

Supporting Information

Experimental section

Reagents were used as received. Tannin was supplied by the company Silvachimica (Italy) in the form of a fine, light brown, powder, obtained by spray drying of aqueous wattle (*Acacia mearnsii* formerly *mollissima*, DeWild) bark extracts. Such commercial raw material is sold with 74 % guaranteed condensed tannins, and contains generally 80-82 % actual phenolic flavonoid materials, 4-6 % water, 1 % amino acids, and the remainder is monomeric and oligomeric carbohydrates, in general broken pieces of hemicelluloses. Mesoporous carbons can be made in a wide range of weight ratios : (1.1 mimosa tannin):(1.1 F127):(4.5 ethanol):(0-4.5 water):(4.5-0 HCl):(0-0.18 NaOH). In a typical synthesis of IS2M-1, Pluronic F127 (1.1 g) and mimosa tannin (1.1 g) are dissolved together in a solution composed of ethanol (4.5 g), water (3.4 g) and hydrochloric acid (1.1 g of 12 mol/L solution). The mixture is stirred for 40 minutes and poured into a Petri dish of diameter of 9.5 cm, to evaporate the solvent at room temperature during one night. The composite is then cured at 100 °C during 24 h in an oven, crushed into powder and calcined in argon atmosphere at different temperatures (400 – 850 °C) for 3 h (heating rate 1 and 5 °C.min⁻¹ above and below 600 °C, respectively; argon flow rate 10 L.h⁻¹). The mesoporous products are labelled as IS2M-1-T where T represents the heat-treatment temperature.

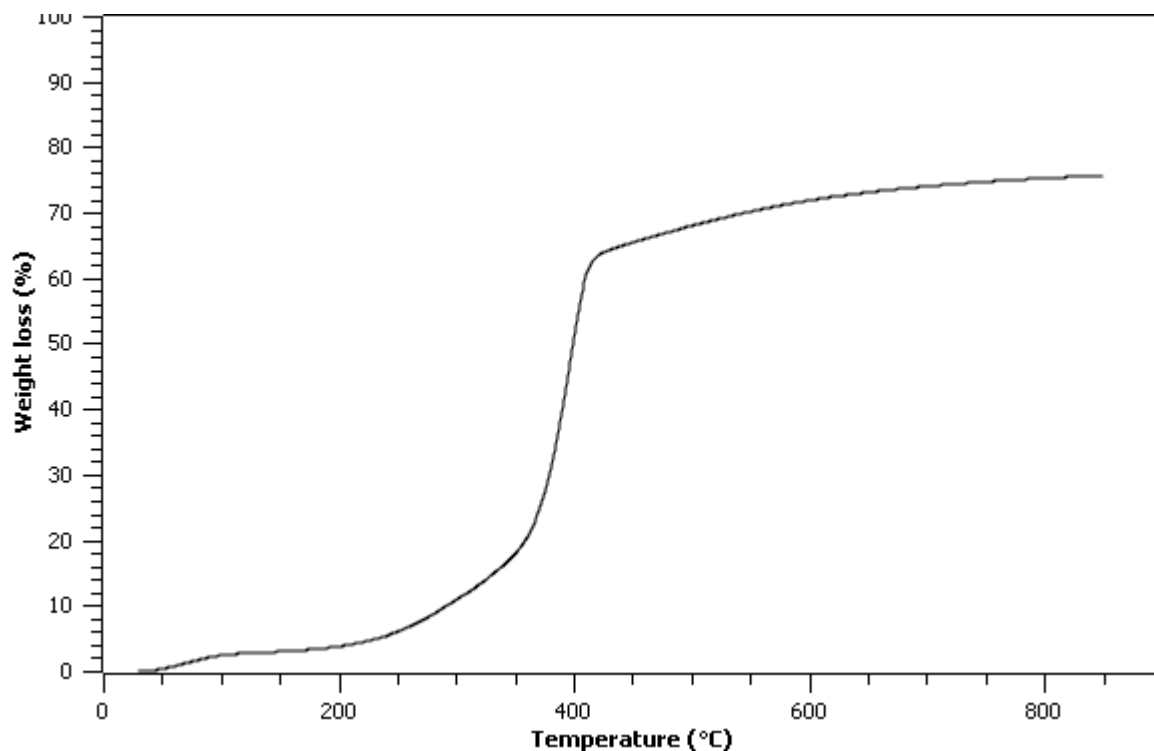


Figure S1: Thermogravimetric analysis in inert atmosphere of the IS2M-1 phase (tannin/F127 mesophase) cured at 100°C.

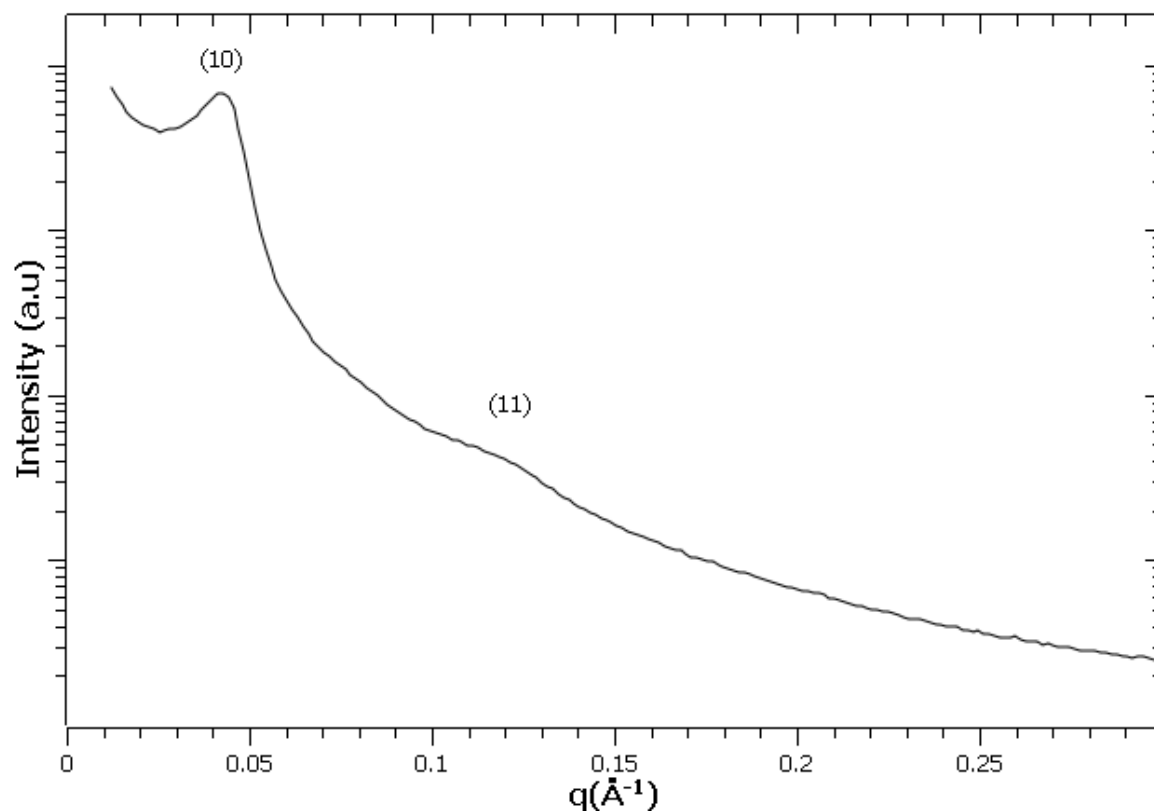


Figure S2: SAXS pattern of the IS2M-1 phase (tannin/F127 mesophase) pyrolysed at 400°C. The cell parameter calculated with a *P6m* space group is around 17 nm.