

Design of Ag decorated ZnO concave nanocubes by ZIF-8 with dual functional catalytic ability for decoloring dyes

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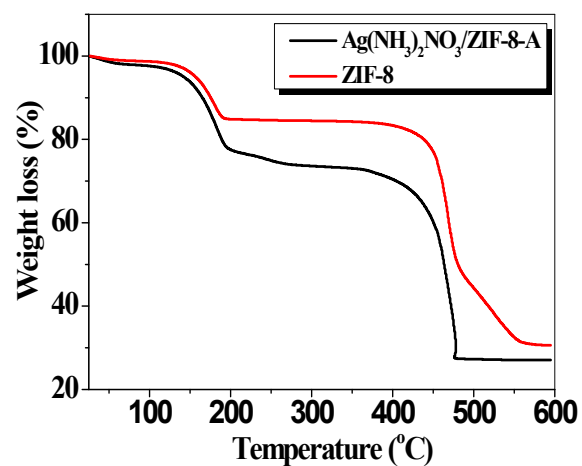


Fig. S1. TGA curves of ZIF-8 and $\text{Ag}(\text{NH}_3)_2\text{NO}_3/\text{ZIF-8-A}$.

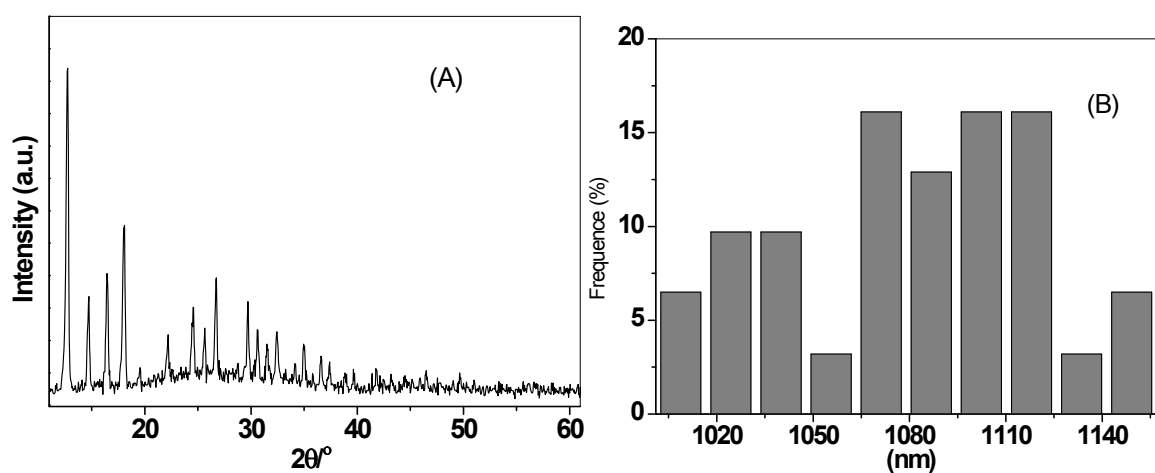


Fig. S2. XRD pattern (A) and size distribution (B) of the referenced ZIF-8 template.

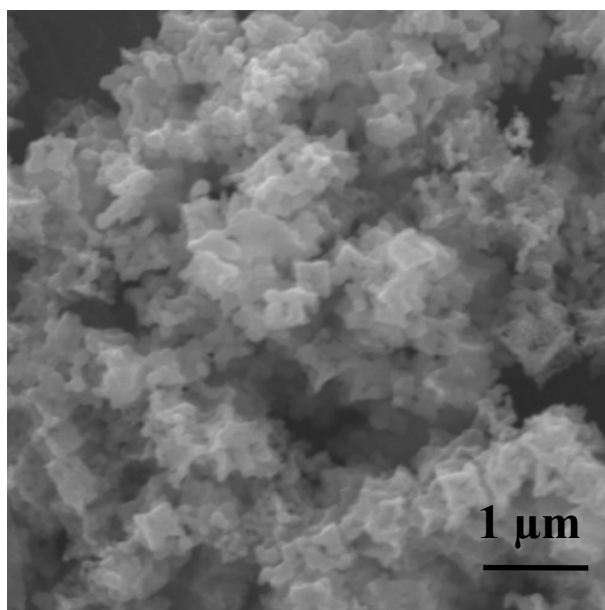


Fig. S3. SEM image of ZnO obtained at 873 K.

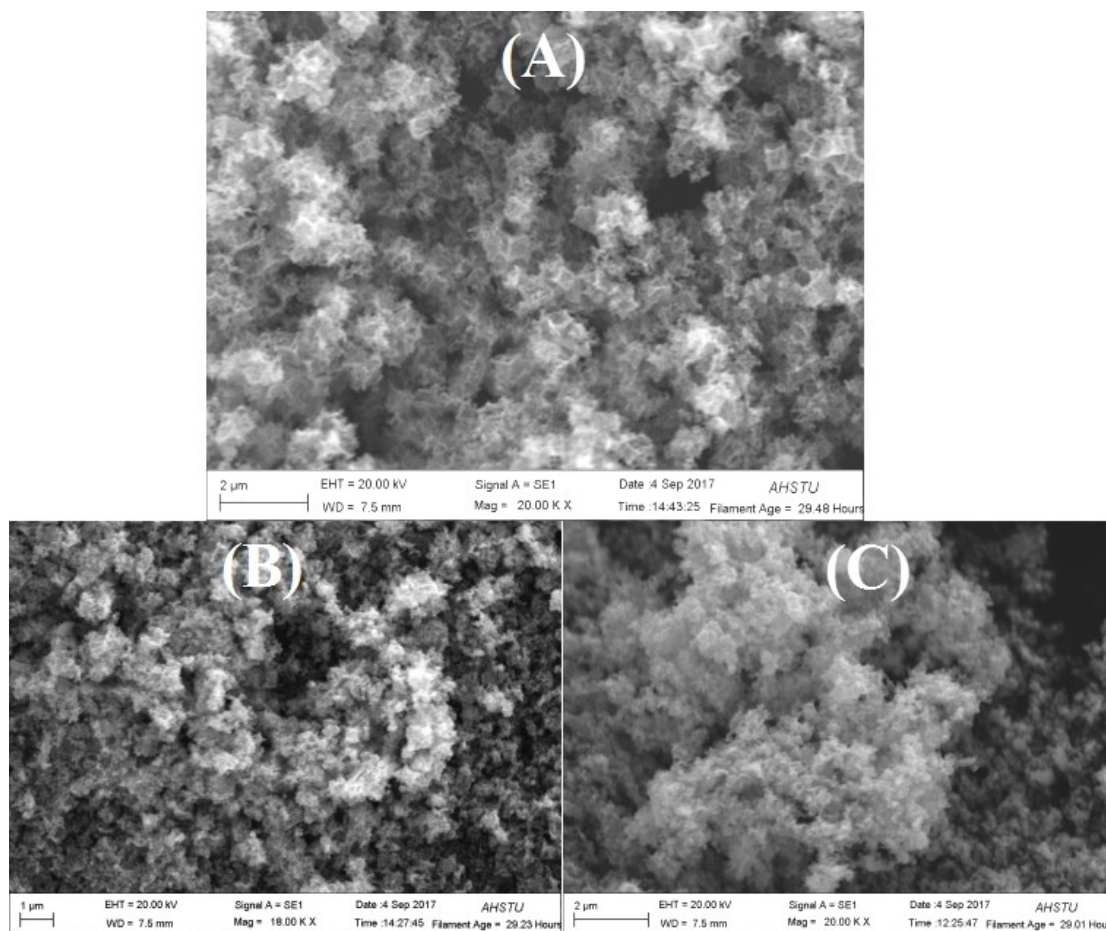


Fig. S4. SEM images of Ag/ZnO-A (A), Ag/ZnO-B (B) and Ag/ZnO-C (C).

Table S1. BET surface area of the samples before and after calcination.

Sample	$S_{\text{BET}} (\text{m}^2\text{g}^{-1})^{\text{a}}$	$S_{\text{BET}} (\text{m}^2\text{g}^{-1})^{\text{b}}$
ZIF-8	369.9	14.1
$\text{Ag}(\text{NH}_3)_2\text{NO}_3/\text{ZIF-8-A}$	357.6	12.0
$\text{Ag}(\text{NH}_3)_2\text{NO}_3/\text{ZIF-8-B}$	340.4	9.5
$\text{Ag}(\text{NH}_3)_2\text{NO}_3/\text{ZIF-8-C}$	318.8	7.7

^a and ^b stand for before and after calcination, respectively.

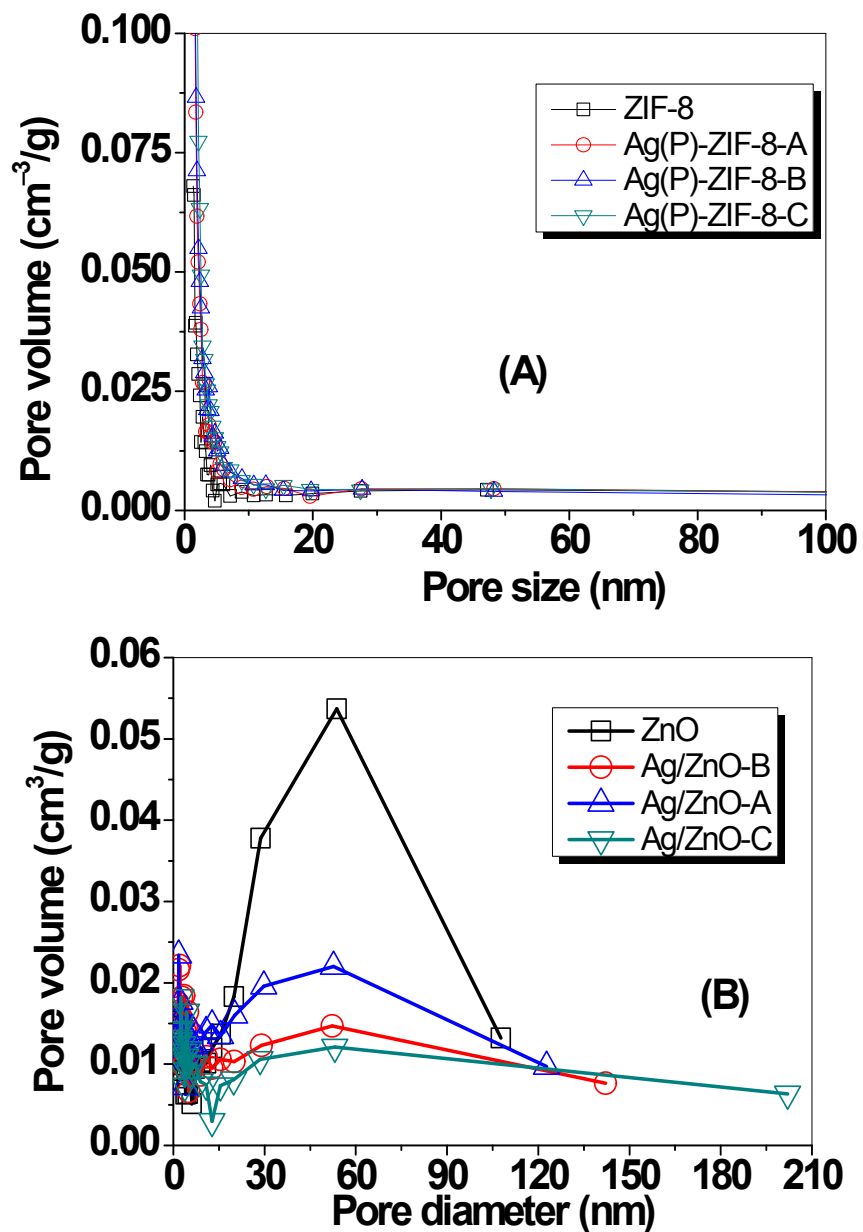


Fig. S5. Pore size distribution of the precursors before calcination (A) and calcined catalysts (B).

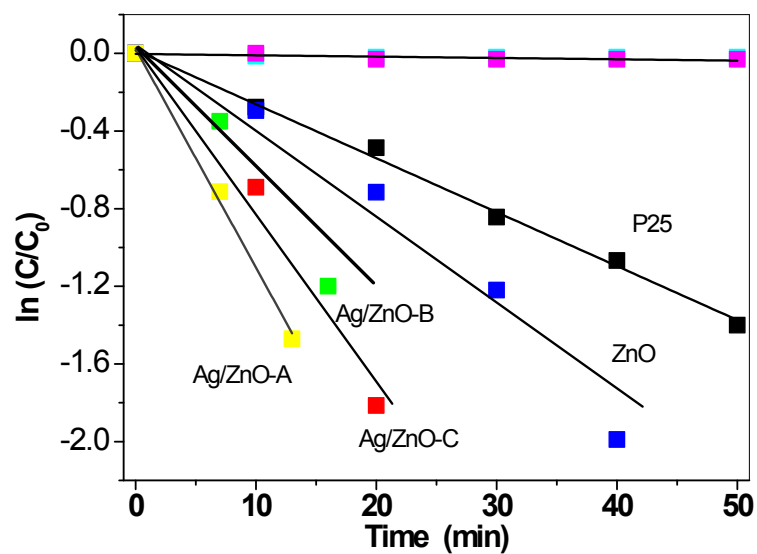


Fig. S6. Chemical kinetics study of photocatalytic degradation of MO using different catalysts.