

Sterile and dual-porous aerogels scaffolds obtained through a multistep supercritical CO₂-based approach

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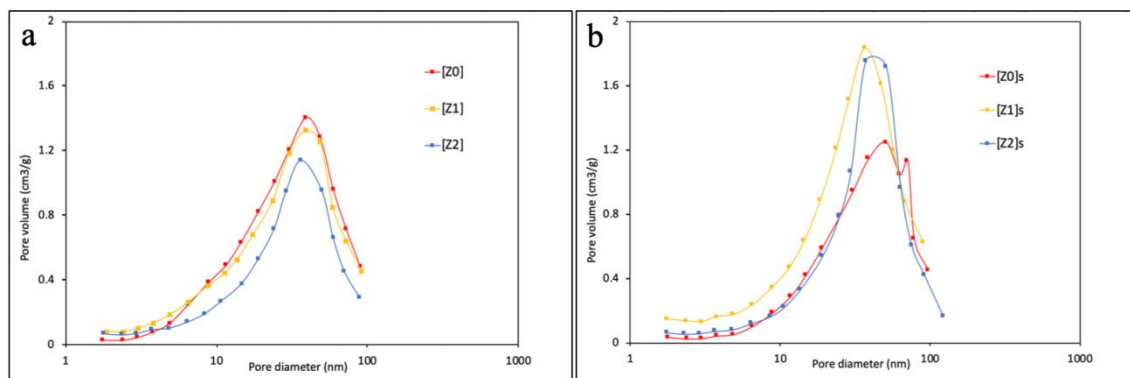


Figure S1: BJH-pore size distributions from the N₂-desorption curves of the (a) unsterile and (b) sterile aerogel formulations.

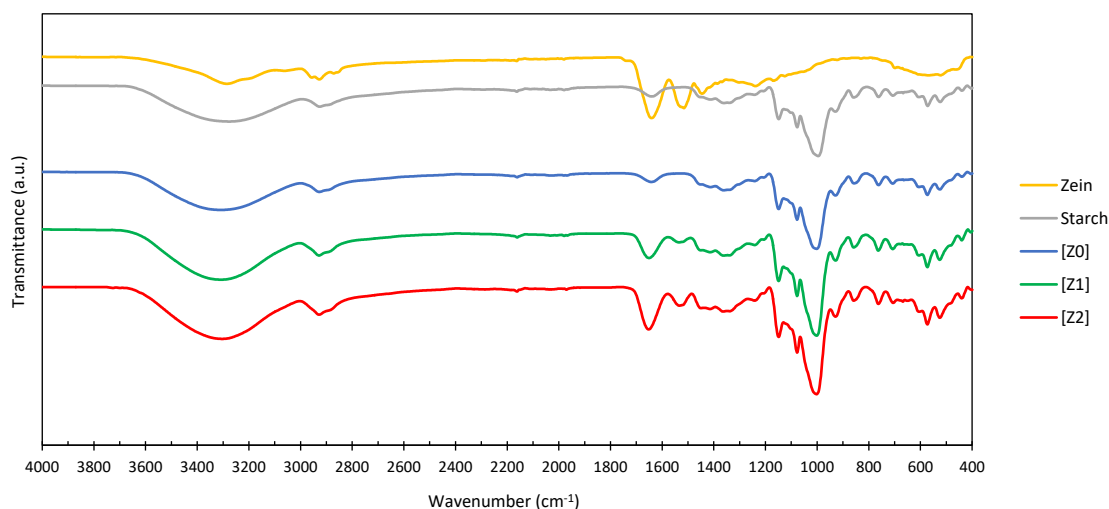


Figure S2: ATR-IR spectra of raw materials (zein and starch) and different starch aerogel formulations ([Z0], [Z1] and [Z2]).

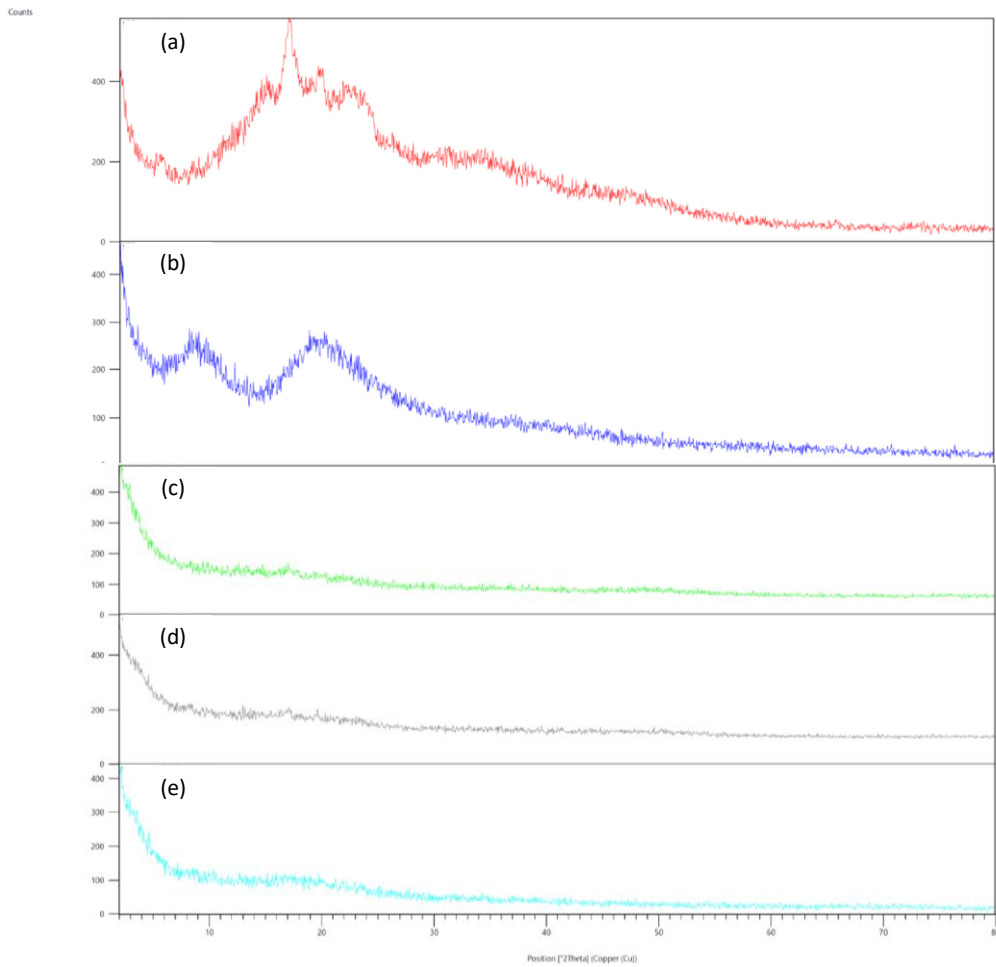


Figure S3: XRD diffraction patterns for raw materials {(a) starch and (b) zein} and starch aerogel formulations {(c) [Z0], (d) [Z1] and (e) [Z2]}.

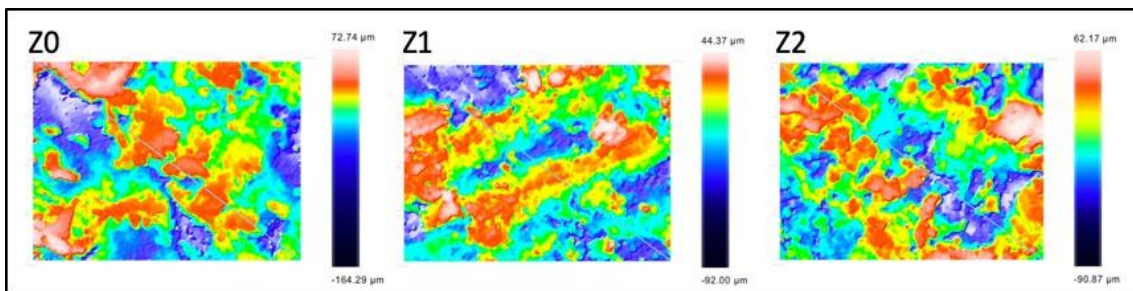


Figure S4: Surface 2D mapping of the three starch aerogels formulations ([Z0], [Z1], [Z2]) obtained from a contactless 3D-optical profiler.

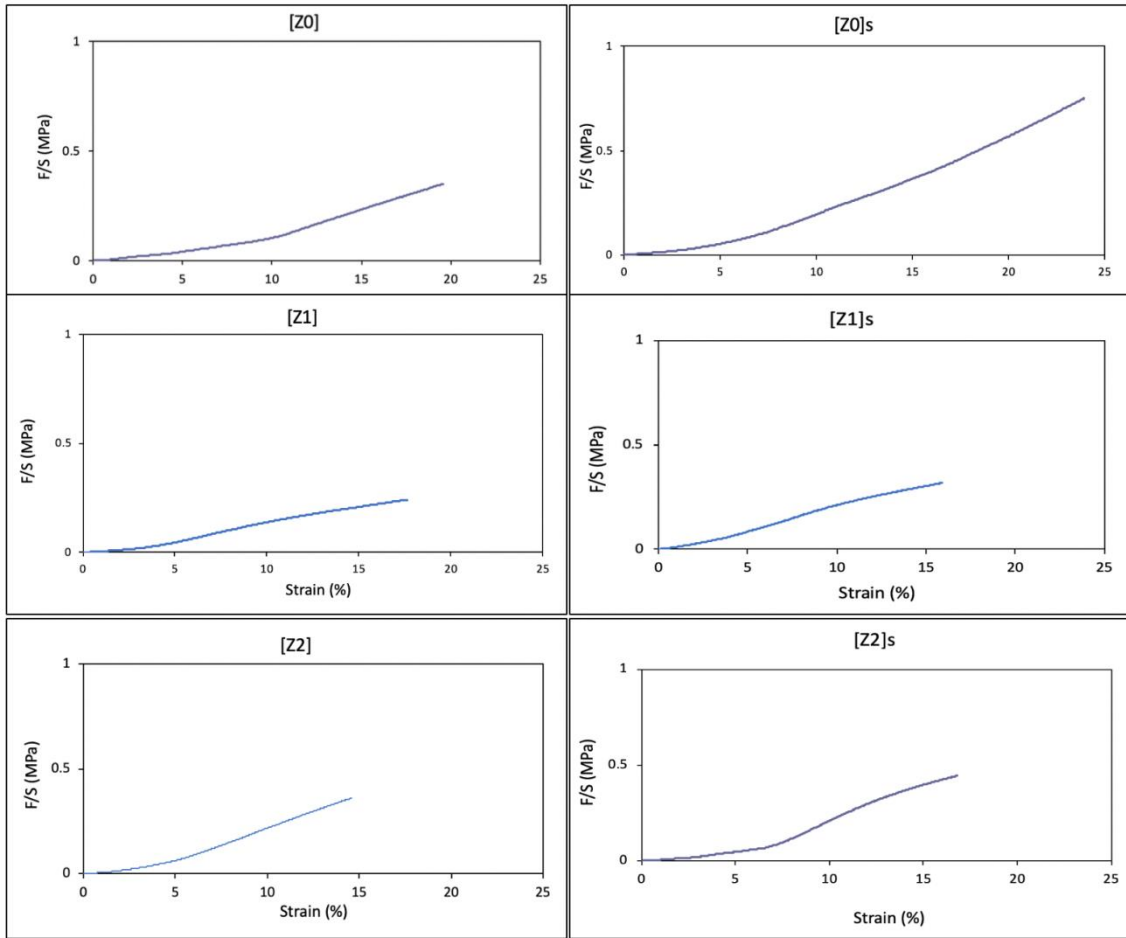


Figure S5: Stress-strain curves of the obtained aerogels under orthogonal compression tests with a 30 kg load cell at a crosshead speed of 1 mm/min.

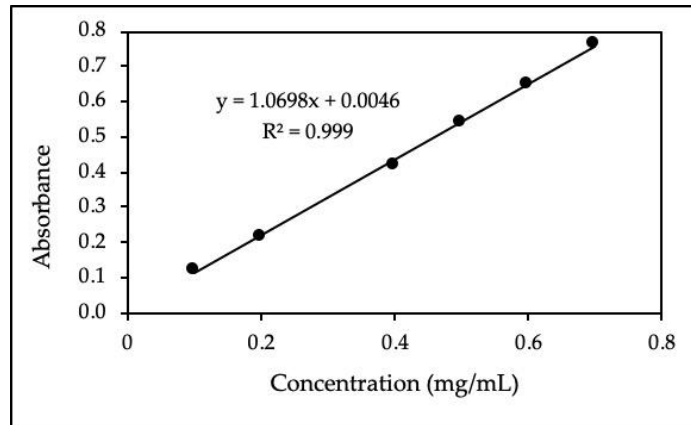


Figure S6: Calibration curve of zein in 70% (v/v) ethanol in the 0.1-0.7 mg/mL range ($R^2 > 0.999$). This curve was used for zein detection during the simultaneous solvent exchange-poregen leaching step during starch aerogel processing.