EPFL STI IMT-NE PV-LAB

Seminar

Friday 20th January 2012
MT 2 11.00 - ≈12.00

Rue A.-L. Breguet 2, CH-2000 Neuchâtel

PHABLE : A new photolithography method for photonics

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ABSTRACT

There are countless examples for the use of nanometer scale periodic structures to enhance the performance of photonic devices such as LEDs, PV cells, displays, in the literature. The enhancement is generally related to the optimization of the interaction of the light field with the device surface. However, there are other mechanisms as well, such as the attainment of better crystalline quality on nano-patterned templates or enhanced photo-carrier capture in patterned PV devices. The production of such patterns on an industrial scale requires a high-throughput and low-cost method that can work with often non-ideal surfaces of photonic devices. We have recently introduced a novel photo-lithography method called PHABLE that has this potential.