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Enhanced performance of the OMS-2 catalyst by Ag loading for

the oxidation of benzene, toluene, and formaldehyde

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Fig. S1. XRD patterns of 9 wt% Ag/OMS-2 before (a) and after (b) the activity test.



Fig. S2. H_2 -TPR profiles of 9 wt% Ag/OMS-2 before (a) and after (b) the activity test.



Fig. S3. O_2 -TPD profiles of 9 wt% Ag/OMS-2 before (a) and after (b) the activity test.



Fig. S4. NH₃ -TPD profiles of 9 wt% Ag/OMS-2 before (a) and after (b) the activity

test.



Fig. S5. Mn 2p XPS spectra of 9 wt% Ag/OMS-2 before (a) and after (b) the activity



Fig. S6. O 1s XPS spectra of 9 wt% Ag/OMS-2 before (a) and after (b) the activity

test.



Fig. S7. Ag 3d XPS spectra of 9 wt% Ag/OMS-2 before (a) and after (b) the activity