

Supporting information

Synthesis of silver loaded ZnO nanorods and their enhanced photocatalytic activity and photoconductivity study

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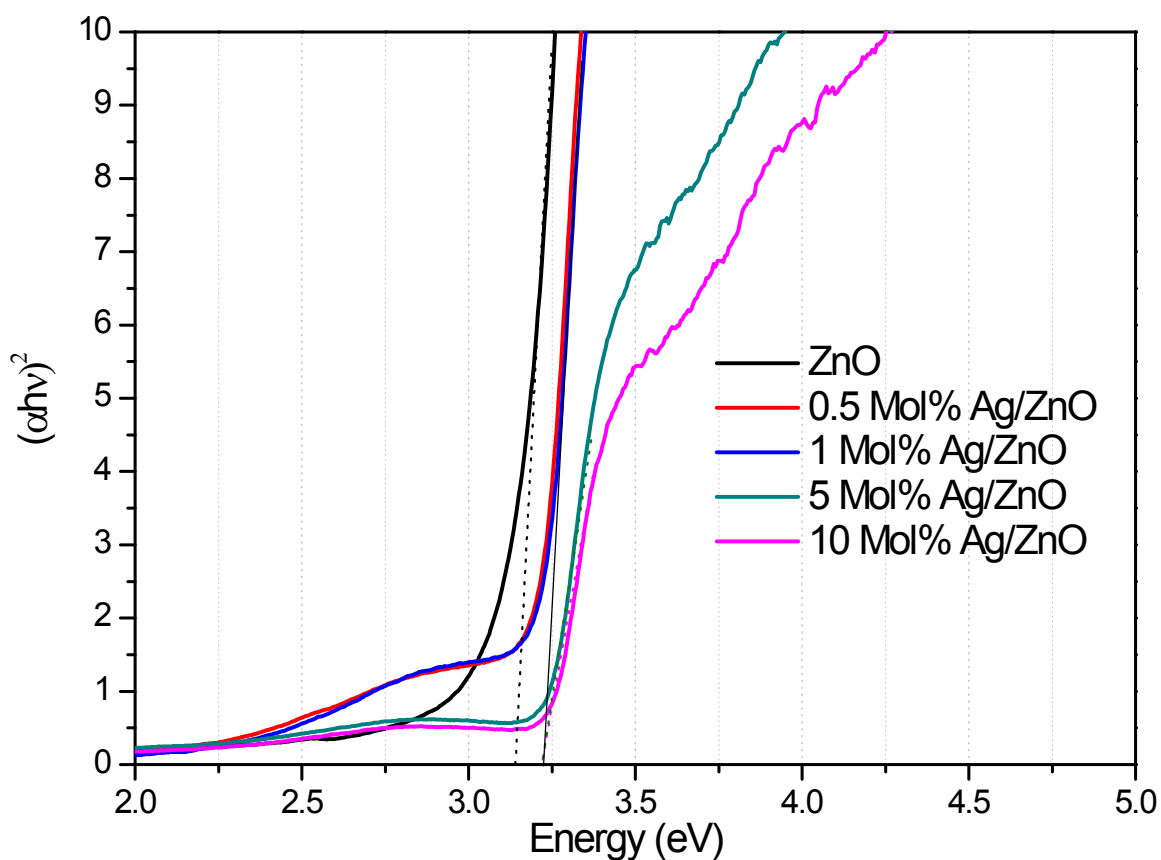


Figure S1: Tauc plot for ZnO and Ag loaded ZnO nanostructures

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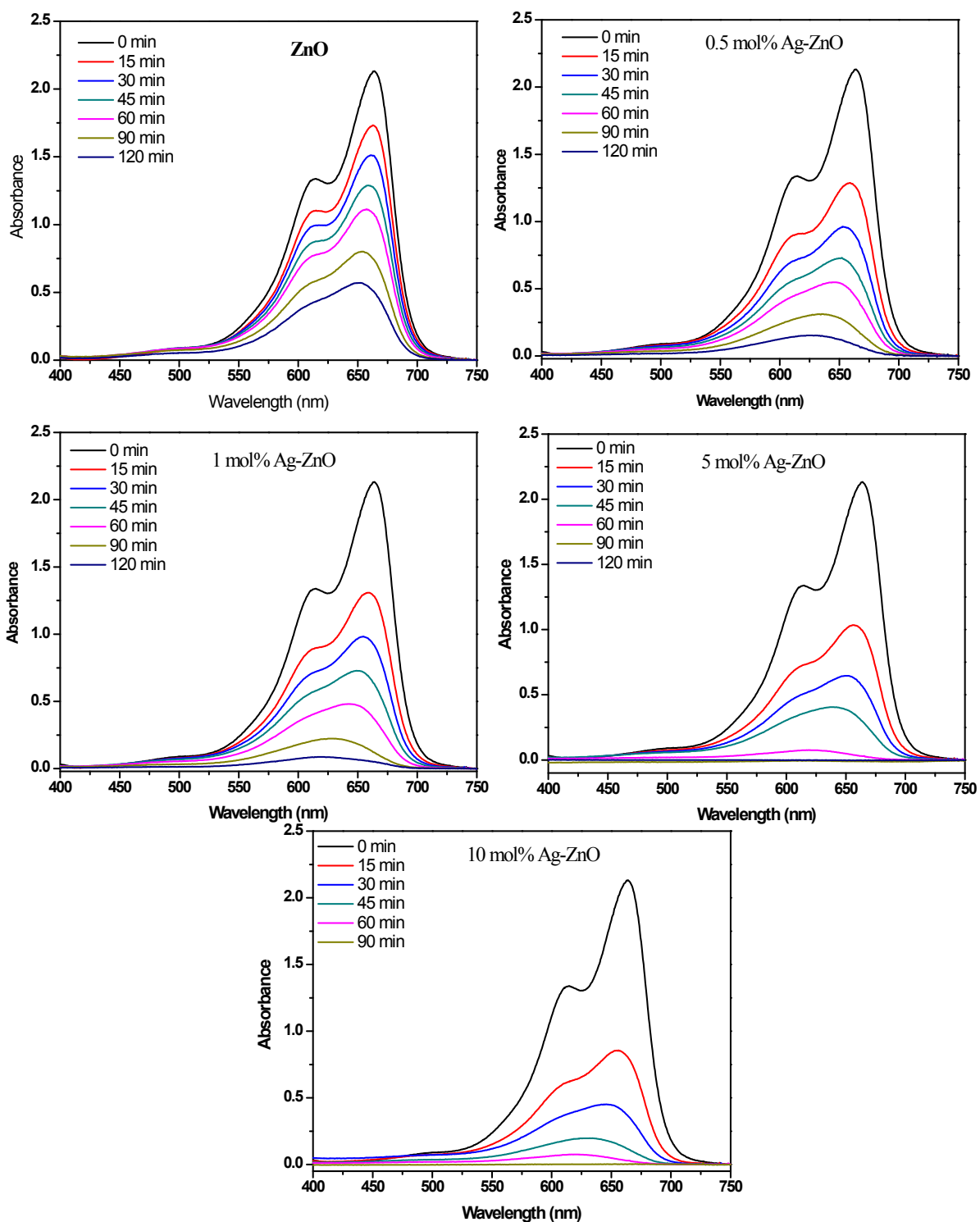


Fig. S2. Graph of MB degradation with irradiation time using Ag-ZnO catalyst

The recycle study of the catalyst was performed using 10 mol% Ag-ZnO nanorods for photocatalytic MB degradation under same experimental set up and results are tabulated in Table

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S1. Even after third recycle the catalyst showed 92 % of MB degradation with 1h of irradiation, this clearly confirms the stability and reproducibility of the catalyst.

Table S1. Amount of %MB degradation after 1h of irradiation over 10 mol % Ag-ZnO catalyst

Sr. No.	Description	% MB degrade
1	First run	96
2	Second run	94
3	Third run	92

XRD analysis of as synthesized and used catalyst is depicted in Fig. S 2. The Ag-ZnO catalyst recovered after third run was analyzed with X-ray diffractogram. The identical XRD pattern confirms the stability of Ag-ZnO catalyst.

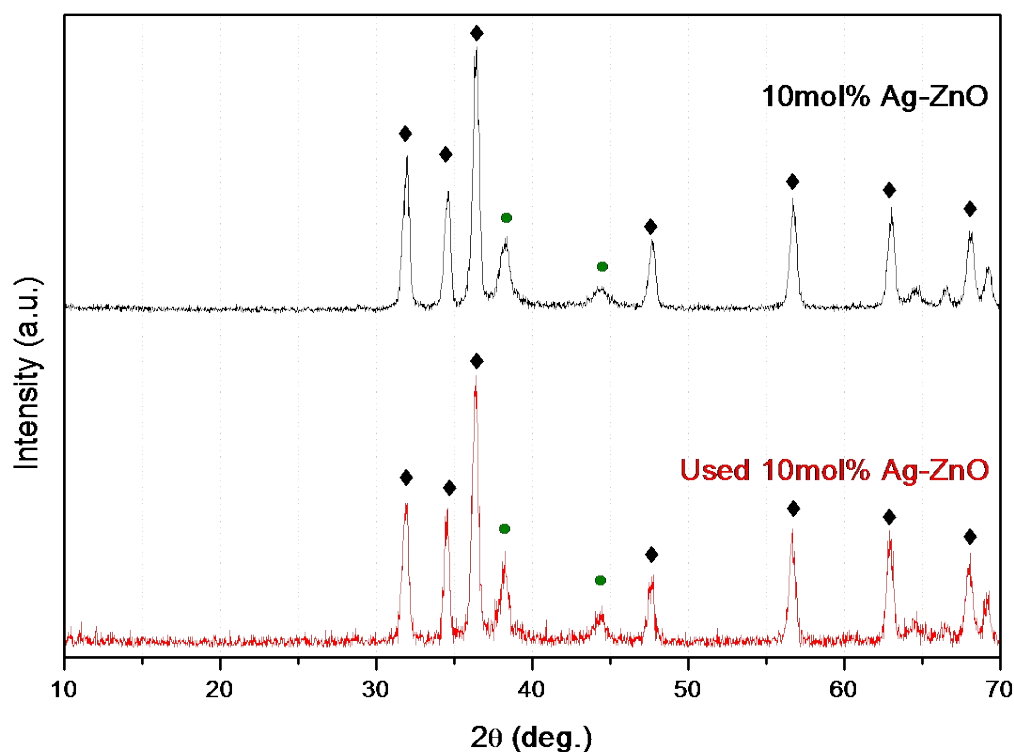


Fig. S3. XRD pattern of 10 mol% Ag-ZnO before and after photocatalytic MB degradation reaction