Supplementary Material

Photo-mediated co-loading of highly dispersed MnO_x-Pt on g-C_3N_4 boosts the ambient catalytic oxidation of formaldehyde

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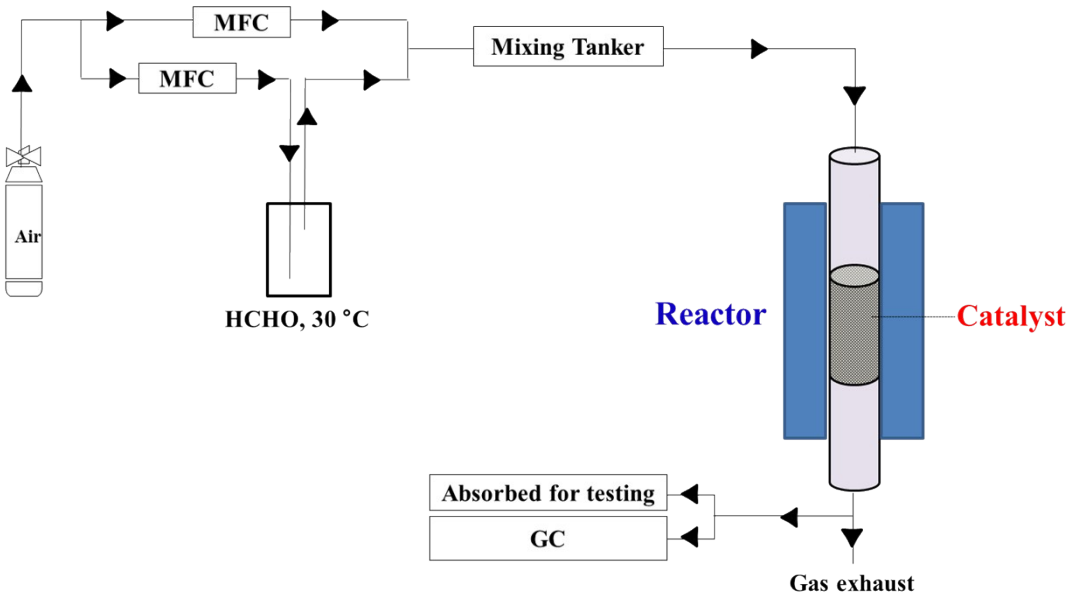

Fig. S1 Schematic representation of experimental setup for catalytic oxidation of HCHO.

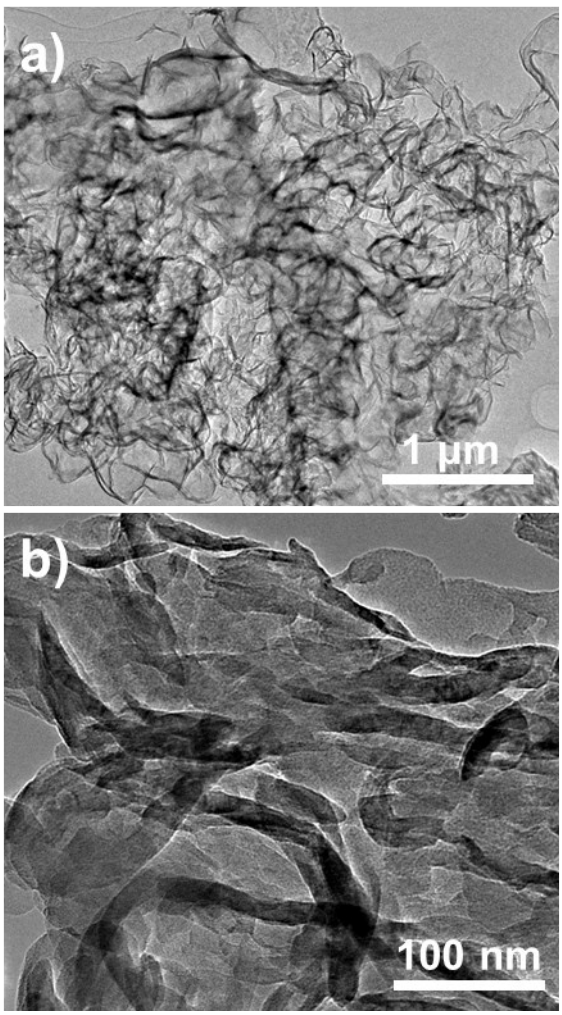

Fig. S2 Field-emission TEM images of g-C_3N_4.

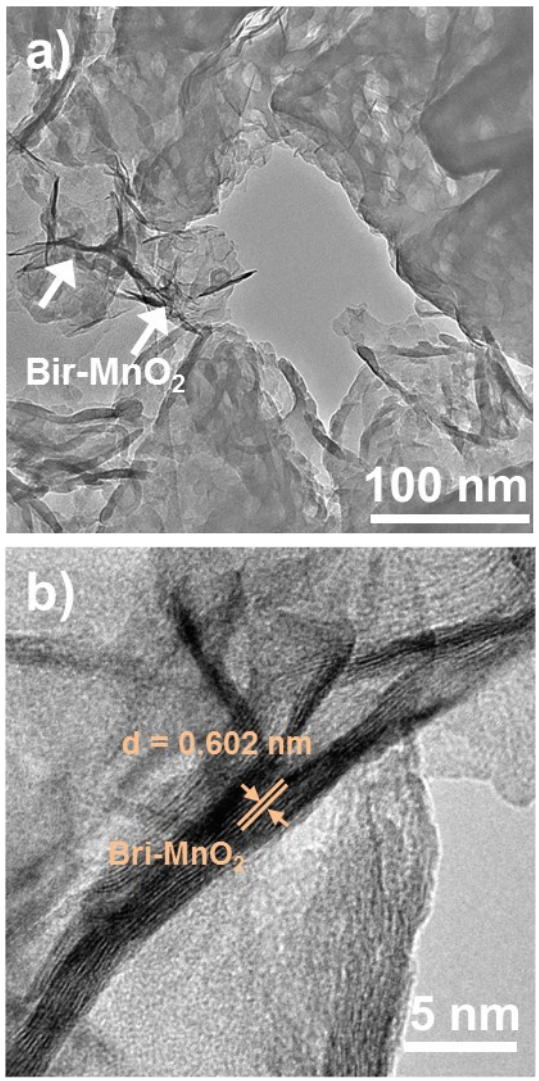

Fig. S3 Field-emission TEM and HRTEM images of MnO_x /g-C_3N_4.

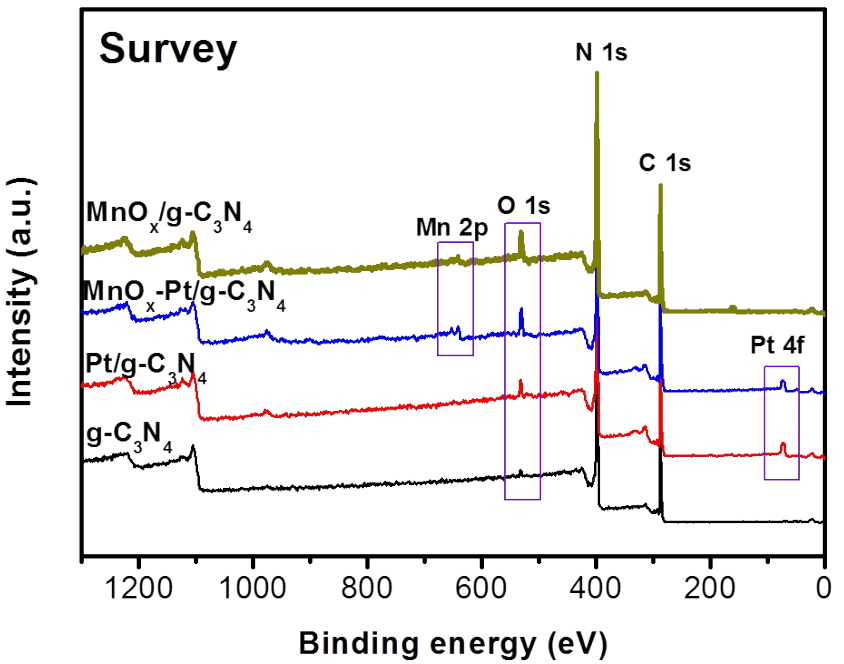

Fig. S4 XPS spectra of survey for various catalysts.

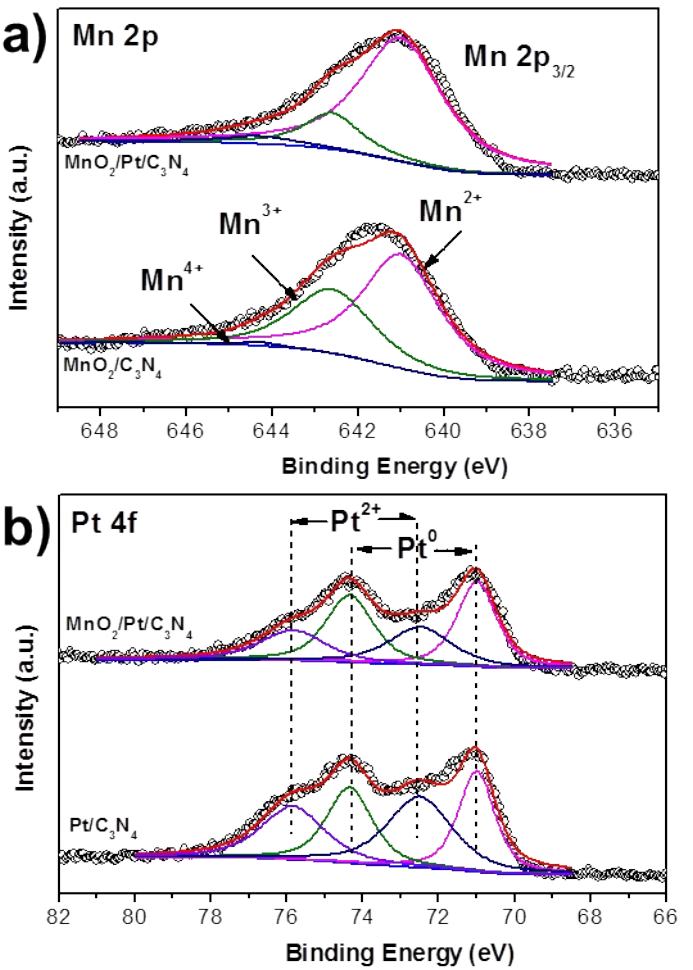

Fig. S. XPS spectra of Mn 2p (a) and Pt 4f (b) of various catalysts.

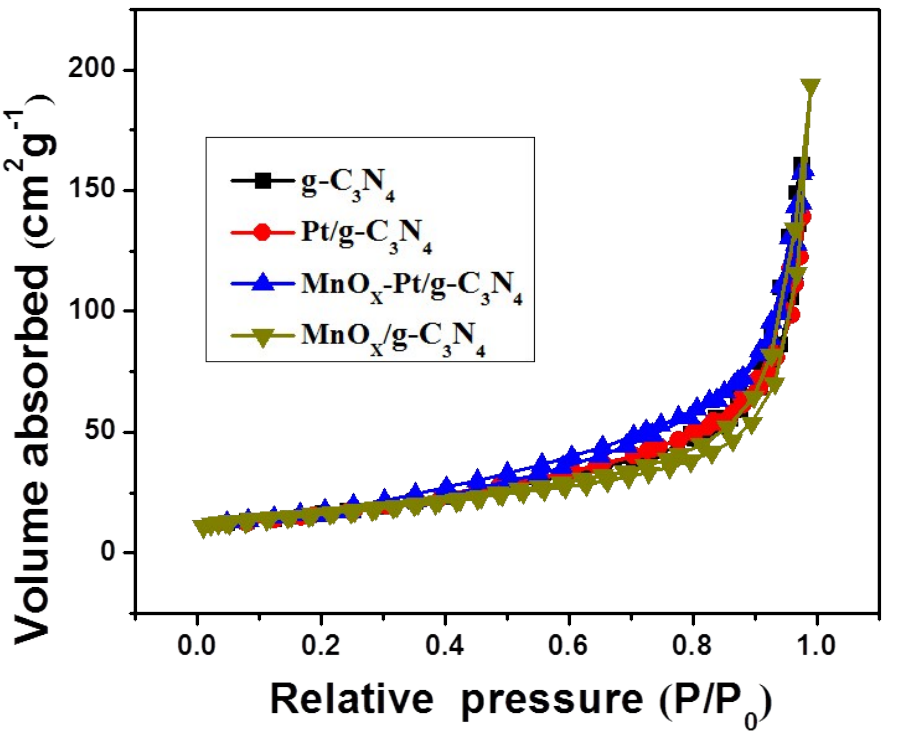

Fig. S6 N_2 adsorption-desorption isotherms of g-C_3N_4, Pt/g-C_3N_4, MnOx-Pt/g-C_3N_4 and MnO_x/g-C_3N_4.

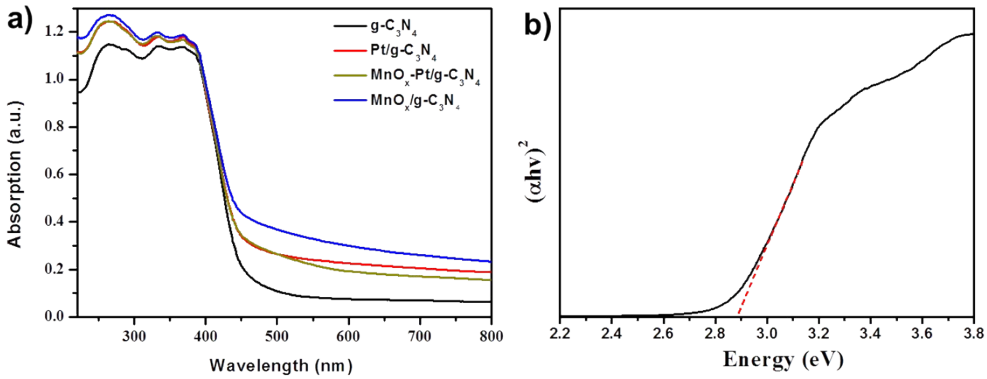

Fig. S7 (a) is UV-vis diffusion absorption spectra of g-C_3N_4, Pt/g-C_3N_4, MnO_x-Pt/g-C_3N_4 and MnO_x/g-C_3N_4. (b) is the plots of the $(ahv)^2$ versus photon energy (hv).

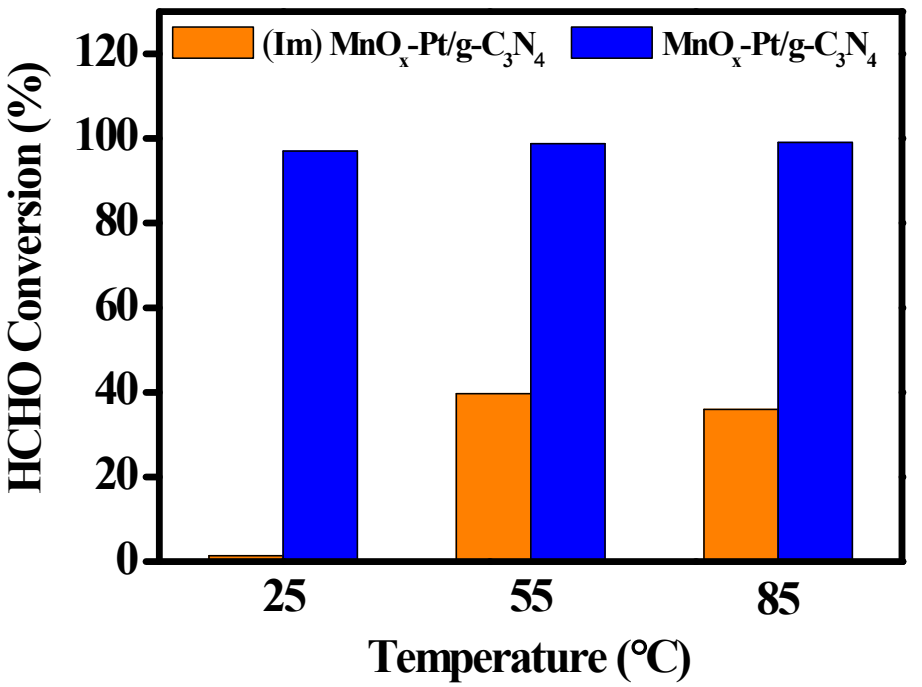

Fig. S8 HCHO conversion over MnO_x-Pt/g-C_3N_4 and (Im)MnO_x-Pt/g-C_3N_4.