SUPPORTING INFORMATION

Manuscript: "**Structural study of TiO_2 hierarchical microflowers grown by aerosol assisted MOCVD**", by S. Biswas et al.

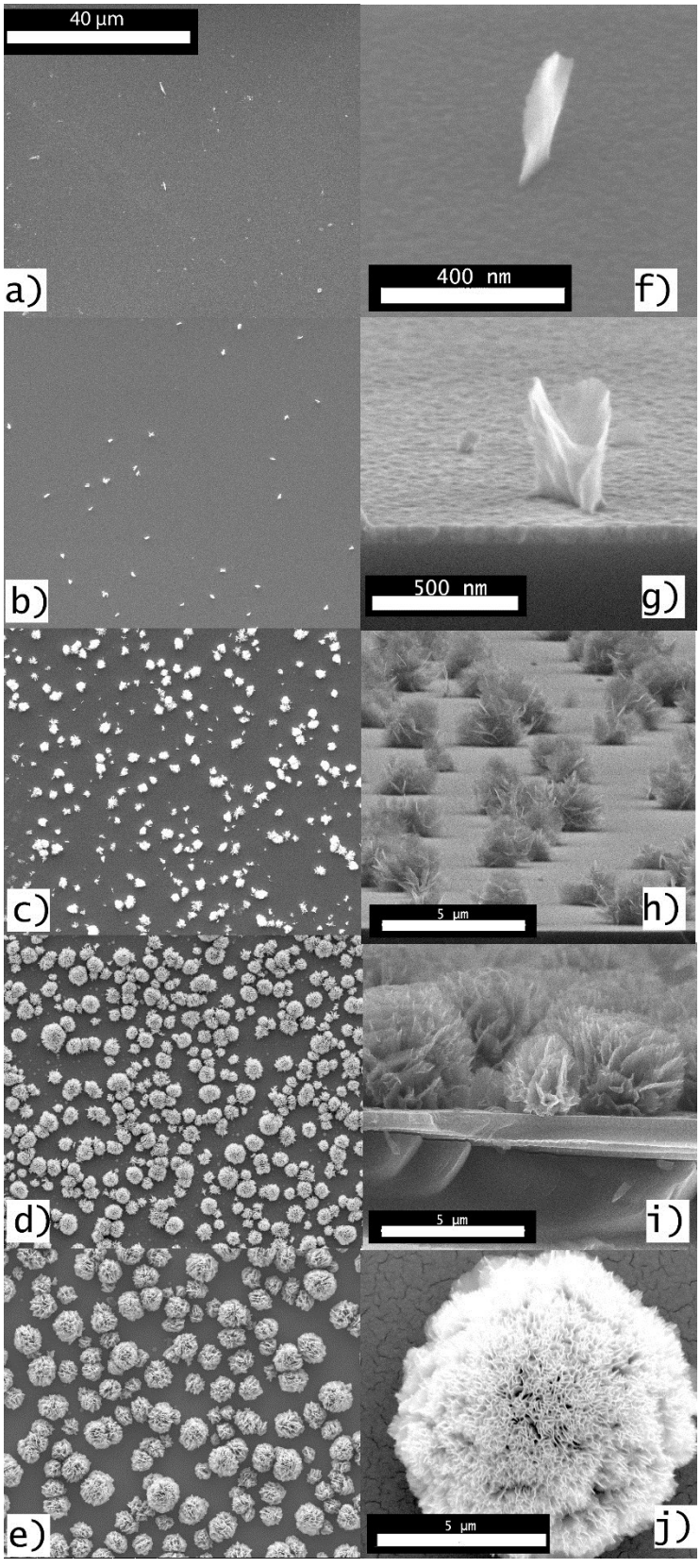

Figure S1: On left, SEM images of features developed on the surface of TiO_2 thin film samples for different deposition times obtained at the same magnification: a) 2 min, b) 8 min, c) 10 min, d) 60 min and f) 120 min

On right, characteristic features of the corresponding sample of right to show the evolution for (f) a single petal at 2 min, (g) a double petal structure at 8 min, (h) microflowers already formed and dispersed at the surface for 10 min, (i).and a tilted view of a sample for 60 min. The Figure (j) corresponds to a microflower obtained at a deposition time of 120 min which presents a higher density of petal.

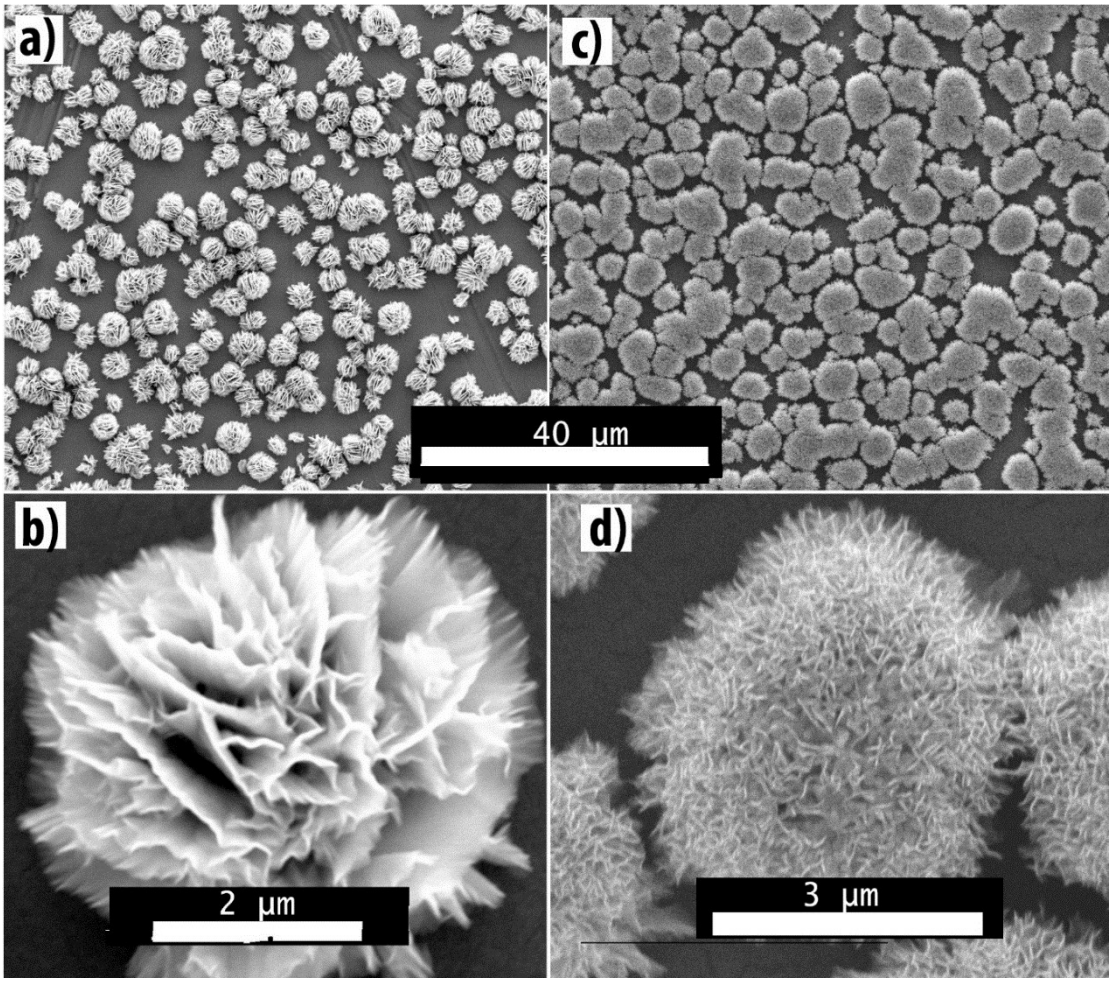

Figure S2: Comparison of microstructures corresponding to deposition at 490 °C for 60 min but using different precursor concentration solutions a) and b) a standard concentration of 0.03 mol/l corresponding to a coverage area fraction of 40% and c) and d) 0.06 mol/l which leads to a coverage area fraction of 70%. Other than the change in microflower density, the petal density is also increased when using high precursor concentration (b compared to d).

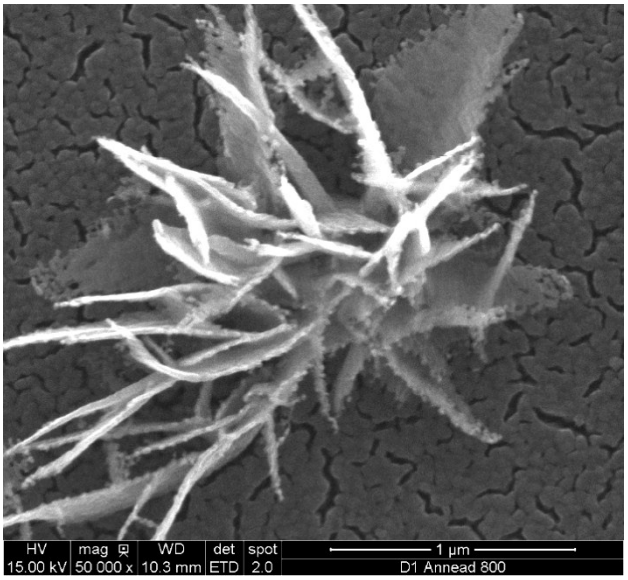

Figure S3: Top view of a sample annealed at 800 °C. The TiO_2 film beneath the flower presents cracks produced by shrinking during the annealing process.

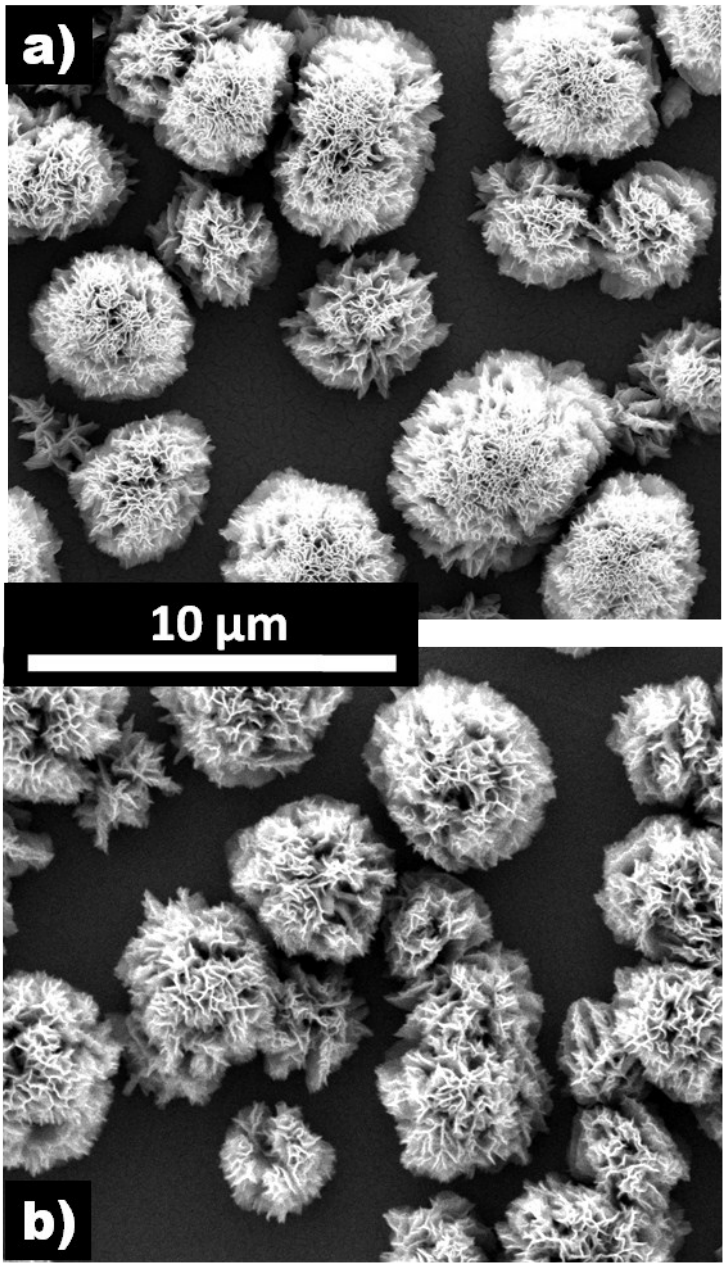

Figure S4: Top view of TiO_2 films deposited at 490 °C for a) 90 min in a single run and for b) 90 min but in two separate runs (60 min + 30 min).