

SUPPLEMENTARY

Polysaccharides as green fuels for the synthesis of MgO: Characterization and evaluation of antimicrobial activities

Nayara Balaba¹, Silvia Jaerger¹, Dienifer F. L. Horsth^{1,2}, Julia de O. Primo¹, Jamille de S. Correa¹, Carla Bittencourt^{2*}, Cristina M. Zanette³, Fauze J. Anaissi¹

¹ Departamento de Química, Universidade Estadual Do Centro-Oeste, 85040-080 Guarapuava, Brazil

² Chimie des Interactions Plasma-Surface (ChIPS), Research Institute for Materials Science and Engineering, University of Mons, 7000 Mons, Belgium

³ Departamento de Engenharia de Alimentos, Universidade Estadual do Centro-Oeste, 85040-080 Guarapuava, Brazil

*E-mail: carla.bittencourt@umons.ac.be

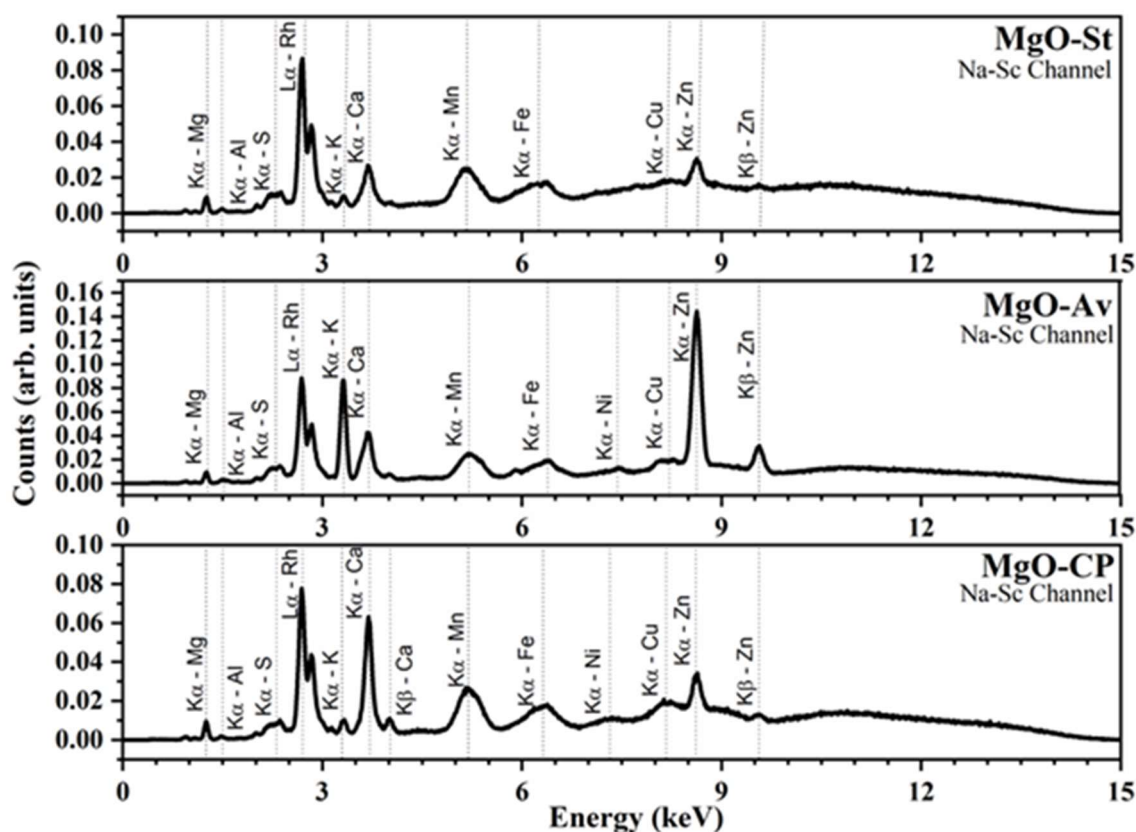


Figure S1. Elemental analysis of the MgO samples MgO-ST, MgO-Av, and MgO-CP. The Identification was performed using the Mg $\text{K}\alpha$ line located at 1.25 keV.

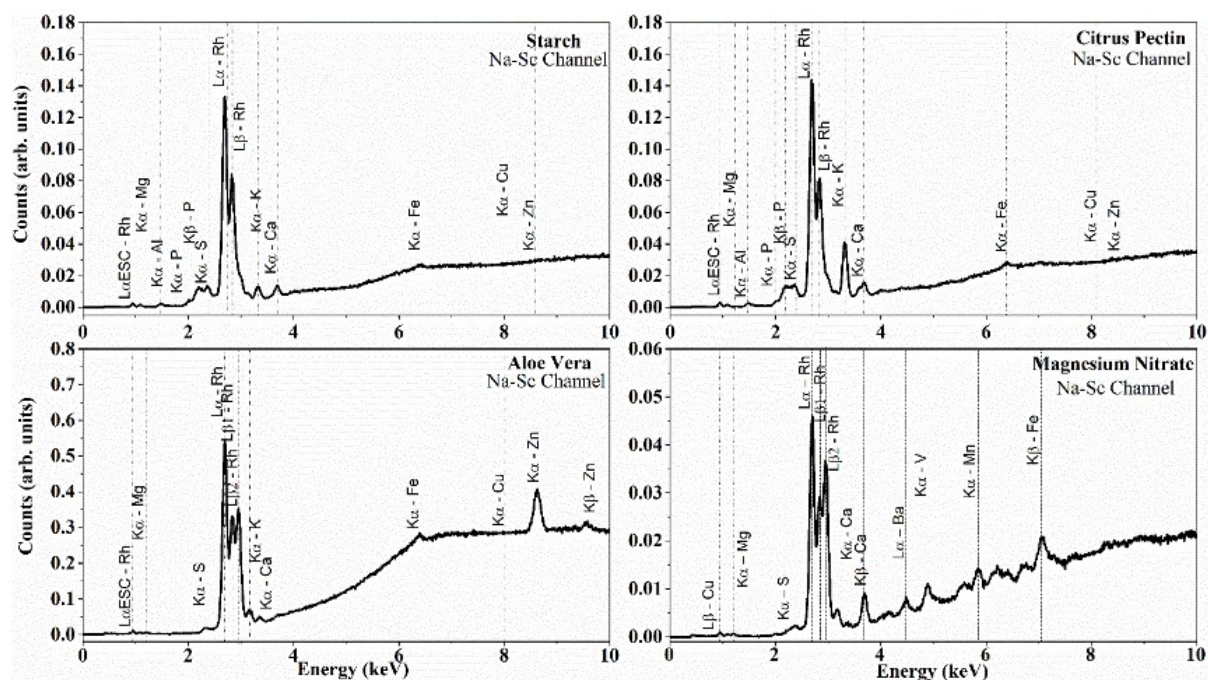


Figure S2. Elemental analysis of the organic precursors and magnesium salt. The percentage of Mg presented by the precursors was: 6.6% for starch, 0.1% for Aloe Vera, and 1.7% for citrus pectin. The $Mg(NO_3)_2 \cdot 6H_2O$ salt used in the three synthetic routes showed a purity of 98% of magnesium. Identification was performed using the Mg $K\alpha$ line located at 1.25 keV.