

## **Hematite iron oxide nanorod patterning inside COK-12 mesochannels as an efficient visible light photocatalyst**

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Table S1. Physicochemical properties of COK-12 and  $\alpha$ -Fe<sub>2</sub>O<sub>3</sub>@COK-12.

Samples	$d_{10}^a$ (nm)	$a^b$ (nm)	BET surface area (cm <sup>2</sup> /g)	Langmuir surface area (cm <sup>2</sup> /g)	Pore volume (cm <sup>3</sup> /g)	Pore diameter <sup>c</sup> (nm)
COK-12	9.28	10.7	478	546	0.32	4.9
$\alpha$ -Fe <sub>2</sub> O <sub>3</sub> @COK-12	9.19	10.6	411	463	0.29	4.9

<sup>a</sup> $d_{10}$  spacing of calcined material determined from SAXS; <sup>b</sup>unit cell parameter calculated from SAXS; <sup>c</sup>pore diameter determined from BJH method

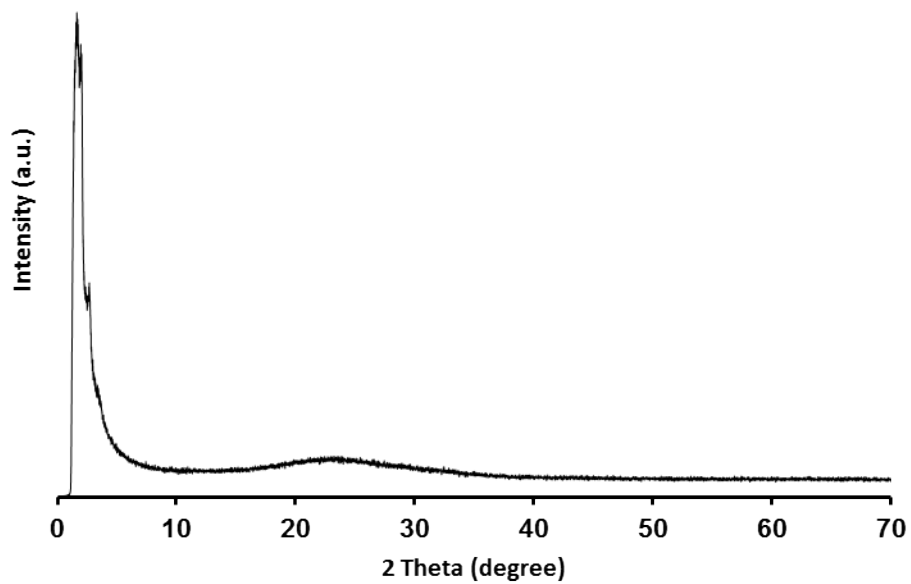


Figure S1. XRD pattern of  $\alpha\text{-Fe}_2\text{O}_3@\text{COK-12}$