Electronic Supplementary Material (ESI) for Journal of Materials Chemistry C.

Supplementary Information

Controllable synthesis of Ag/AgCl@MIL-88A via in-situ growth method for morphology-dependent photocatalytic performance

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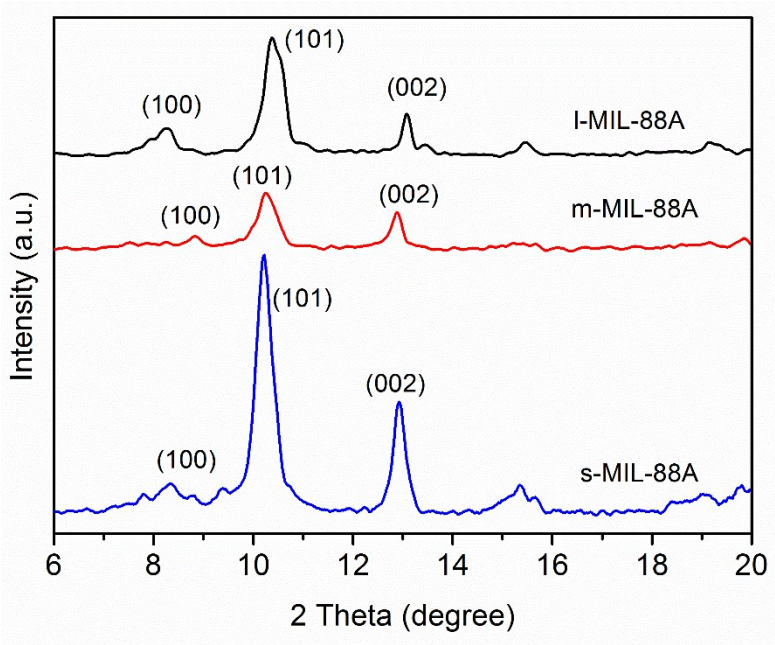

Fig. S1 XRD patterns of different-shaped MIL-88A

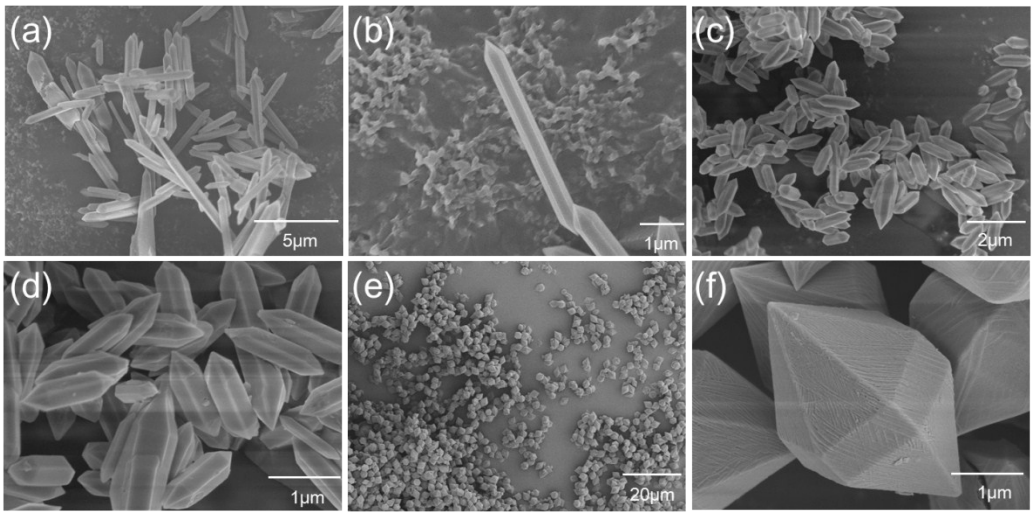

Fig. S2 SEM images of different shaped MIL-88A, (a) and (b): l-MIL-88A, (c) and (d): m-MIL-88A; (e) and (f): s-MIL-88A

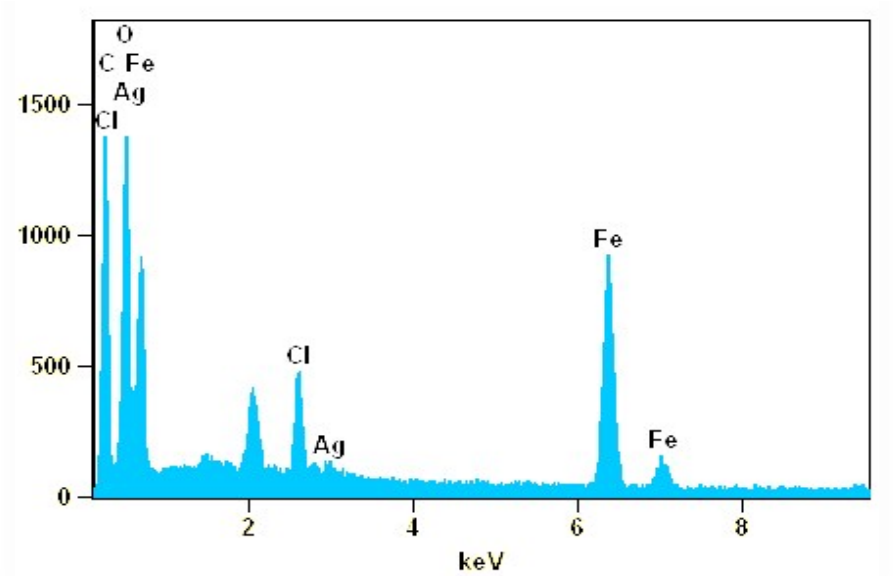

Fig. S3 EDS spectroscopy of the s-ACML nanocomposite

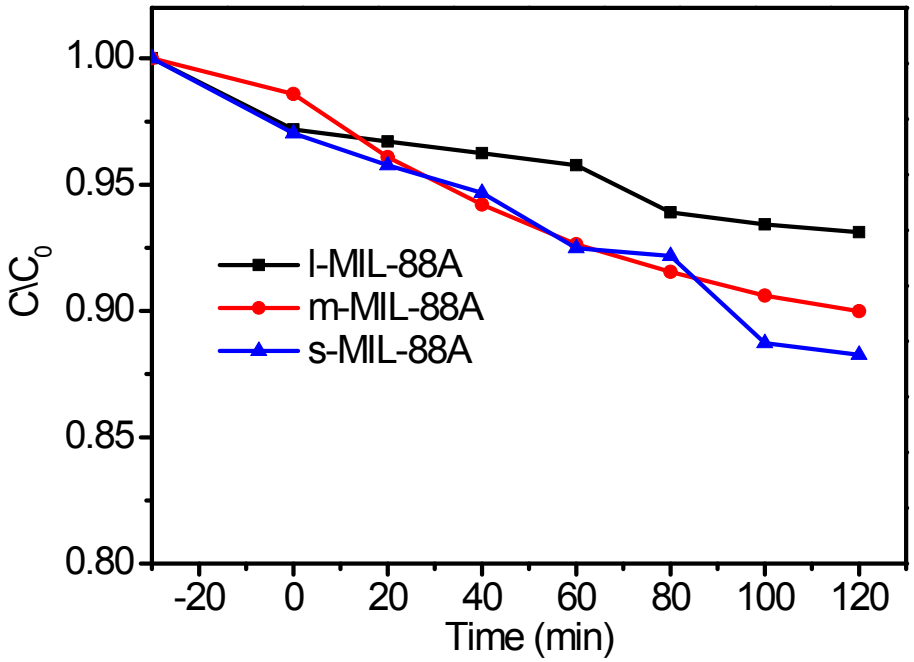

Fig. S4 Photocatalytic degradation curves of RhB with pure MIL-88A

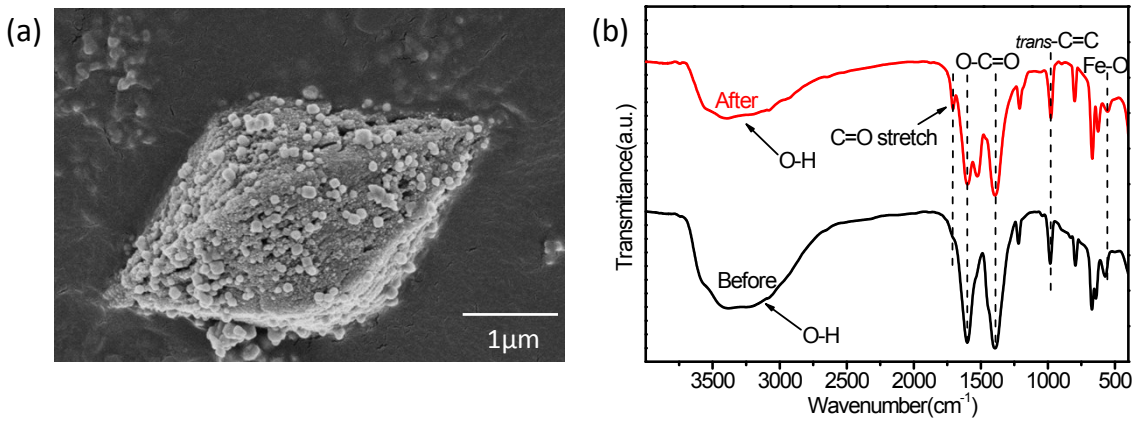

Fig. S5 (a) SEM image of the s-ACML nanocomposite, (b) FT-IR spectra of s-ACML before and after photocatalytic reaction

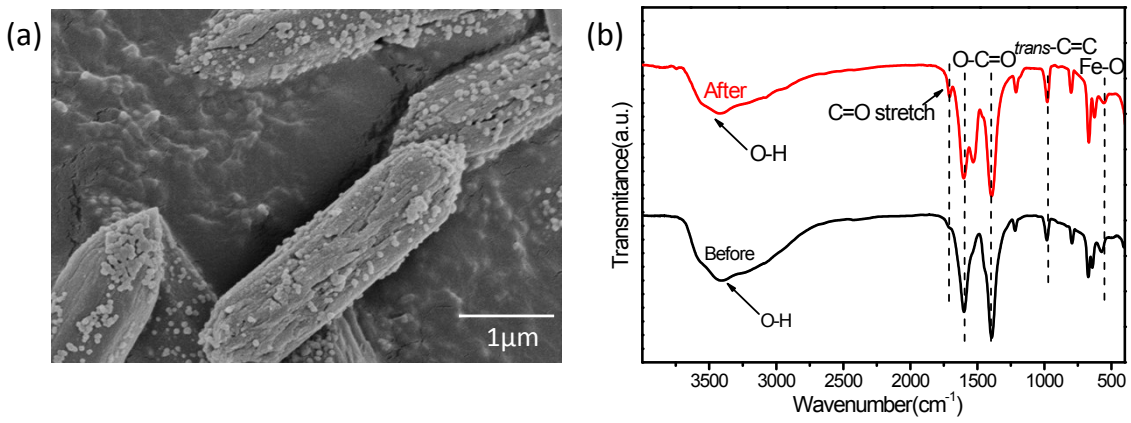

Fig. S6 (a) SEM image of the m-ACML nanocomposite, (b) FT-IR spectra of m-ACML before and after photocatalytic reaction

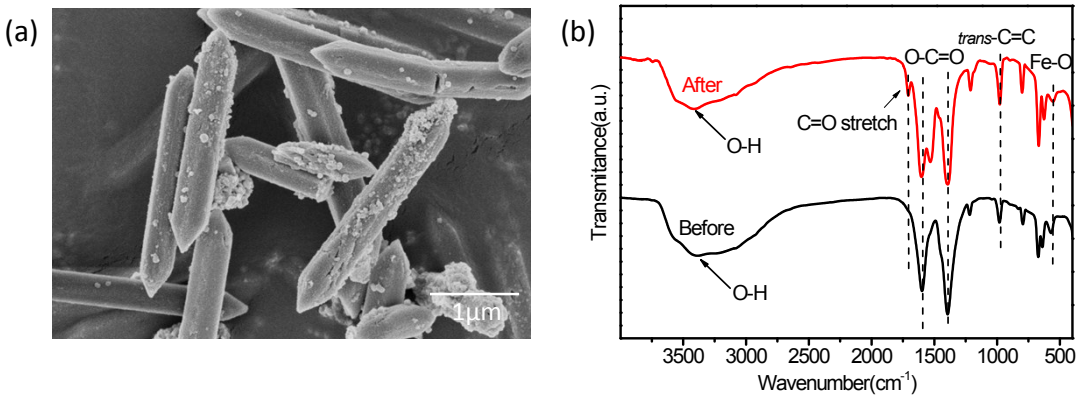

Fig. S7 (a) SEM image of the l-ACML nanocomposite, (b) FT-IR spectra of l-ACML before and after photocatalytic reaction

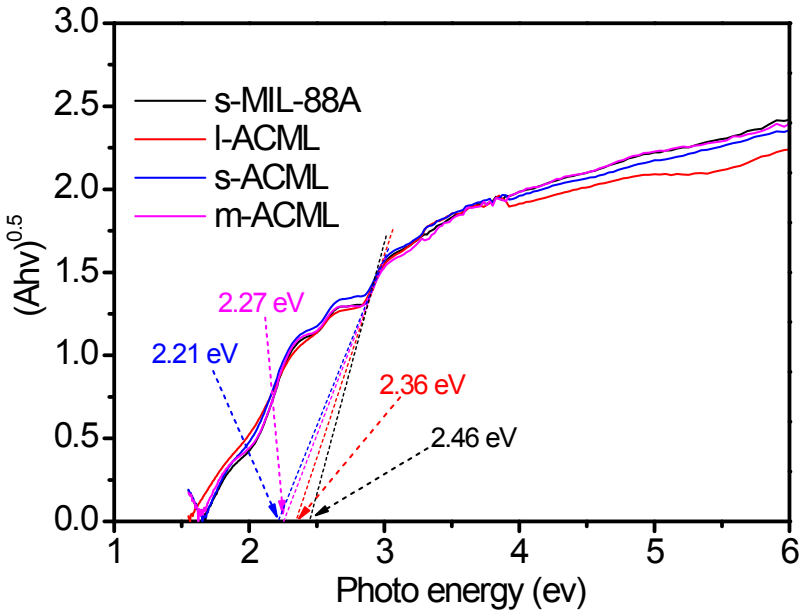

Fig.S8 The Tauc plots of the samples

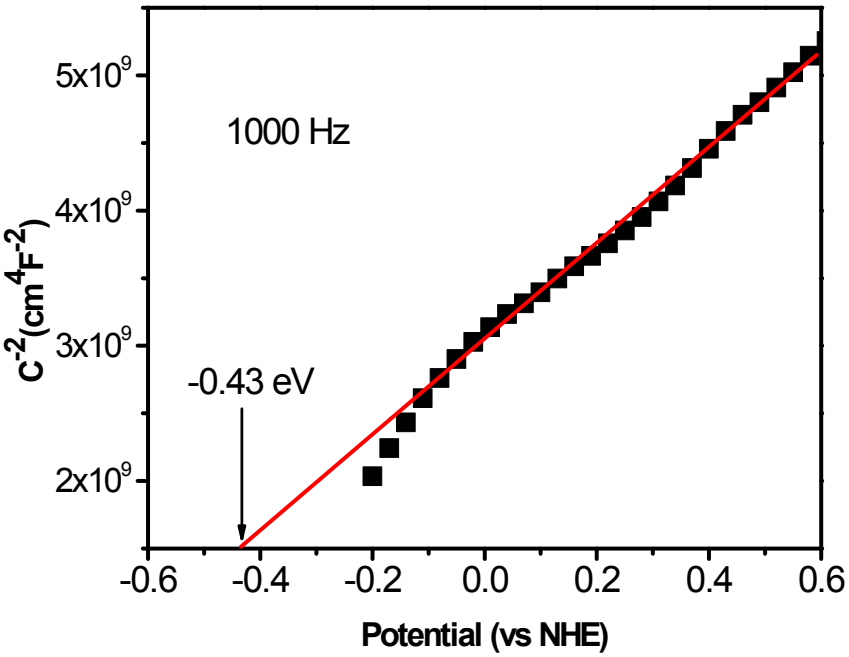

Fig. S9 Mott-Schottky plot of the as-prepared s-MIL-88A

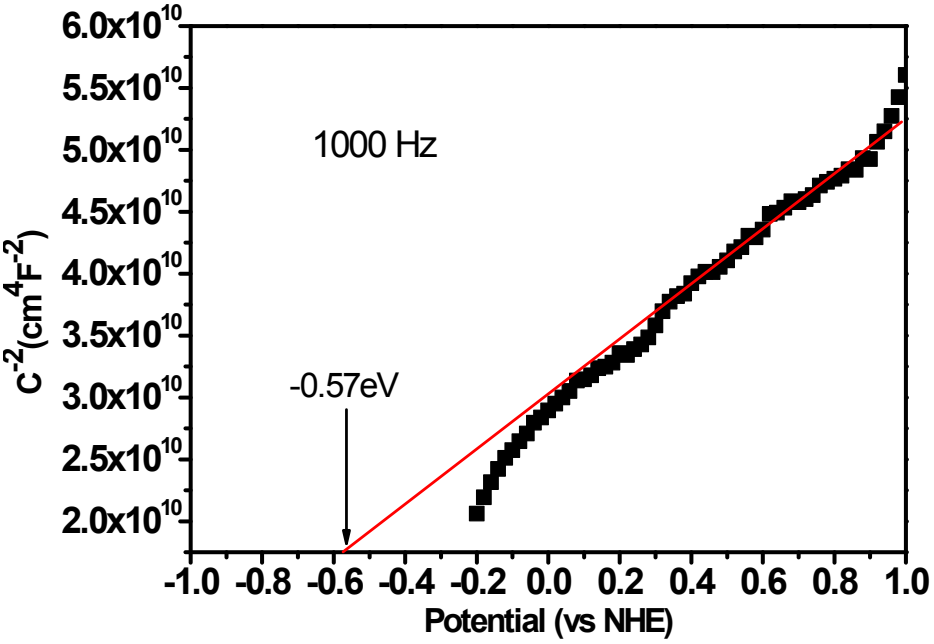

Fig. S10 Mott-Schottky plot of the as-prepared s-ACML

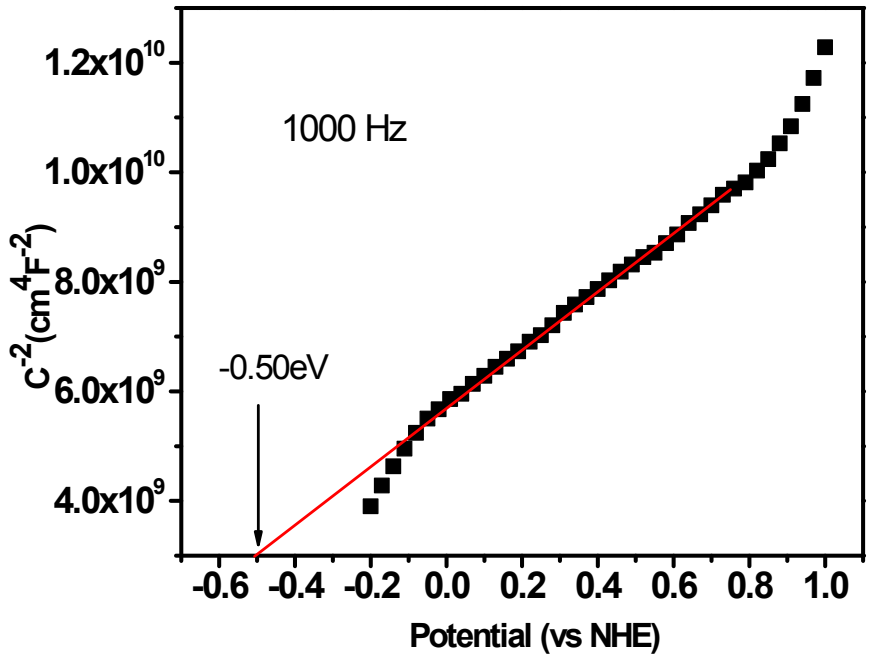

Fig. S11 Mott-Schottky plot of the as-prepared m-ACML

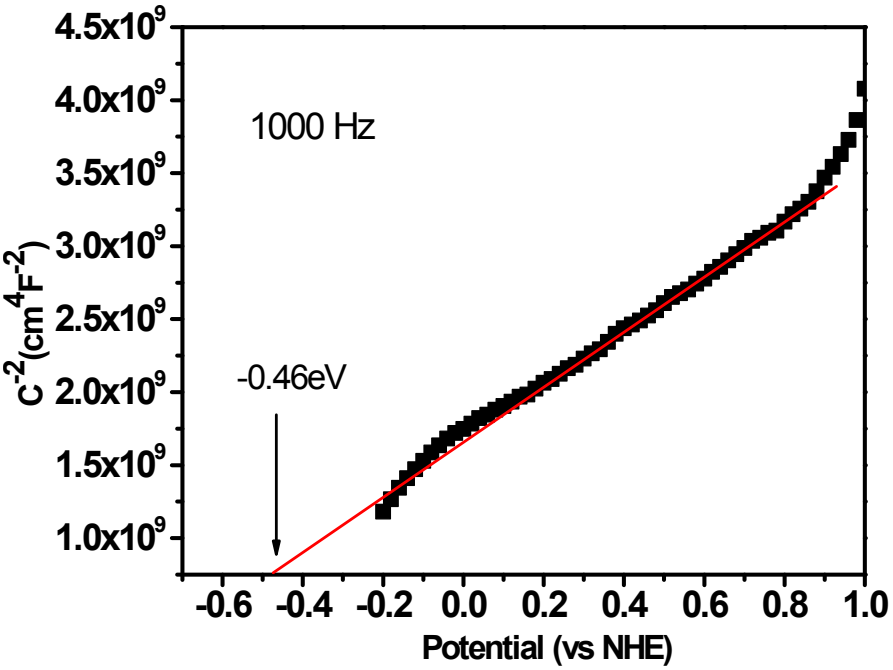

Fig. S12 Mott-Schottky plot of the as-prepared l-ACML

Table S1 SEM mapping element content ratio and error of s-ACML

Element line	Element (Wt.%)	Wt.% Error	Atom (%)	Atom % Error
C K	88.72	+/-0.87	93.77	+/- 0.92
O K	6.71	+/-0.45	5.32	+/- 0.36
Cl K	0.32	+/-0.05	0.11	+/- 0.02
Fe K	2.66	+/-0.37	0.61	+/- 0.08
Ag L	1.59	+/-0.28	0.19	+/- 0.03
Total	100	-------	100	------

Table S2 Physicochemical parameters of different ACML composites

Samples	BET ($m^2 g^{-1}$)	Pore volume ($cm^3 \cdot g^{-1}$)	Pore diameter (nm)	Ag NPs mass ratio (wt%)	Fe mass ratio (wt%)
s-ACML	5.18	0.022	31.26	3.48	25.07
m-ACML	9.06	0.033	18.38	4.39	21.78
l-ACML	14.73	0.050	21.63	2.32	20.69