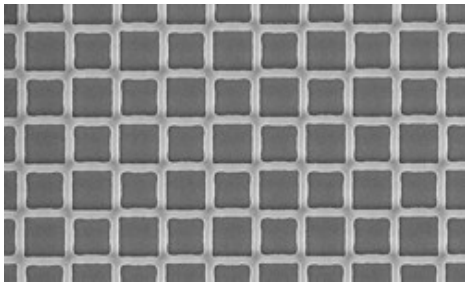
Nanostructuring News

Newsletter of EULITHA AG - October 2015

We are excited to present to you our new products, solutions and news in this newsletter. We look forward to hearing from you and working with you to find solutions to your lithography needs.

Product News

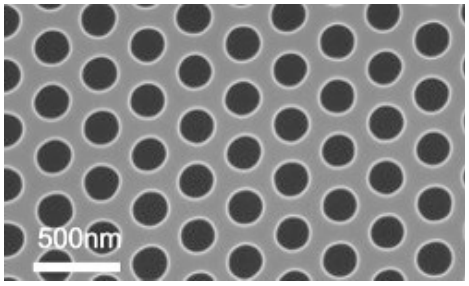
Fine Grids and Meshes with Displacement Talbot Lithography



In a recently published article Eulitha researchers describe a new technique in which phase shifting masks are used in conjunction with Displacement Talbot Lithography to print various meshes and grids with sub-micron resolution. The use of phase shifting masks enables the formation of high-contrast images while the DTL technique ensures uniform printing over large areas. The method is suitable for the production of engineered growth substrates for LEDs and photonic structures, among others. The article can be accessed at the Microelectronic Engineering Journal website.

Read our article on Microelectronic Engineering Journal

New standard patterns



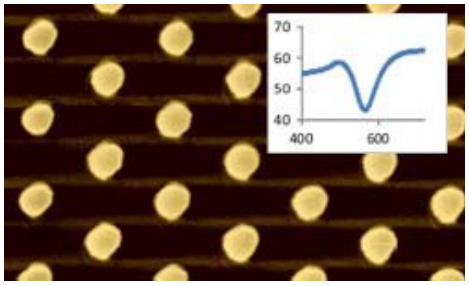
P350h_h_100d
High-resolution array of holes on a hexagonal lattice with period 350nm

MP800L1500
Linear gratings with periods 800, 1000, 1200, 1500nm combined on a single substrate

P1300L_75w55
Linear grating with period 1300nm

New standard patterns produced using our PHABLE technology are now available. They can be provided either on silicon or fused silica for use in nanoimprint processes. They can also be printed on custom substrates.

Gold Plasmonic Structures - New standard patterns in Au



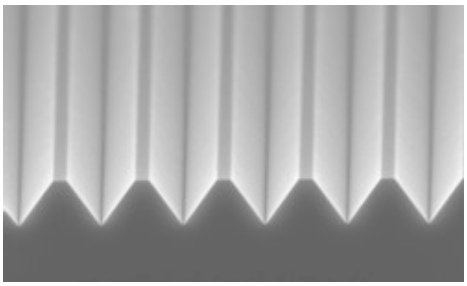
Eulitha is introducing a new line of nano-structured products for use in the field of plasmonic research. The first product introduced in this category is an array of Au dots formed on fused silica substrates.

- Large area
- Innovative Phable method
- Quartz substrate
- Pillar array with period 600nm

Spectrometric transmission measurements show a clear resonance at a wavelength of about 550 nm. The plasmonic structure is immediately available as an off-the-shelf standard product.

High-Quality Nano- & Micro- V-Grooves by Anisotropic Etching of Silicon

Anisotropic wet-etching of Si is a well-known micro- or nano-fabrication technique for obtaining smooth and precise geometrical shapes in the material. The process, however, requires considerable know-how which often discourages researchers from taking advantage of this unique possibility. Eulitha is now combining its experience in the fabrication of periodic patterns with its wet etching expertise to offer standard and customized solutions.

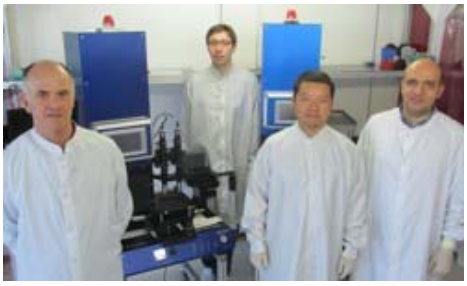


Phabler 100 News

PhableR 100 High-resolution photolithography tool

The innovative PhableR 100 photolithography tool for printing high resolution periodic patterns is generating strong interest from university research laboratories. Eulitha has recently announced the delivery of a system to University of Twente in the Netherlands, and a purchase agreement with Changchun Institute of Optics, Fine Mechanics and Physics (CIOMP), China.

Learn more about Phabler



Conferences & Events

Technical presentation at MNE & MNC

Eulitha will make technical presentations at two leading lithography conferences; first at the MNE conference in The Hague, Netherlands in September, and then at the MNC conference in Toyama, Japan in November. Our researchers will report on novel photolithography methods and their applications.

MNE 2015:

- Through-Wafer Photolithographic Exposure for Control of Resist Sidewall Profile
- Fabrication of high-aspect-ratio polarizers with Displacement Talbot Lithography

MNC 2015:

- Patterning of Sapphire Substrates with Displacement Talbot Lithography for LED Fabrication

EULITHA

www.eulitha.com - info@eulitha.com
tel: 41 56 281 2152
Althau 1, 5303 Würenlingen, Switzerland