

Electronic Supplementary Information

Selective Surface Modification in Bimodal Mesoporous CMK-5 Carbon

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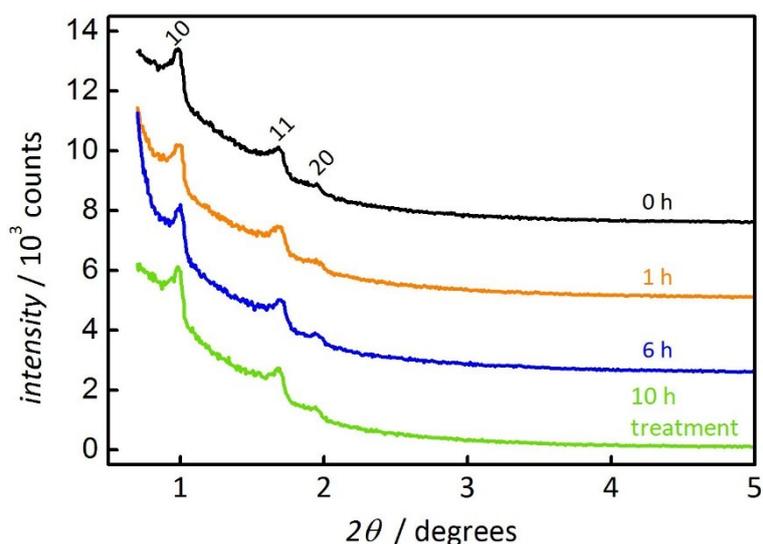


Figure S1. Low-angle powder X-ray diffraction patterns (vertically shifted in steps of 2500 counts) of CMK-5 carbon before and after oxidative treatment with persulfate solution up to 10 h.

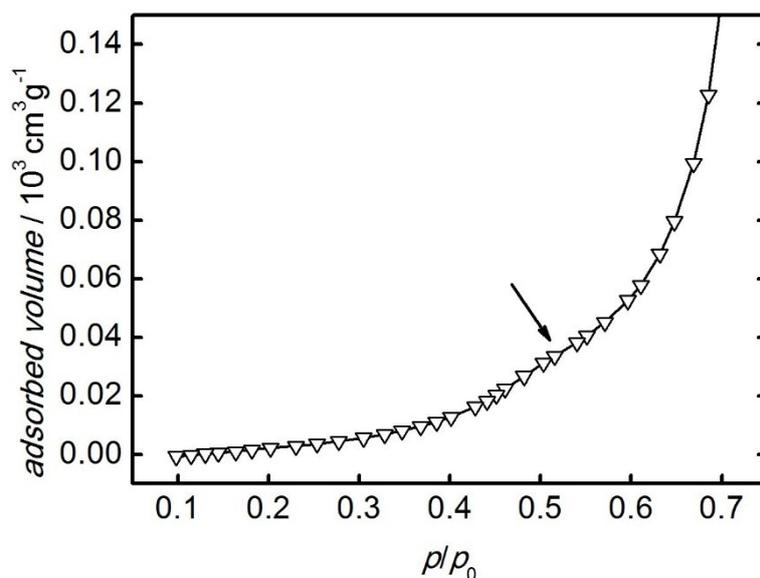


Figure S2. Water vapor desorption isotherm of CMK-5 carbon before oxidative treatment with persulfate solution: detail from Figure 2. The step in the isotherm at ca. $p/p_0 = 0.5$ is visible as a shoulder (arrow); it corresponds to the emptying of the intra-tubular pores, as discussed in the text.

Table S1. Pore volume of CMK-5 carbon and CMK-5@SBA-15 composites before and after oxidative treatment with persulfate solution up to 10 h determined from N₂ and H₂O physisorption.

sample	treatment	$A_{\text{BET}}^{[a]}$ $\text{m}^2 \text{g}^{-1}$	$V_{\text{N}_2}^{[b]}$ $\text{cm}^3 \text{g}^{-1}$	$V_{\text{H}_2\text{O}}^{[c]}$ $\text{cm}^3 \text{g}^{-1}$	$V_{\text{N}_2} / V_{\text{H}_2\text{O}}$
CMK-5 carbon	(none)	1084	1.55	0.93	0.60
	1 h	1057	1.49	1.08	0.72
	6 h	1027	1.43	1.08	0.76
	10 h	1031	1.43	1.07	0.75
CMK-5 @SBA-15 composite	(none)	273	0.33	0.21	0.64
	1 h	212	0.27	0.24	0.89
	6 h	166	0.24	0.23	0.96
	10 h	160	0.24	0.24	1.00

^[a] specific surface area; ^[b] specific pore volume from N₂ physisorption; ^[c] specific pore volume from H₂O physisorption