

## Supporting information

### Supercritical CO<sub>2</sub> drying of Alginate/zinc hydrogel: Green and Facile route to Prepare ZnO Foamy-Structure and ZnO Nanoparticles

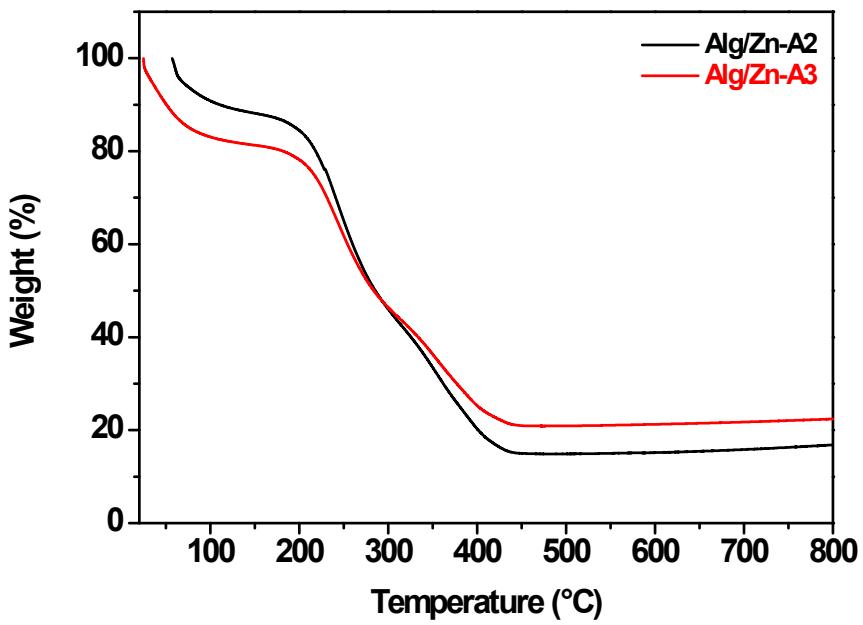
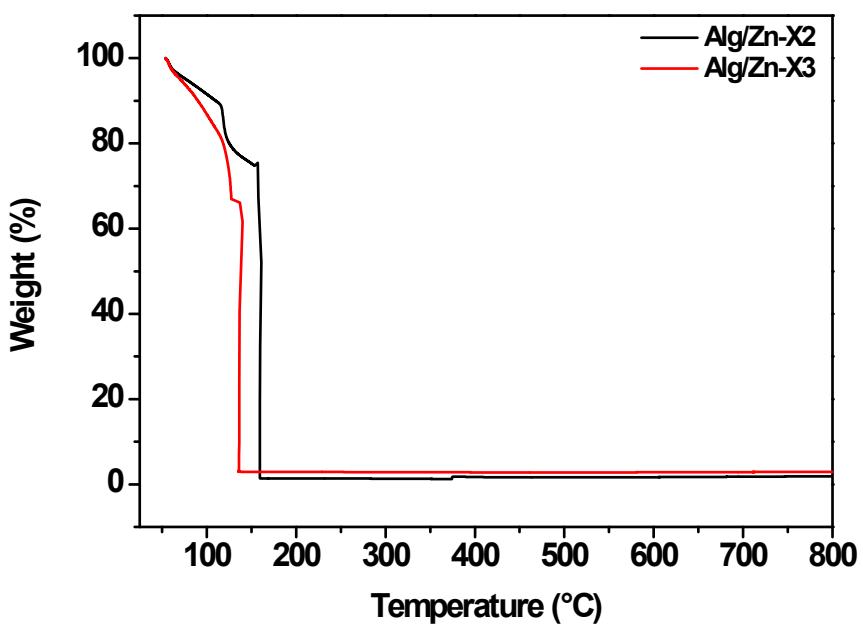
Hicham Abou Oualid,<sup>a,b</sup> Othmane Amadine,<sup>b</sup> Younes Essamlali,<sup>b</sup> Karim Dânoun,<sup>b</sup> Mohamed Zahouily<sup>a,b\*</sup>

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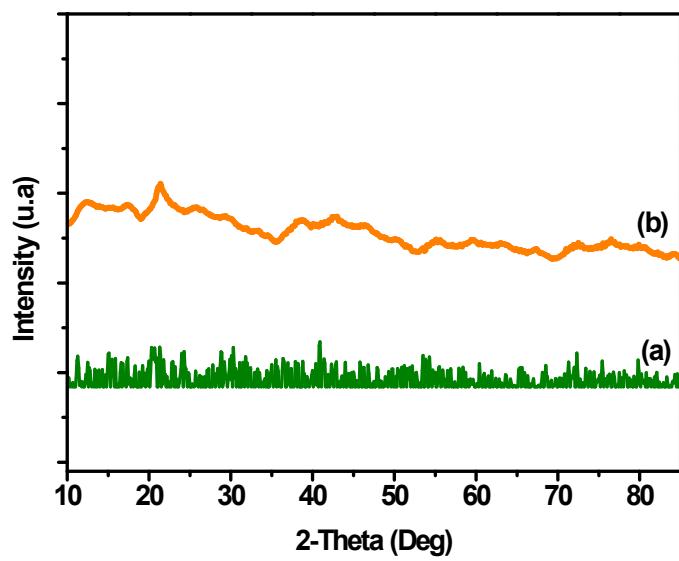
<sup>a</sup>*Laboratoire de Matériaux, Catalyse & Valorisation des Ressources Naturelles, URAC 24, Faculté des Sciences et Techniques, Université Hassan II, Casablanca B.P. 146, 20650, Morocco.*

<sup>b</sup>*MAScIR Foundation, VARENA Center, Rabat Design, Rue Mohamed El Jazouli, Madinat Al Irfane 10100 Rabat, Morocco.*

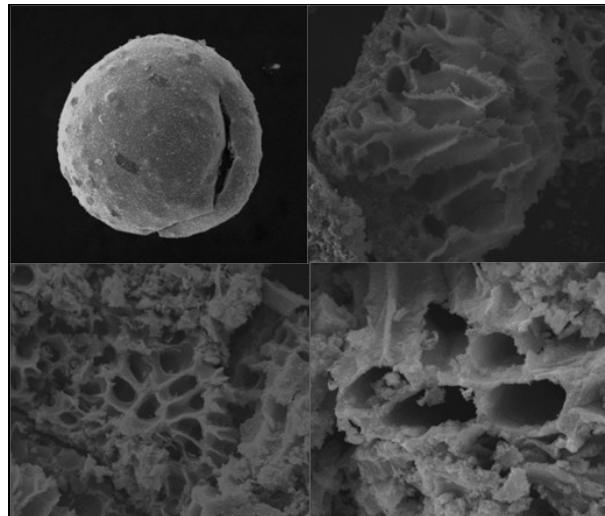
\* Correspondence: [m.zahouily@mascir.com](mailto:m.zahouily@mascir.com); Tel. +212661416359



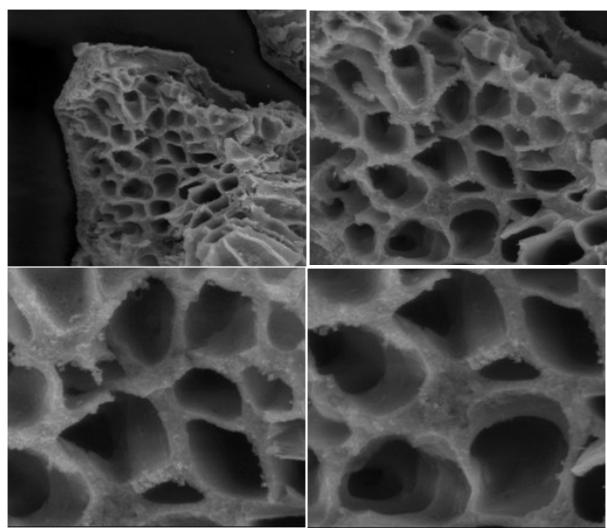
**Fig. A1.** TGA curves of the Alg/Zn-X2, Alg/Zn-X3, Alg/Zn-A2 and Alg/Zn-A3 materials.



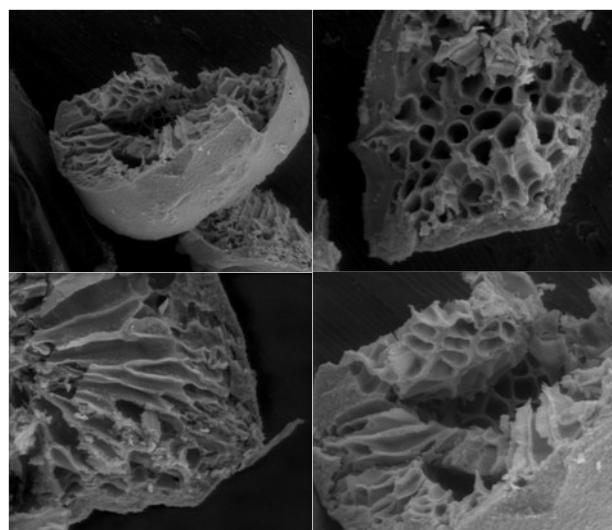
**Fig. A2.** XDR pattern of (a) Alg/Zn-X1 and (b) Alg/Zn-A1 dried on air and CO<sub>2</sub> supercritical conditions respectively.



**Fig. A3.** SEM images of ZnO-A1 foams.



**Fig. A4.** SEM images of ZnO-A2 foams.



**Fig. A5.** SEM images of ZnO\_A3 foams.