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Supplementary material to

STUDY OF CATALYTIC OXIDATION OF TOLUENE USING Cu-Mn, Co-Mn, AND Ni-Mn MIXED OXIDES CATALYSTS

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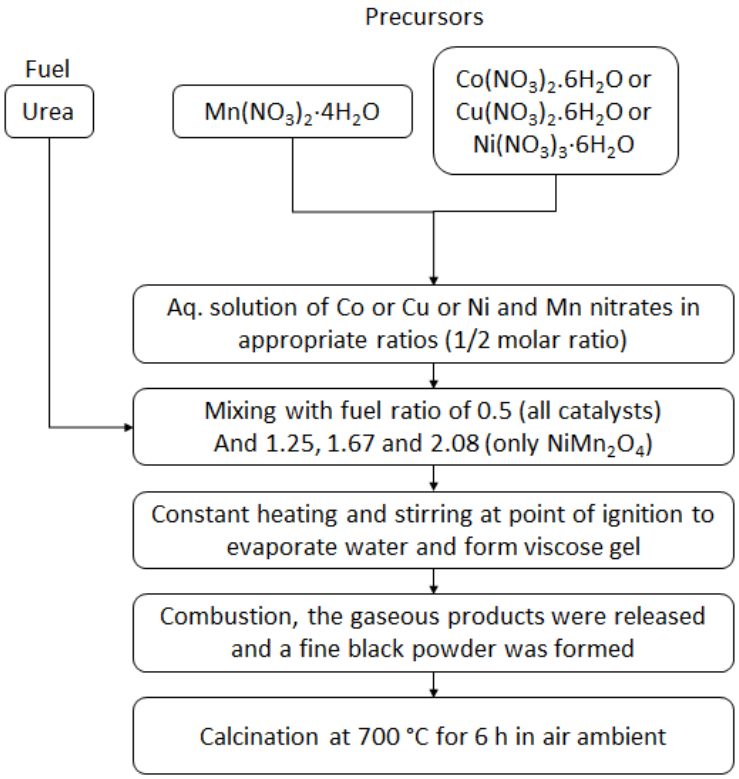

Figure S1. Combustion synthesis of catalyst solution with various fuel ratios.

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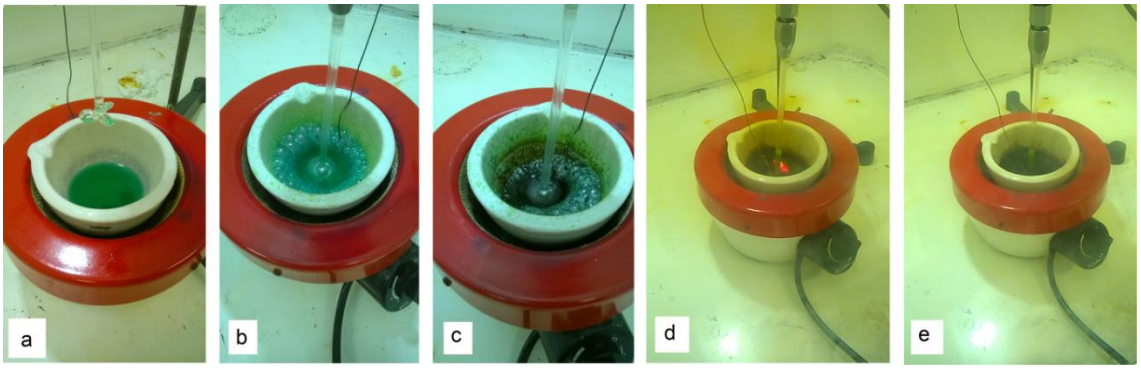

Figure S2. Obtaining catalyst by solution combustion synthesis.

Figure S3. Catalytic tests unit.

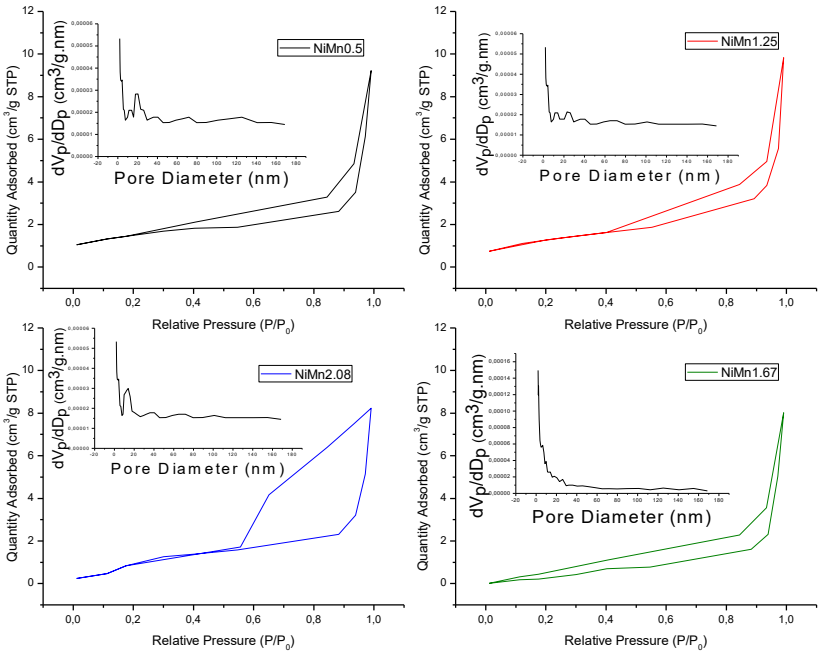

Figure S4. Adsorption/Desorption isotherms and BJH pore size distribution of $NiMn_2O_4$ catalysts with various fuel ratios.

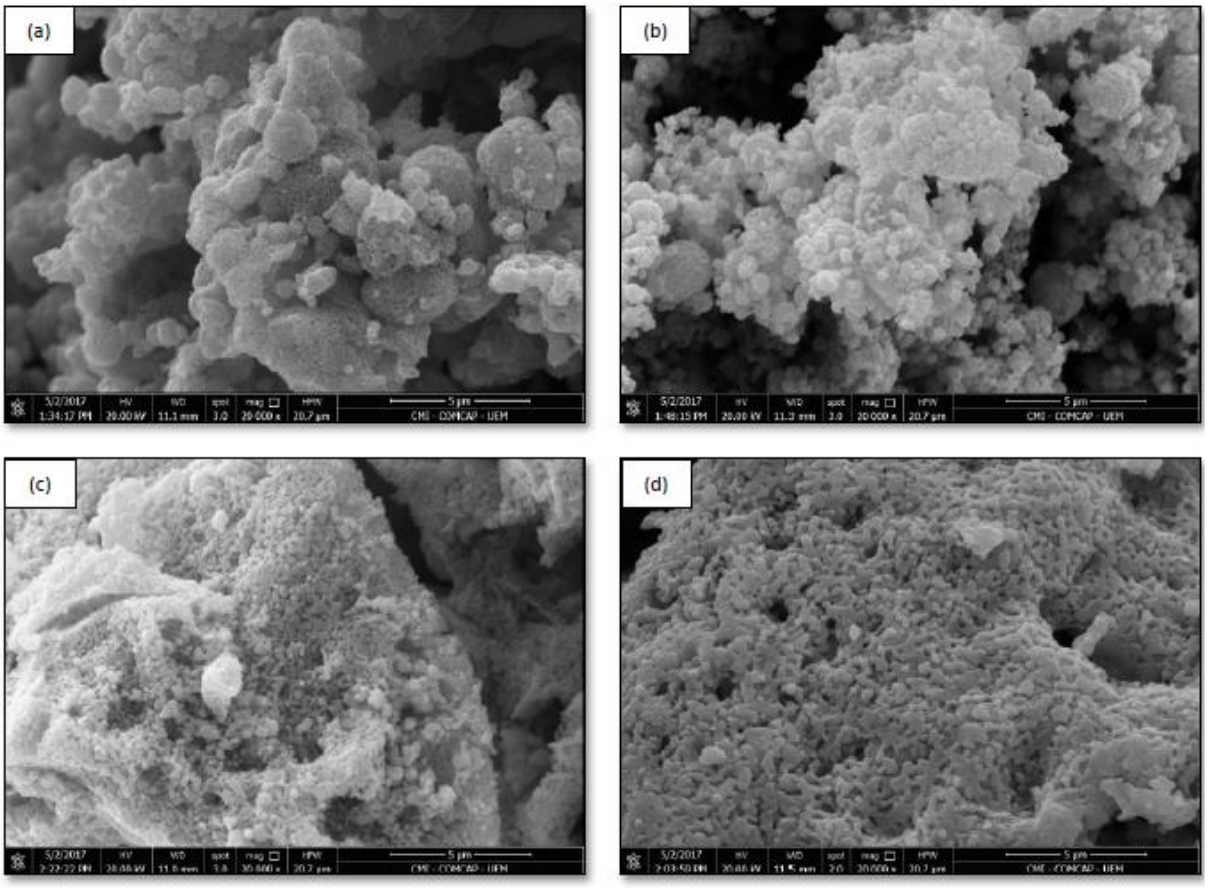

Figure S5. SEM images of $NiMn_2O_4$ catalysts with various fuel ratios: (a) NiMn0.5 (b) NiMn1.25 (c) NiMn1.67 (d) NiMn2.08.

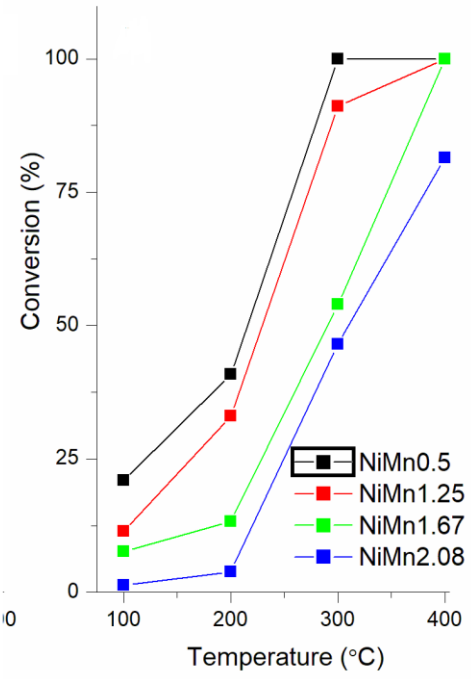

Figure S6. Curves for conversion of toluene over $NiMn_2O_4$ catalysts with various fuel ratios.