InnoStamp® 40
“Design your molecular patterns”

Microcontact printing technology dedicated to biology
Empowering Applications

Cell Biology

With microcontact printing, all patterns are feasible up to 100nm. Through deposition of growth factors in nano-patterns, it is possible to control cellular adhesion in order to study cell development, migration, differentiation and even cell polarization in neurons or bacteria.

Biopatterning

The InnoStamp40 can be used to manufacture DNA or protein microarrays. It can deposit between 64 to 256 different biomolecules in one step. The InnoStamp40 is the perfect tool for the manufacturing of biosensors, point-of-care devices and cell based arrays.

Chemistry

Microcontact printing can be used to pattern chemical molecules or can be integrated into a synthesis process. In this case, the InnoStamp40 allows the user to generate catalysis, bifunctional Janus beads, “click” chemistry, pollutants sensors and gas sensors.

Nano/Micro Patterning

A fully automated microcontact printing solution

• Maximum resolution of 140 nm
• Customizable patterns in size and shape
• Multiple molecules deposition, molecular networks
• High Precision Printing

Easy Automation

Make molecular stamping easy

• Reproducible and uniform process
• From preliminary testing to small industrial series
• Shorter development time due to user-friendly system
• High-precision printing by magnetic force

Versatility

Print any molecule on any surface

• Compatible with a wide range of inks and supports:
  - inks: proteins, DNA, antibodies, nanoparticles, silane, thiols...
  - Surface materials: glass slide, coverslips, polymer membranes, plastic, silicon wafer...
• Biocompatible deposition
• Flexible programming

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Printing of collagen adhesive lines separated with PLL-g-PEG passivation agent. After incubation, cells stick to the adhesive patterns.

Printing of streptavidin dots of 1 µm diameter and 3 µm pitch.

Printing of laminin rhodamine lines.

Control of the adhesive sites (green) of a human living macrophage by the patterning of ECM proteins (red) on a glass surface.

Printing of single actin filaments.

Applications

Service activities

- Custom printing & Stamp manufacturing
- Micropatterned substrate supply
- Process development / R&D
- Licensing

BIOSSOFT
Our joint-lab
Free trial of the InnoStamp®40 in Laas-CNRS laboratory, Toulouse, France

Challenge us with your application!

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