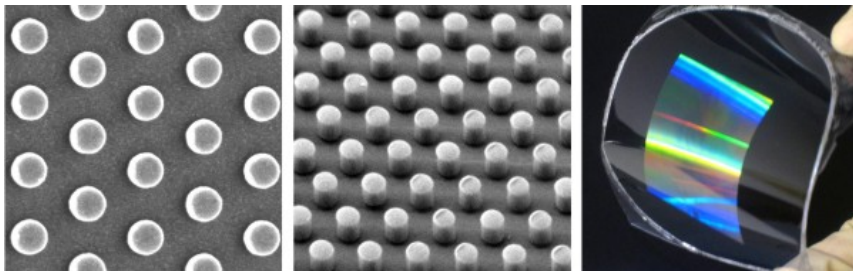


smaller better nanostructures

PHABLE-made Photonic Templates: Silicon or Fused Silica

In the last edition of our newsletter we announced the revolutionary photolithography technology PHABLE. Eulitha has now developed a series of standard photonic templates for replication processes, in particular nanoimprint and soft lithography. The templates are made with the PHABLE technology and are etched into silicon or quartz substrates using Eulitha's optimized reactive ion etching process that produces smooth sidewalls with a slight positive slope that facilitates problem-free demolding in a replication process. The range of templates currently offered includes a 600 nm period hexagonal array of holes with an area of 46 mm x 46 mm. The molds have been tested by a number of collaborators and customers. The feedback we have received has been extremely positive and has included the words "perfect" and "exceptional". Our proprietary PHABLE technology allows us to offer these high-quality templates at competitive prices. Please [check our brochure](#) for the list of currently available templates or [contact us](#) for custom designs and volume discounts.



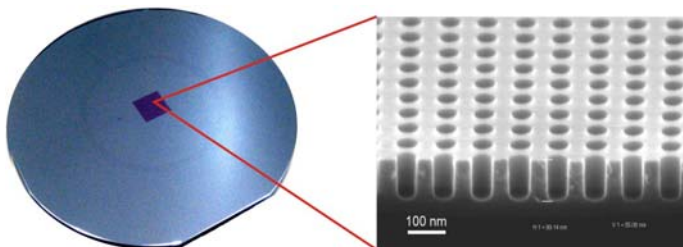
PHABLE™ Photonic pattern replicated on a flexible polymer foil. 300 nm diameter pillars on a hexagonal grid.

Pattern area: 46 mm x 46 mm.

(Images courtesy of M. Altana, INKA Institute, PSI)

10 Billion tiny holes - Affordable Price

Eulitha's world leading research team has succeeded in developing efficient processes for fabricating unique nanohole arrays over areas that were considered too large to be affordable until now. Nanoholes formed with the newly developed process have diameters down to 30 nm and they are etched into silicon substrates up to an aspect ratio (depth/diameter ratio) of 2. The period of the nanohole patterns is freely adjustable to anywhere between 70 nm to tens of microns. The size of the patterned areas is typically measured in square centimeters. The patterns are continuous over these areas. Fields of application for the new nanohole arrays include patterned epitaxial growth substrates, magnetic nanostructures, nanoparticle production, biology, molecular self assembly and nanoimprint processes.



- Hole diameter: 30 nm and up
- Pattern period: 70 nm – 100 um
- Pattern area: 1 – 10 cm²
- Aspect ratio: up to 2
- Substrate size: 2" – 4"

Representative in Japan: Kyodo International

Our customers in Japan now have an even easier way to access Eulitha's products. Eulitha AG has reached an agreement with Kyodo International for exclusive distribution of Eulitha's nanostructured products in Japan. Please contact Kyodo International at denshi@kyodo-inc.co.jp with your inquiries.

