

## Supporting Information

### Efficient photocatalytic performance of hydrogen bonding between P25 and microcrystalline cellulose aerogel

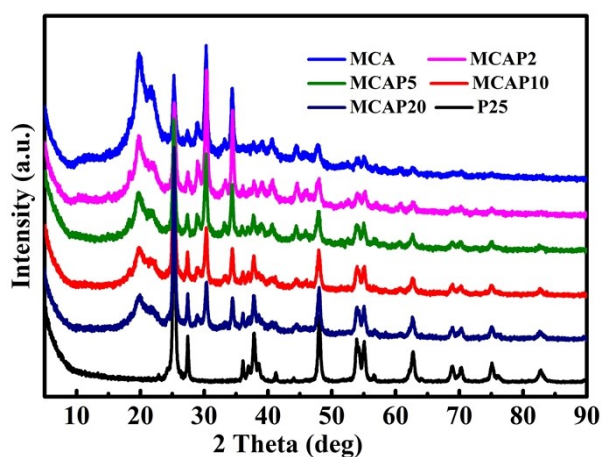
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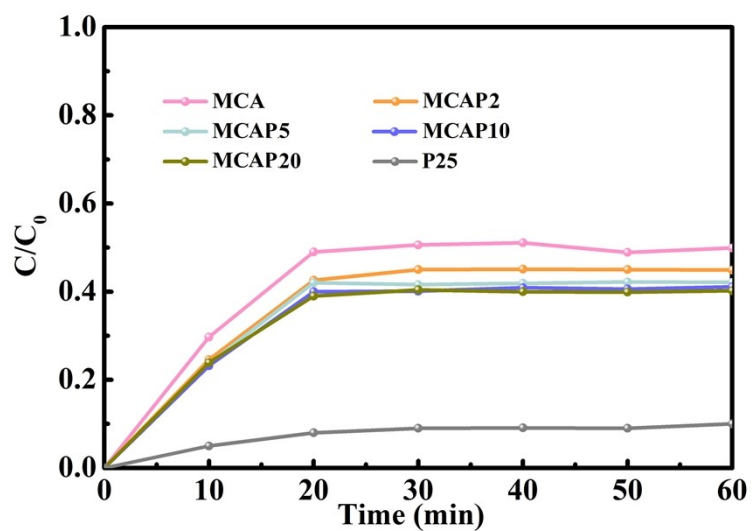
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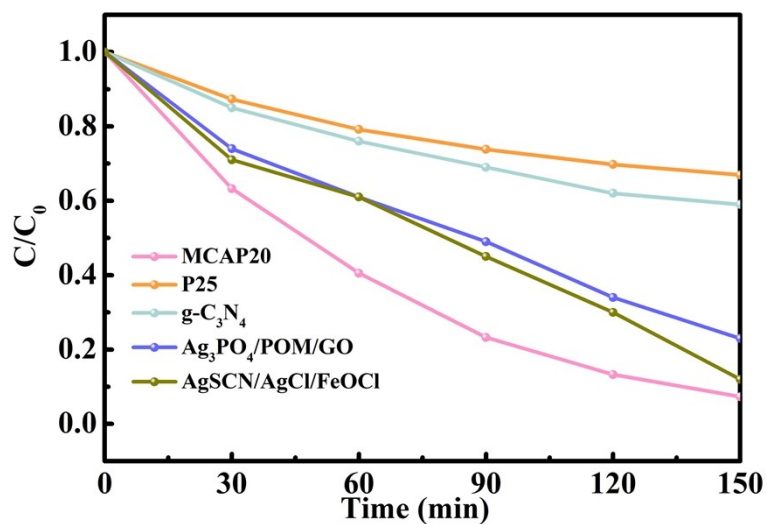
**Figure S1.** XRD patterns of MCA, MCAP2, MCAP5, MCAP10, MCAP20 and P25.



**Figure S2** Effect of contact time on AO7 adsorption.



**Figure S3** Photocatalytic degradation curves of AO7 over MCAP20, P25,  $g\text{-C}_3\text{N}_4$ ,  $\text{Ag}_3\text{PO}_4/\text{POM}/\text{GO}$  and  $\text{AgSCN}/\text{AgCl}/\text{FeOCl}$ .



**Table S1.** Element contents of MCAP20 before and after the fifth cycling runs.

Samples	C	H	O	Ti
Before	37.568	5.219	46.774	5.250
After	38.125	5.321	46.498	5.145

**Figure S4.** SEM image of MCAP20 after the cycling experiments.

