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## **Preparation and evaluation of micro and meso porous silica monoliths with embedded carbon nanoparticles for the extraction of non-polar compounds from waters**

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### **Highlights**

- A silica-carbon nanoparticles monolith has been synthesized.
- The hybrid sorbent was prepared in a fused silica capillary.
- Carbon nanostructures improve the extraction efficiency of the monolith.
- PAHs have been determined in waters using the proposed microextraction unit.

### **Abstract**

A novel hybrid micro and meso porous silica monolith with embedded carbon nanoparticles (Si-CNPs monolith) was prepared inside a fused silica capillary (3 cm in length) and used as a sorbent for solid-phase microextraction. The hybrid monolithic capillary was synthesized by hydrolysis and polycondensation of a mixture of tetraethoxysilane (TEOS),

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