

Soft UV – Nanoimprint Lithography for Resonant Nanopillars fabrication

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Nanoimprint lithography (NIL) is a high resolution, low cost, high throughput lithography technique that has been at the forefront of technological advances in nanofabrication of the last couple of decades, especially due to its scalability features (from research to industrial level).

The use of resonant nanopillars (RNPs) arrays as optical biosensors has been extensively studied, thanks to their promising performances of biological detection with good sensitivity and limit of detection.

In this work we evaluate the use of NIL technique for the fabrication of RNPs arrays and describe the production in a step-by-step manner..

Figures

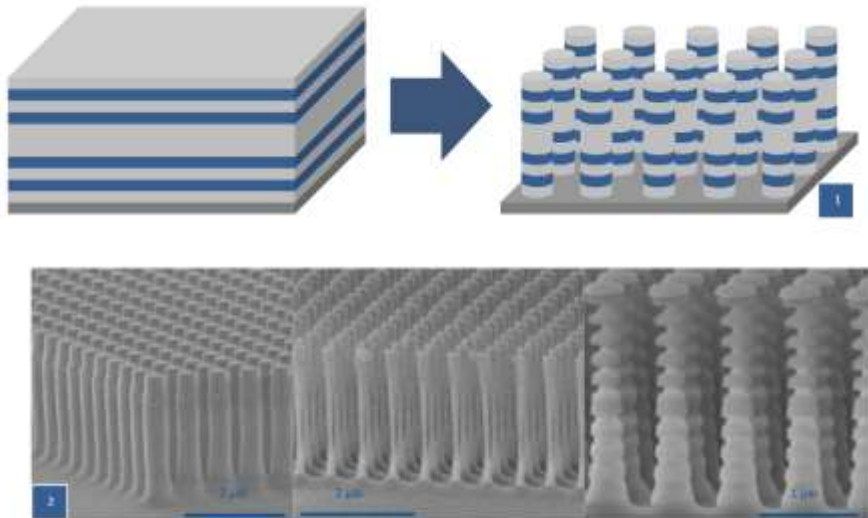


Figure 1: Figure 1. From bulk raw material to nanostructured surface. Figure 2. SEM images of different types of RNPs