

Supporting Information

Hollow carbon fiber sponges from crude catkins: An ultralow cost absorbent for oils and organic solvents

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Fig. S1 Digital photo of HCFSs prepared under 500, 700 and 900 °C from left to right.

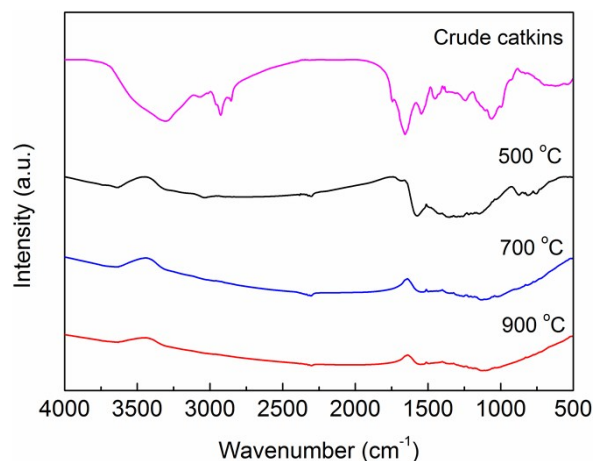


Fig. S2 FT-IR spectra of the crude catkins and the HCFSs at 800 °C.

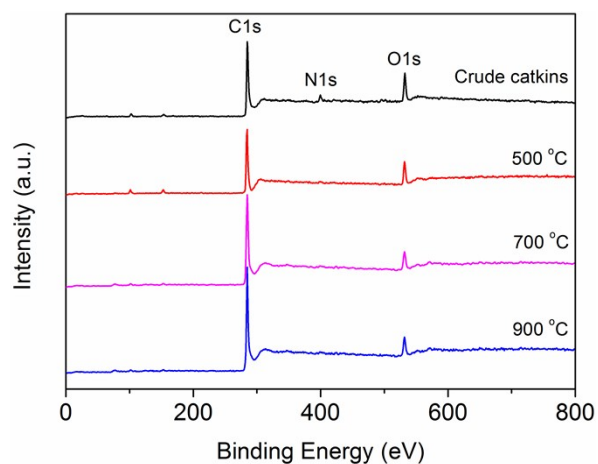


Fig. S3 XPS spectra of the crude catkins and the HCFSSs prepared by different pyrolysis temperatures.

Table S1 Atomic contents of C, N and O elements (at.%) in the crude catkins and the HCFSSs.

Sample	Elements				
	C 1s	N 1s	O 1s	C/O	C/N
Crude catkins	84.90	2.27	12.83	6.62	37.40
HCFSSs 500 °C	86.61	1.86	11.53	7.51	46.56
HCFSSs 700 °C	87.79	1.95	10.26	8.56	45.02
HCFSSs 900 °C	89.05	1.74	9.21	9.67	51.18

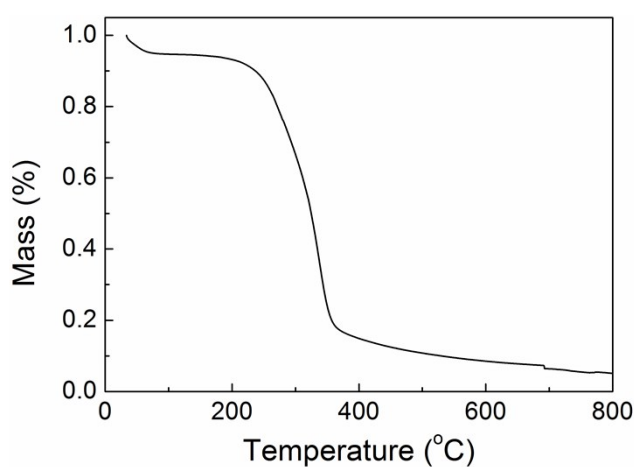


Fig. S4 TGA curve of the HCFSSs that was performed under air atmosphere and a heating rate of $10\text{ }^{\circ}\text{C} \cdot \text{min}^{-1}$ from 30 to 800 °C.

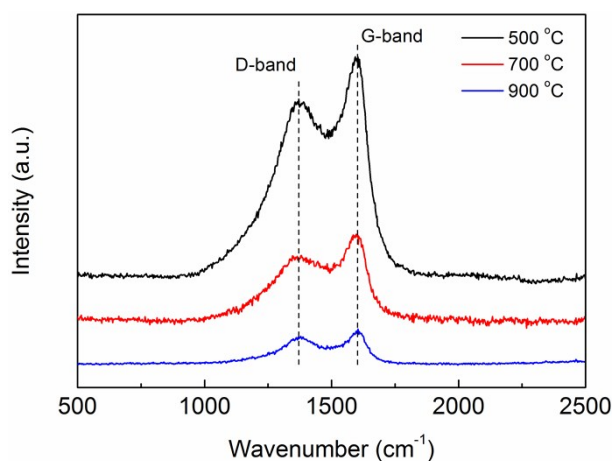


Fig. S5 Raman spectra of the HCFs prepared by pyrolysis at different temperatures.

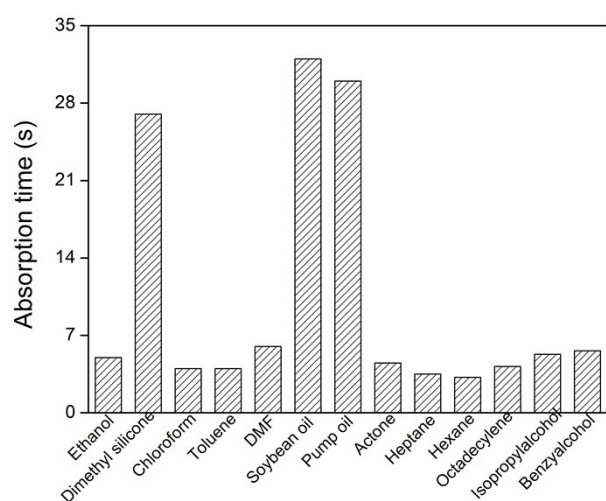


Fig. S6 Absorption time of HCFs-9 for various oils or solvents.

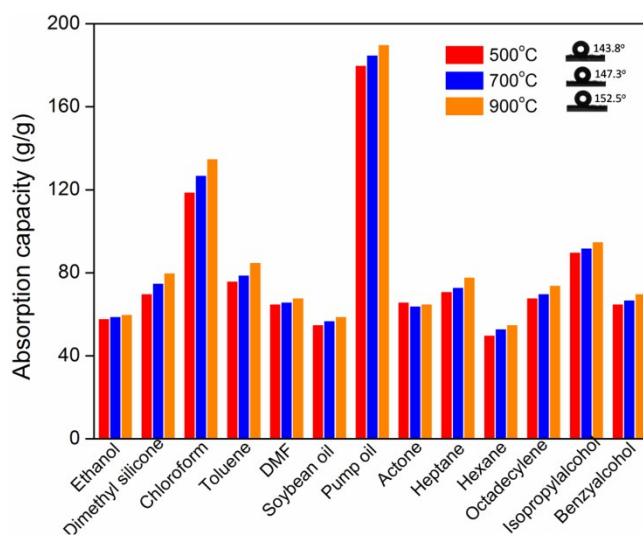


Fig. S7 Absorption capacity of HCFs-5, HCFs-7 and HCFs-9 for oil and organic solvents. Insert pictures were their contact angles when droplet water about $5\mu\text{L}$ was placed on their surfaces, respectively.