



## Supporting Information

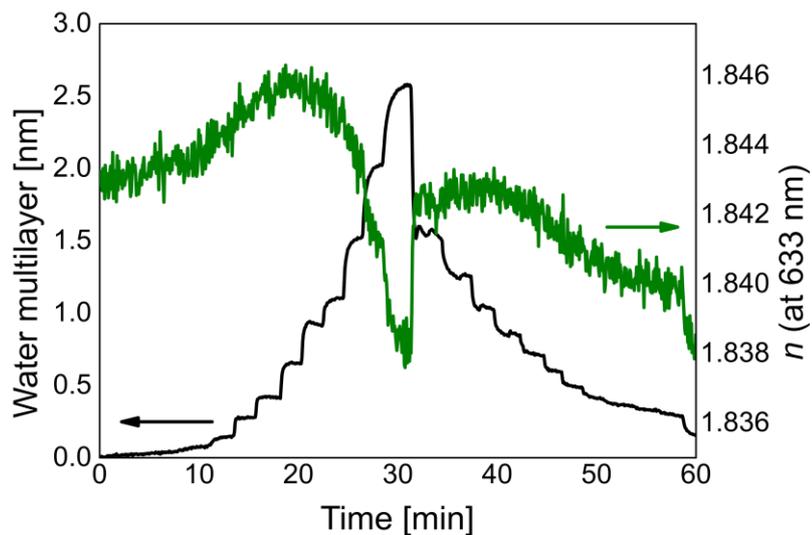
for

### **On the transformation of “zincone”-like into porous ZnO thin films from sub-saturated plasma enhanced atomic layer deposition**

Alberto Perrotta, Julian Pilz, Stefan Pachmajer, Antonella Milella and Anna Maria Coclite

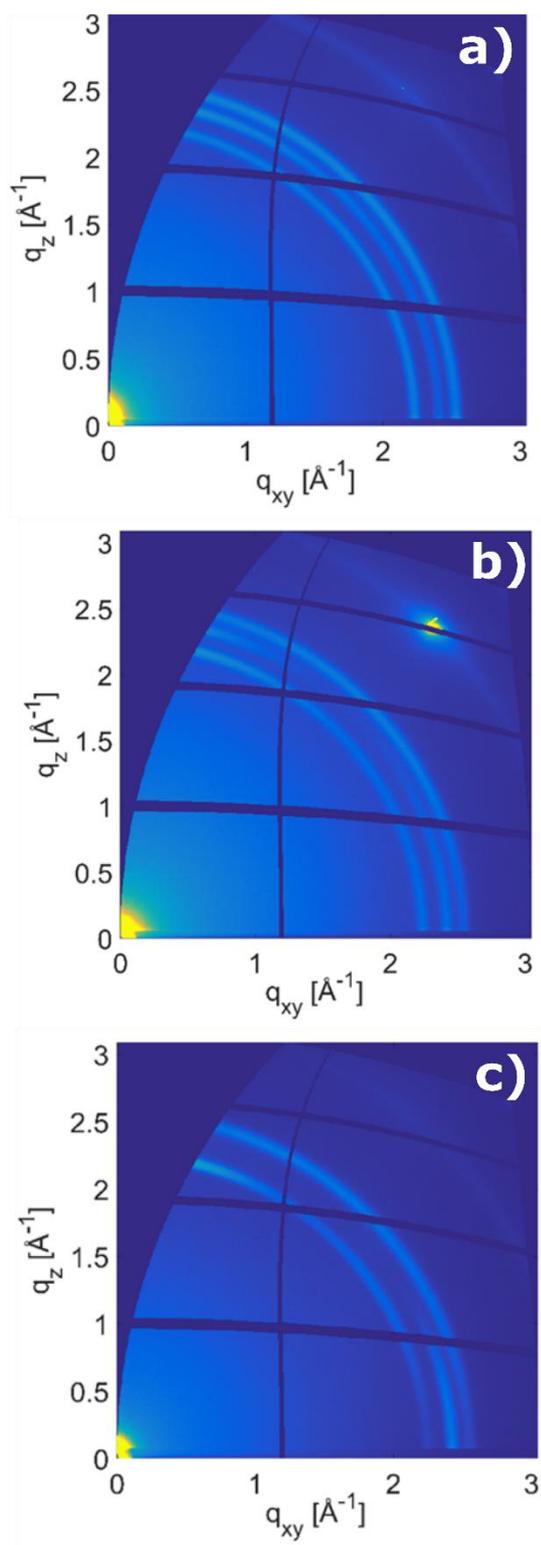
*Beilstein J. Nanotechnol.* **2019**, *10*, 746–759. [doi:10.3762/bjnano.10.74](https://doi.org/10.3762/bjnano.10.74)

**Details on the EP measurements, GIXD data recorded after annealing at 600 °C, saturation curves for the PE-ALD ZnO process optimized at room temperature, example of fitting of the HR XPS peak associated to O 1s**

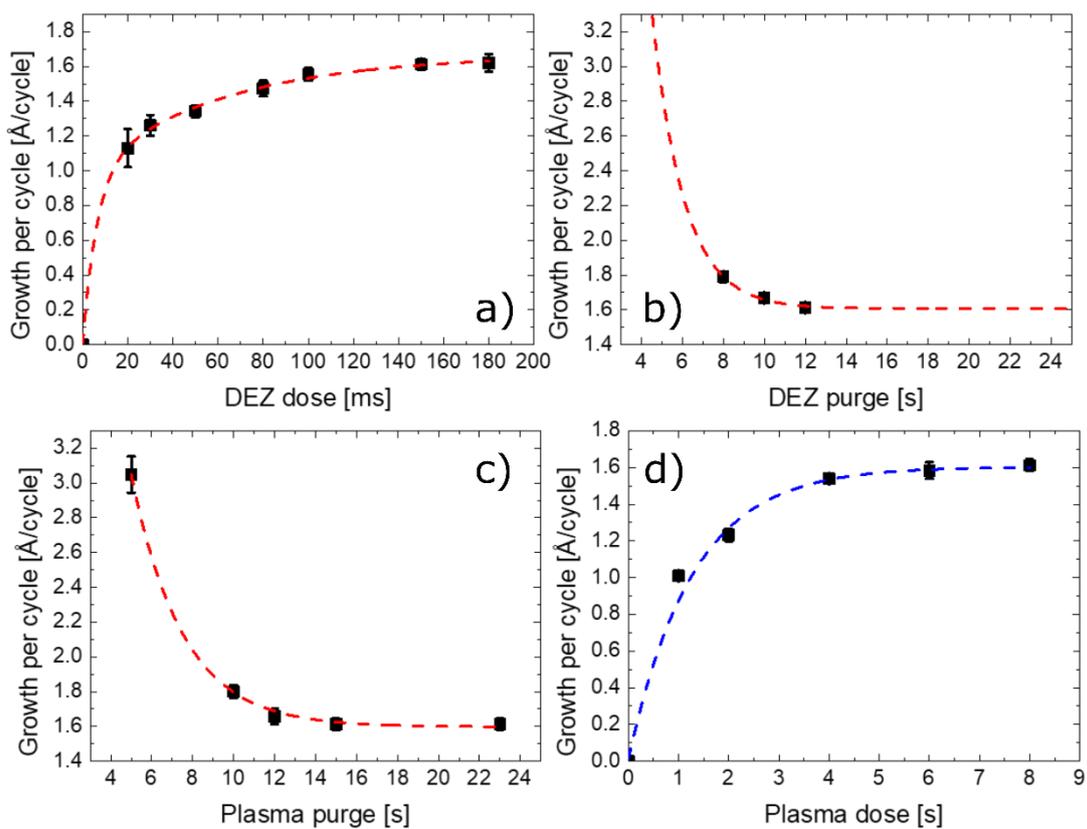


**Figure S1:** Example of the ellipsometric porosimetry measurement performed on an annealed ZnO layer. The water multilayer thickness and the refractive index are here reported as a function of time.

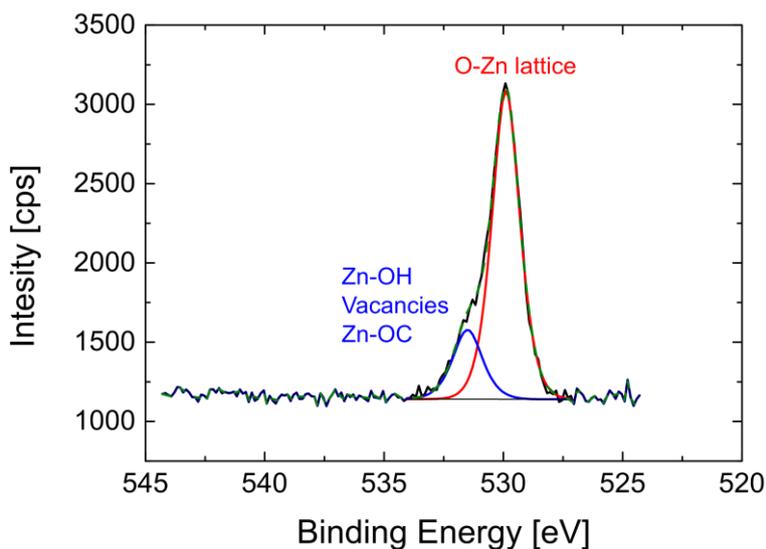
The relative humidity was changed step by step in the range 0–95%.



**Figure S2:** GIXD maps for the zirconium-like layers deposited at different plasma times after annealing at 600 °C: a) 1 s b) 2 s and c) 4 s plasma time.



**Figure S3:** Saturation curves for the PE-ALD ZnO used in this manuscript. a) DEZ dose, b) DEZ purge, c) plasma purge, d) plasma dose, also shown in Figure 1 in the manuscript.



**Figure S4:** Example of fitting of the HR XPS peak associated to O 1s. the attribution of the peaks is also reported in the plot.