Electronic Supplementary Material (ESI) for Catalysis Science .

Nickel-catalyzed oxidative coupling of alkynes and aryl boronic acids using metal-organic framework $Ni_2(BDC)_2(DABCO)$ as an efficient heterogeneous catalyst

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Supporting information

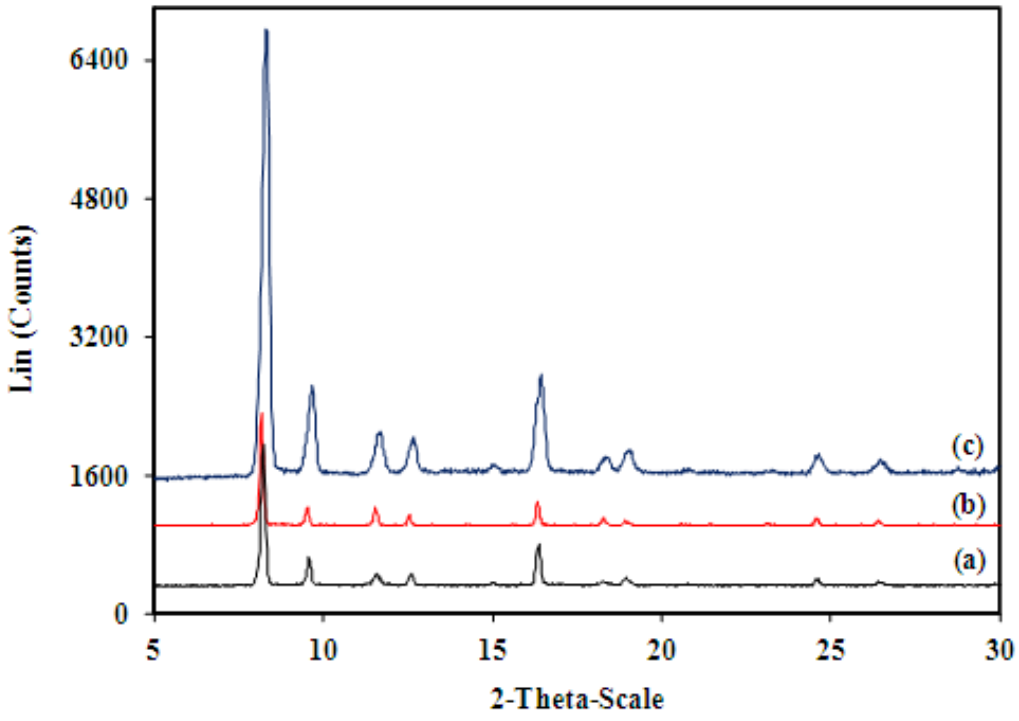

Fig. S1. X-ray powder diffractograms of the as-synthesized (a), CH_3OH-exchanged (b), and activated (c) $Ni_2(BDC)_2(DABCO)$.

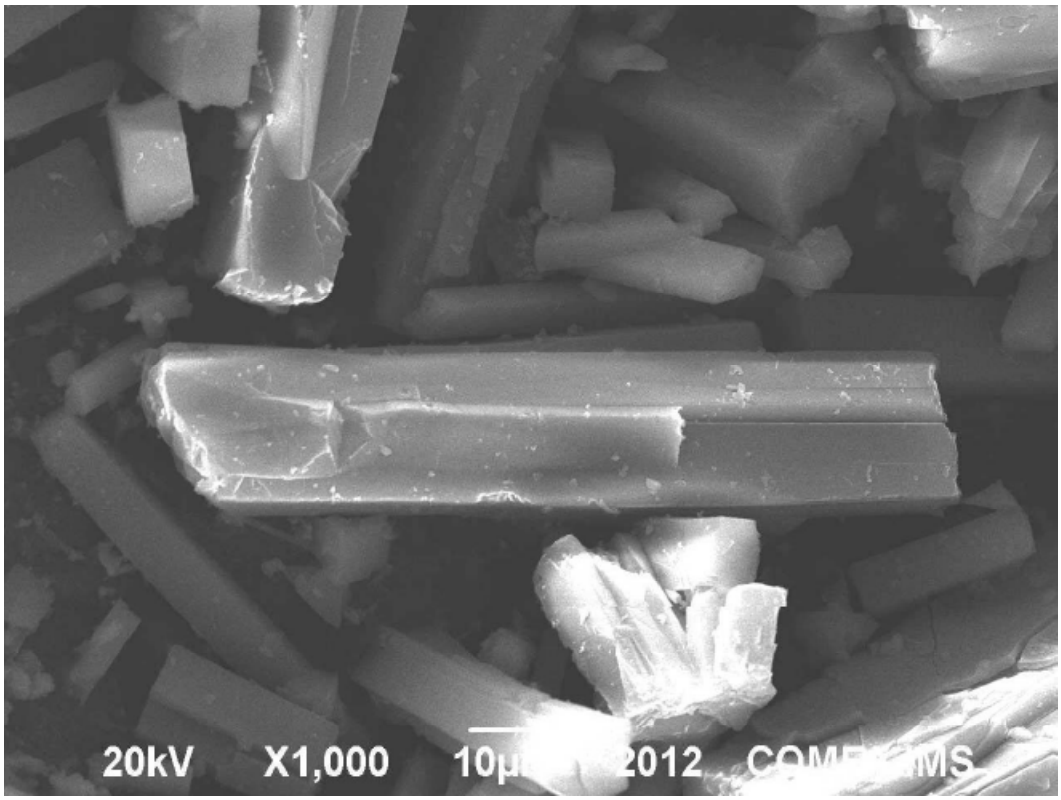

Fig. S2. SEM micrograph of the $Ni_2(BDC)_2(DABCO)$.

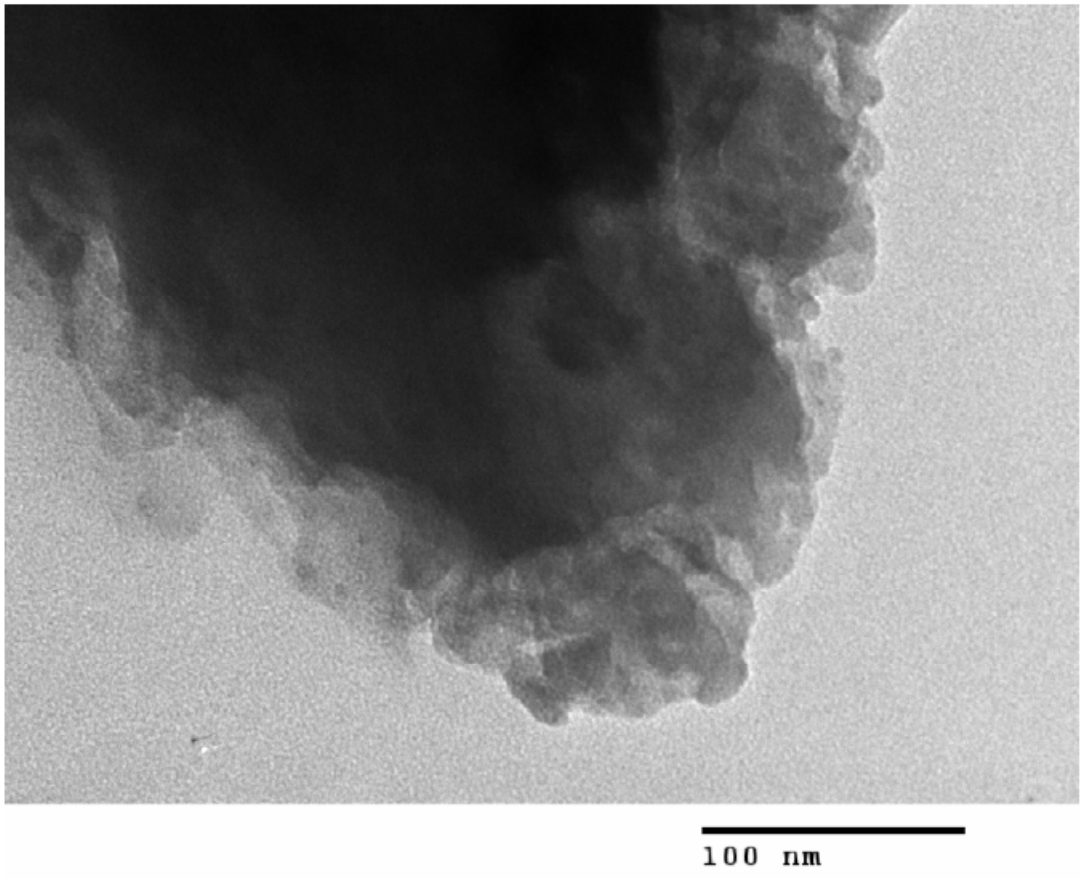

Fig. S3. TEM micrograph of the $Ni_2(BDC)_2(DABCO)$.

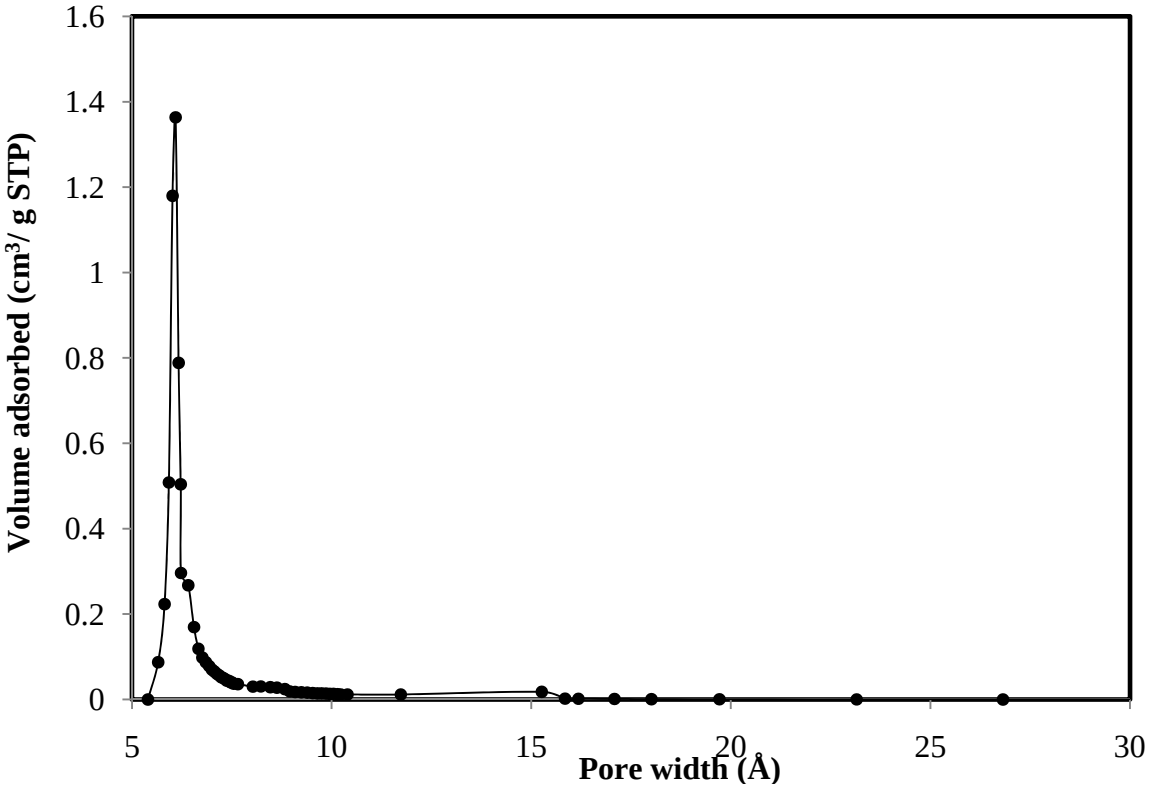

Fig. S4. Pore size distribution of the $Ni_2(BDC)_2(DABCO)$.

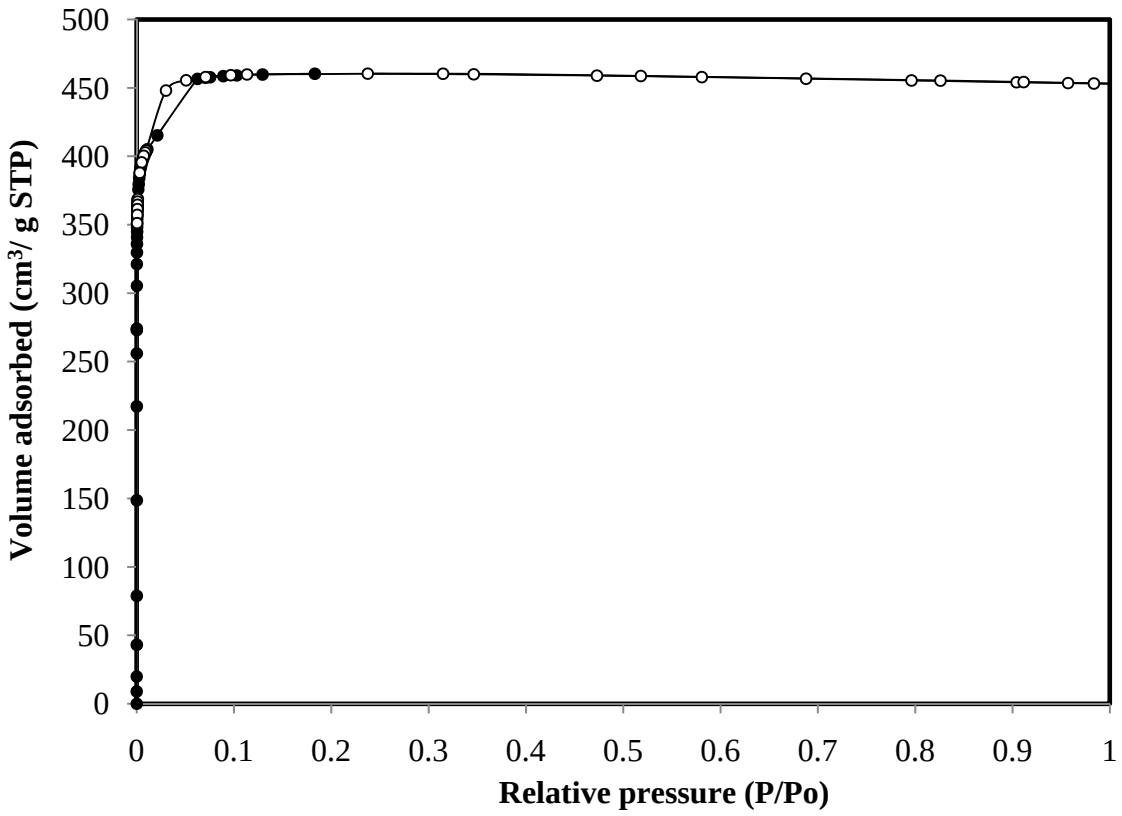

Fig. S5. Nitrogen adsorption/desorption isotherm of the $Ni_2(BDC)_2(DABCO)$. Adsorption data are shown as closed circles and desorption data as open circles.

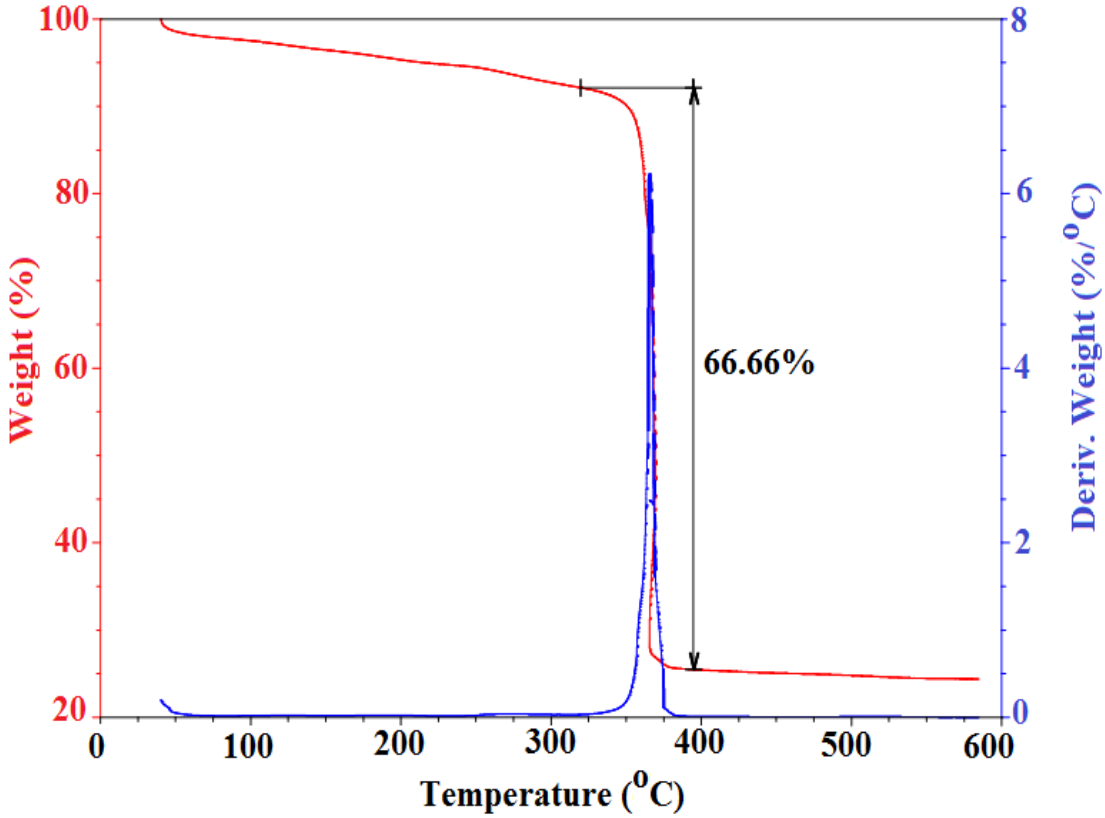

Fig. S6. TGA analysis of the $Ni_2(BDC)_2(DABCO)$.

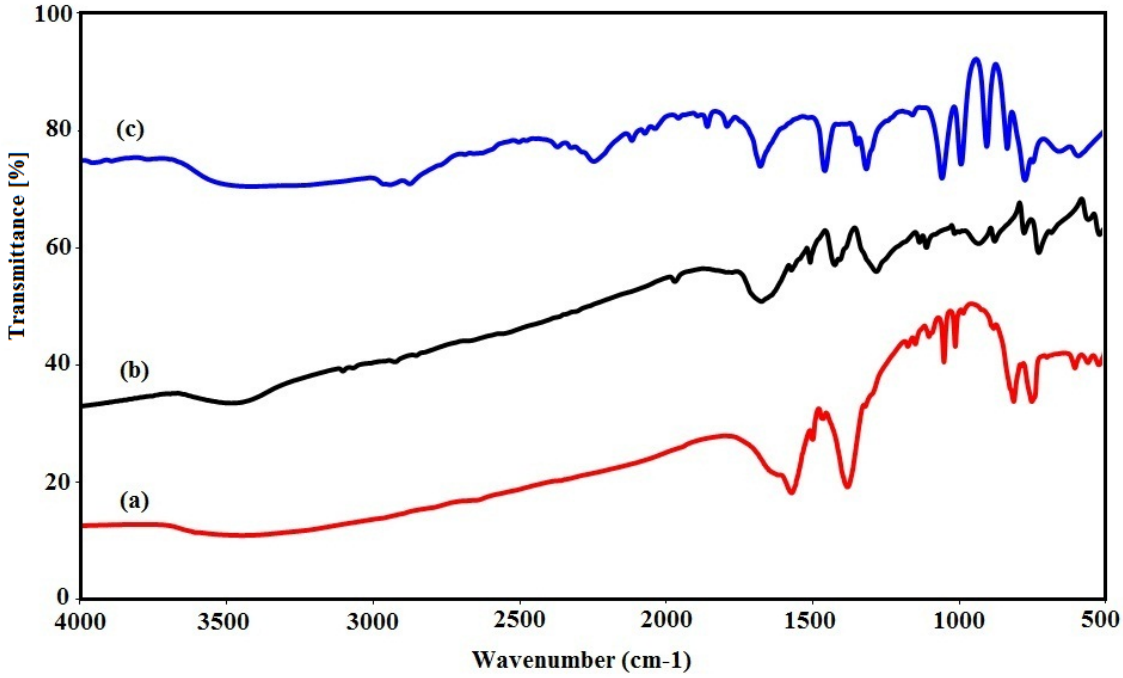

Fig. S7. FT-IR spectra of the $Ni_2(BDC)_2(DABCO)$ (a), 1,4-benzenedicarboxylic acid (b), and 1,4-diazabicyclo[2.2.2]octane (c).

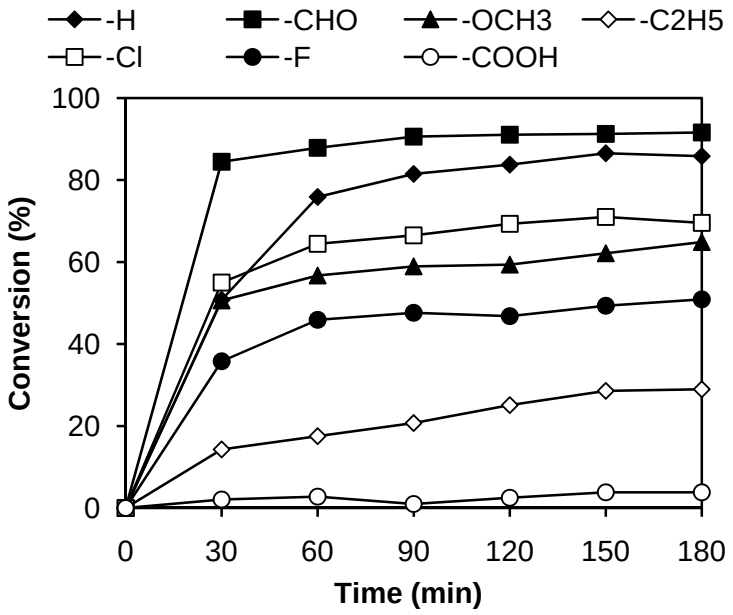

Fig. S8. Effect of different phenylboronic acids on reaction conversions.

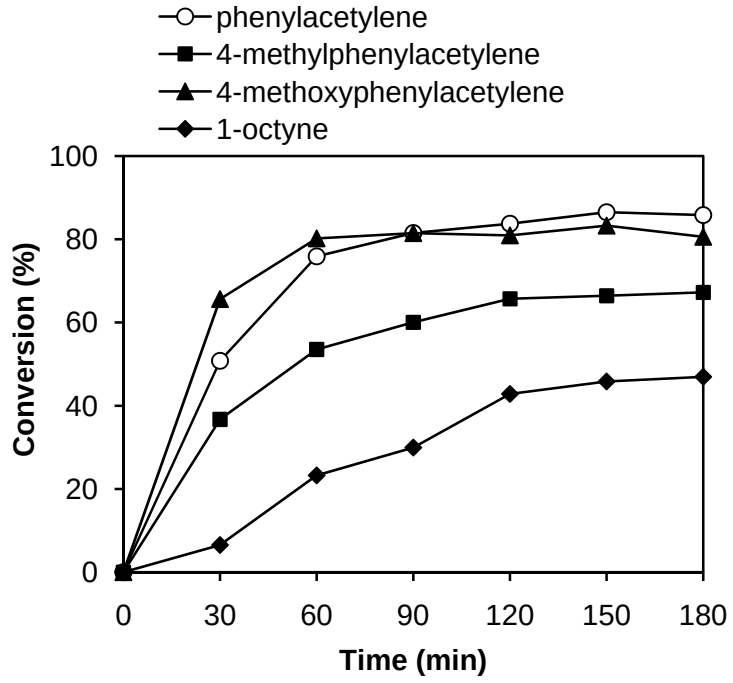

Fig. S9. Effect of different alkynes on reaction conversions.