

## **Highly Crystalline Urchin-like structures made of Ultra-thin Zinc Oxide Nanowires**

Anisha Gokarna,<sup>1,\*</sup> Romain Parize,<sup>1</sup> Hind Kadiri,<sup>1</sup> Komla Nomenyo,<sup>1</sup> Gilles Patriarche,<sup>2</sup> Patrice Miska,<sup>3</sup> Gilles Lerondel<sup>1</sup>

<sup>1,\*</sup> Laboratoire de Nanotechnologie et d'Instrumentation Optique, Institut Charles Delaunay, CNRS UMR 6279, Université de Technologie de Troyes, 12 rue Marie Curie, BP 2060, 10010 Troyes, France.

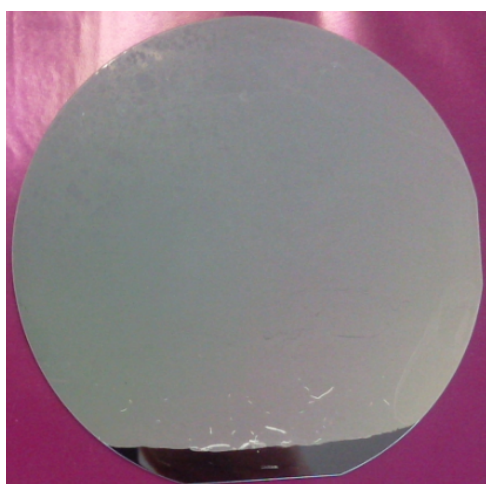
<sup>2</sup> Laboratory of Photonics and Nanostructures, UPR-20, Site Alcatel de Marcoussis, Route de Nozay, 91460 Marcoussis, France.

<sup>3</sup> Institut Jean Lamour – CNRS UMR 7198 – Université de Lorraine, Faculté des Sciences et Technologies, BP 70239, F-54506 Vandoeuvre les Nancy, France.

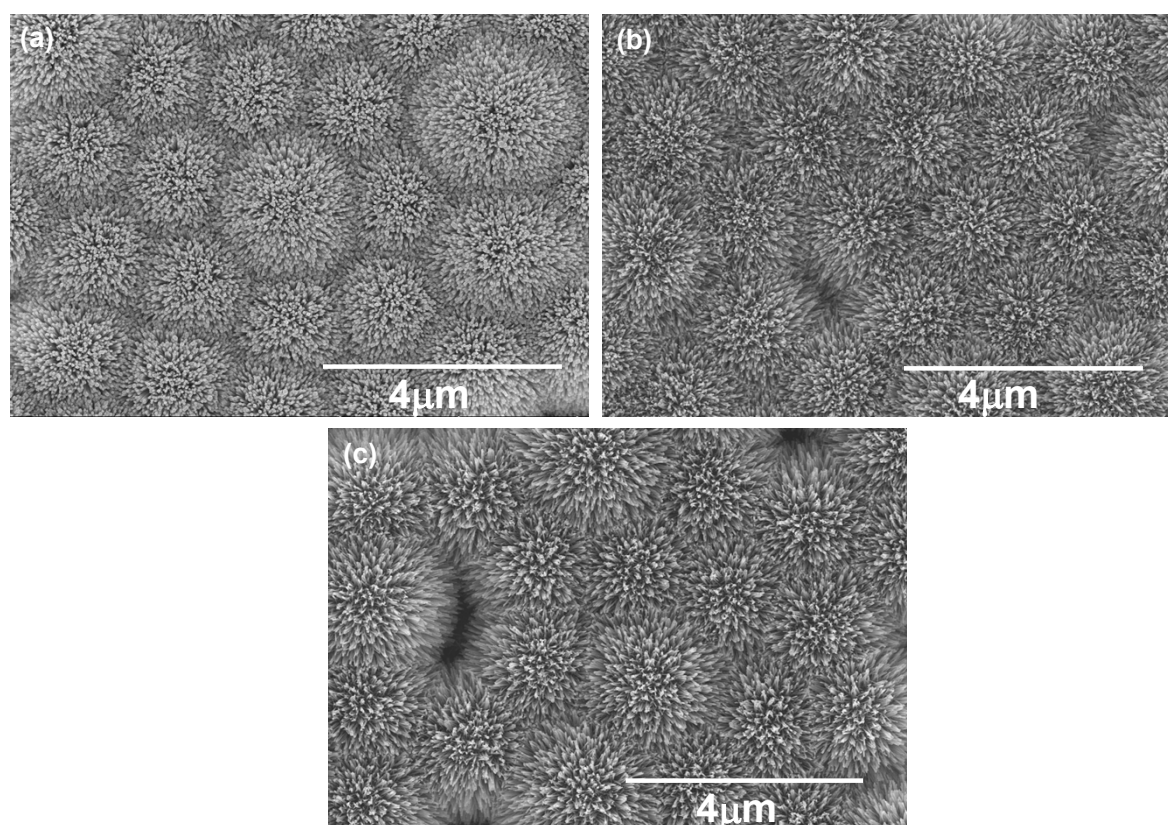
Corresponding author : Tel (+33) 351591146

E-mail Address : anisha.gokarna@utt.fr, lerondel@utt.fr

Supplementary Information :



**Figure S1** : Photograph showing uniform, homogeneous deposition of PS beads on a 3 inch silicon wafer.



**Figure S2** : SEM images of an ensemble of urchins like structures with ZnO NWs, grown as a function of varying solution concentration. Concentration of the solution used was (a) 0.029M, (b) 0.02M and (c) 0.018M respectively.