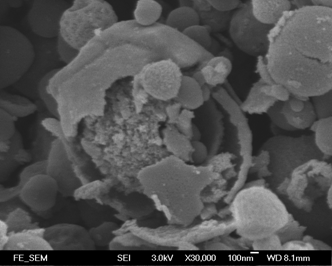
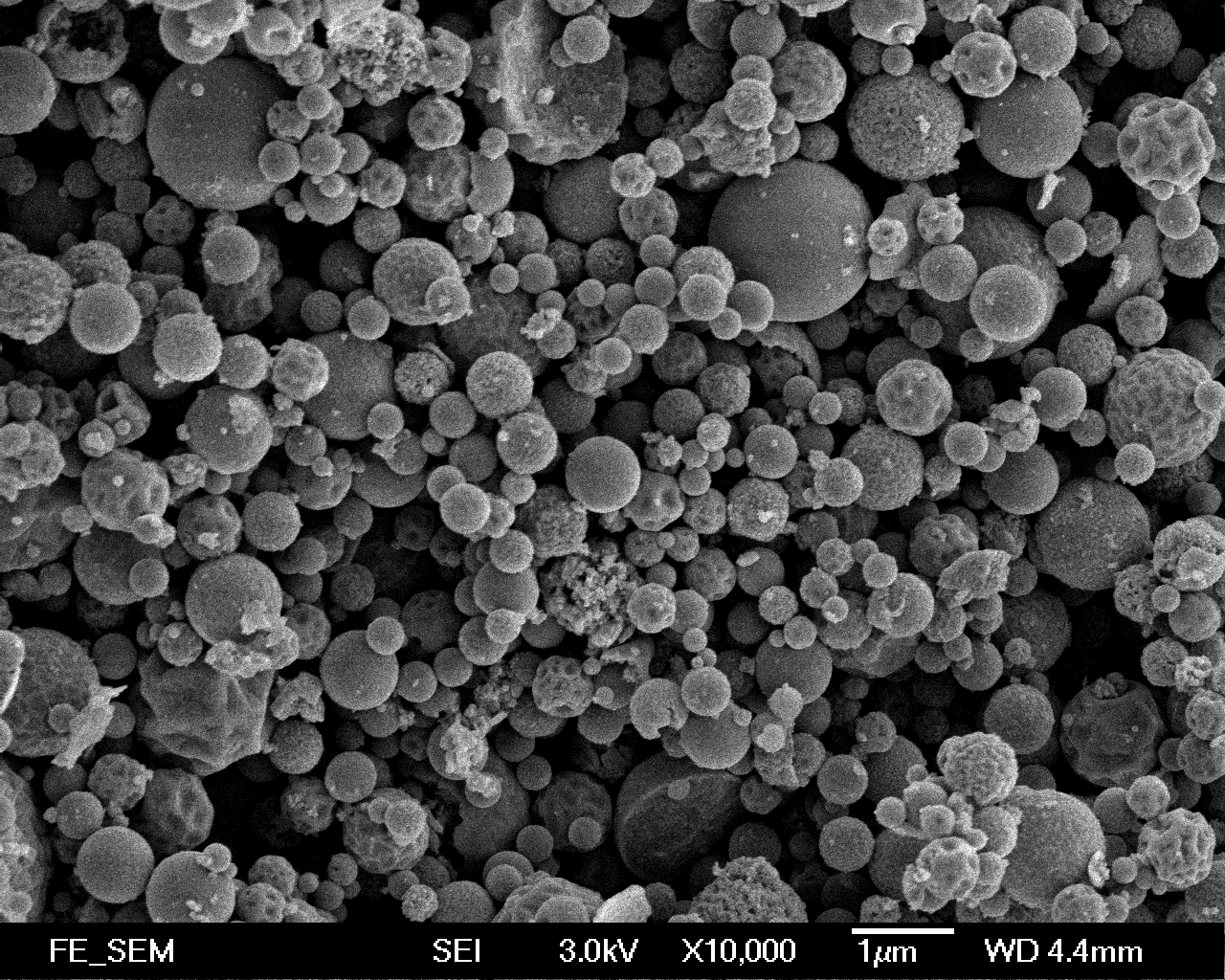
The sentence of “The broken F-doped TiO2 microspheres images of the Figure S1 (a) indicate that the sample prepared sample without adding urea have a hollow structure. While the broken N,F-codoped TiO2 microspheres images of the Figure S1 (b) show that the codoped samples are composed of solid spheres.” is added in the revised supplementary material.

**SI:**

Figure S1 The magnified FSEM images of F-doped TiO2 (a) and F, N codoped TiO2 (b)**.**



**500 nm**



**500 nm**

The broken F-doped TiO2 microspheres images of the Figure S1 (a) indicate that the sample prepared sample without adding urea have a hollow structure. While the broken N,F-codoped TiO2 microspheres images of the Figure S1 (b) show that the codoped samples are composed of solid spheres.