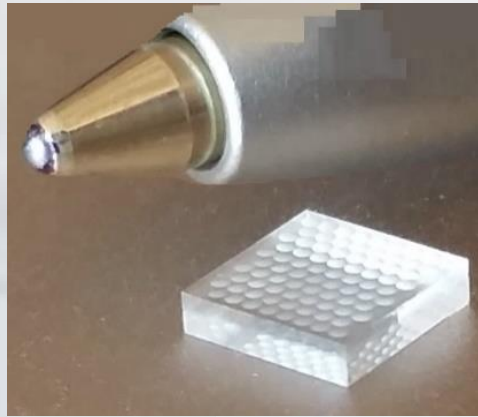
Center-to-center: 250  $\mu\text{m}$

Cavity diameter: 128 to 140  $\mu\text{m}$

Material: fused silica

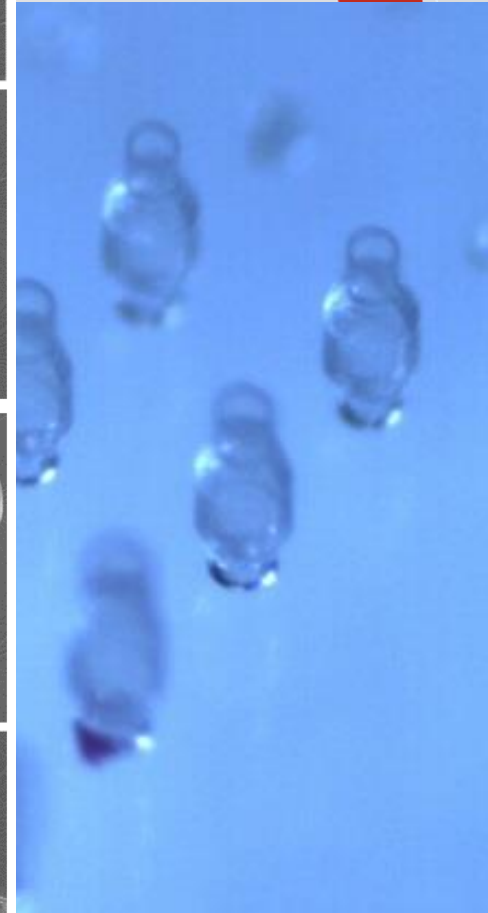
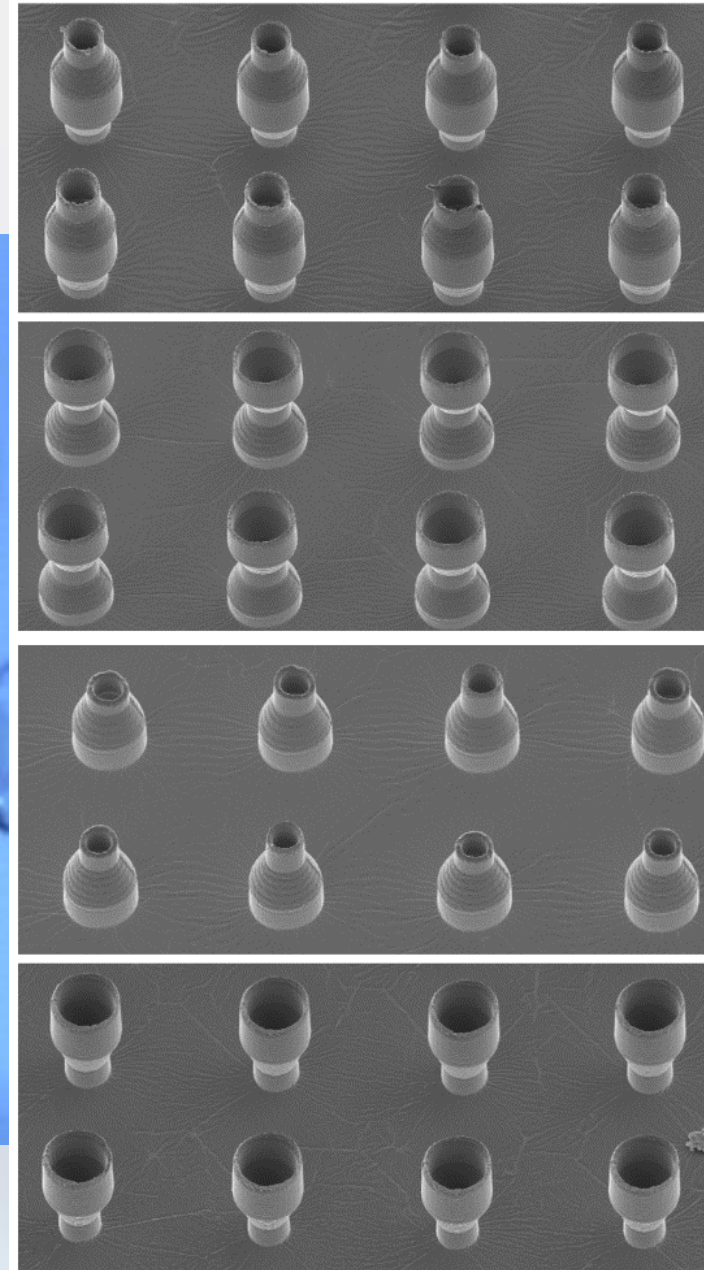
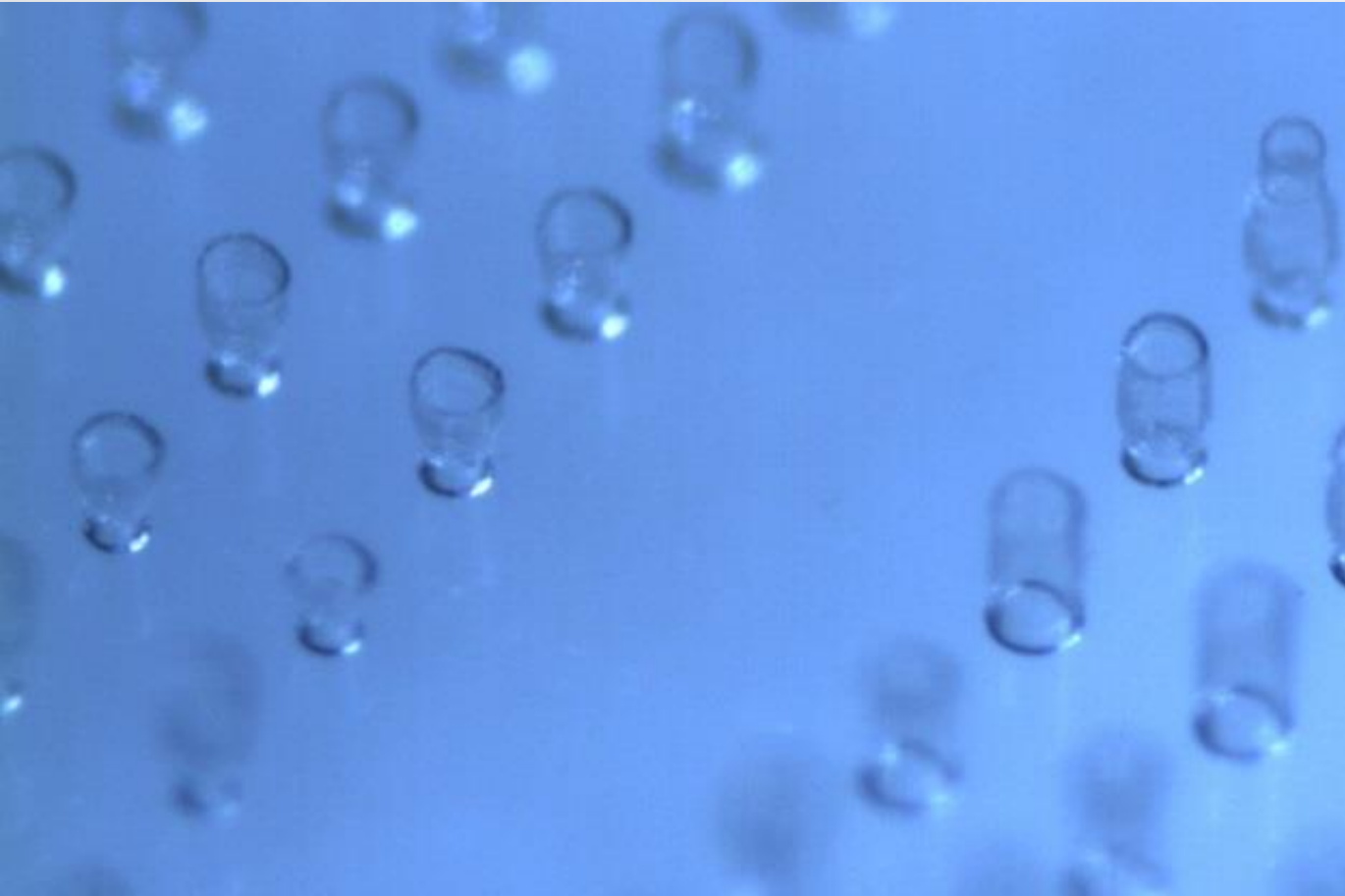
# OPTICS & PHOTONICS

Microlenses for imaging & illumination

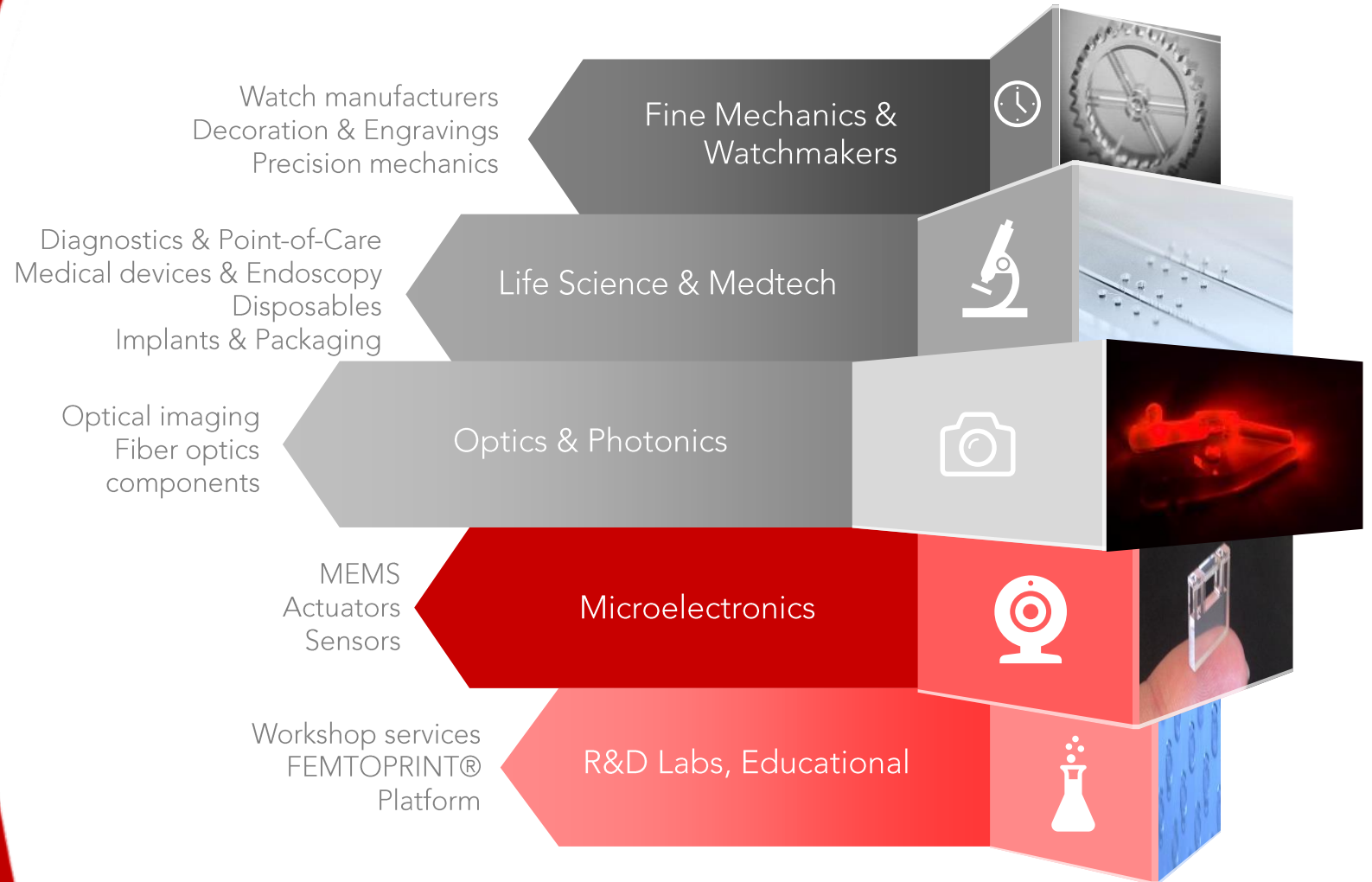


# WHAT ABOUT POLYMERS?

3D Molds integration



# MARKET





# AN EYE BEHIND



Company based in Lugano with exclusive IP rights



12+ employees



ISO 13485:2016 certified

2010 – 2013  
European project,  
investment EUR 3.39M



In operation since  
February 2014



Industrial serial  
production





# GLOBAL PRESENCE



HQ **01**

Lugano, Switzerland



Export **02**

22+ Countries



Distributors **03**

5 in 3 Continents



Customers **04**

200+ active partners



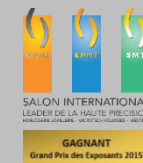
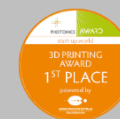
NDA **05**

180+ active agreements



## AWARDS

- ✓ **Best Project Finalist Award** at the EuroNanoForum in Dublin, Jun 2013
- ✓ Finalist of **Innovation Award Laser Technology** in Aachen, May 2014
- ✓ Finalist of **Prism Awards 2015** at SPIE Photonics West in San Francisco, Feb 2015
- ✓ Winner of **Grand Prix 2015** at Salon EPHJ – EPMT – SMT in Geneva, Jun 2015
- ✓ Winner of **Photonics Award**, 3D printing category at Laser World of Photonics in Munich, Jun 2015
- ✓ Finalist of **Swiss Technology Award 2015** in Basel, Nov 2015
- ✓ Winner of **CTI International Entrepreneur Award** at Masschallange Summit 2016 in Geneva, Feb 2016
- ✓ Nominee of **W.A. De Vigier Foundation Award** in Solothurn, May 2016
- ✓ Finalist of **OptecNet Start-up Challenge** in Frankfurt, Jun 2016
- ✓ 33rd ranking at the **TOP 100 Swiss Startup** contest in Zurich, Sep 2016



GAGNANT  
Grand Prix des Exposants 2015

