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Cu²⁺-doped Zeolitic Imidazolate Frameworks (ZIF-8): Efficient and Stable Catalysts for Cycloadditions and Condensation Reactions

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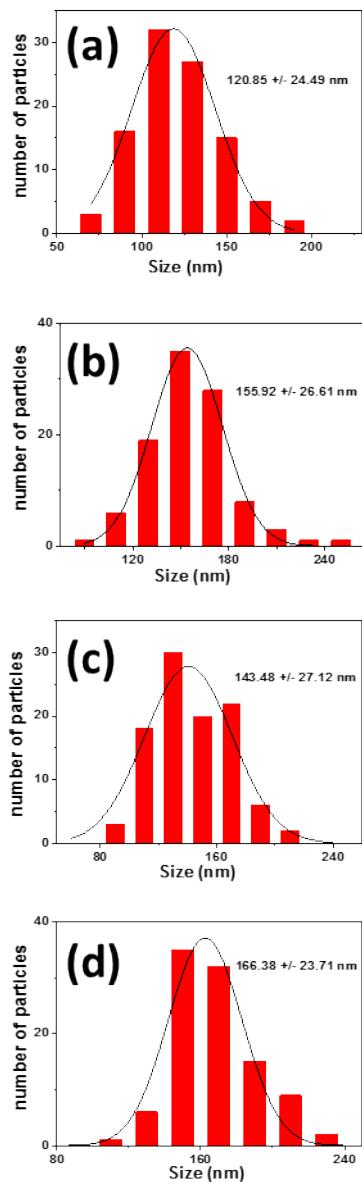


Fig. S1. Size distributions determined by SEM for ZIF-8 crystals doped with (a) 1, (b) 5, (c) 10, and (d) 25% Cu²⁺, respectively.

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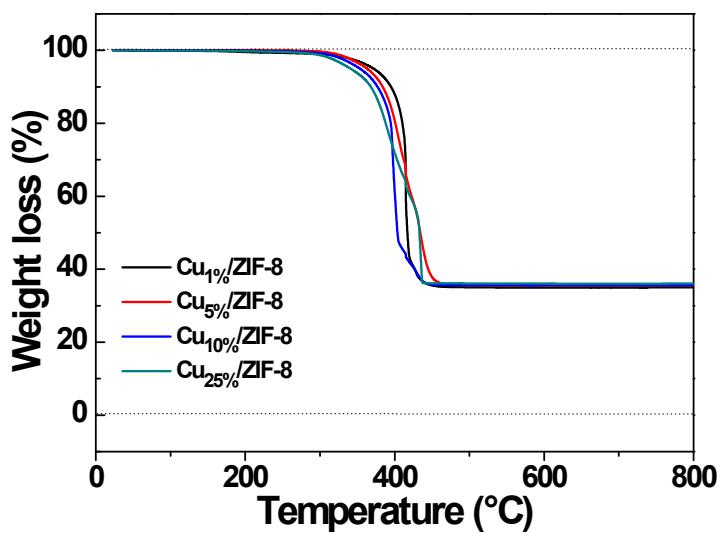


Fig. S2. TGA traces of Cu-doped ZIF-8 crystals.

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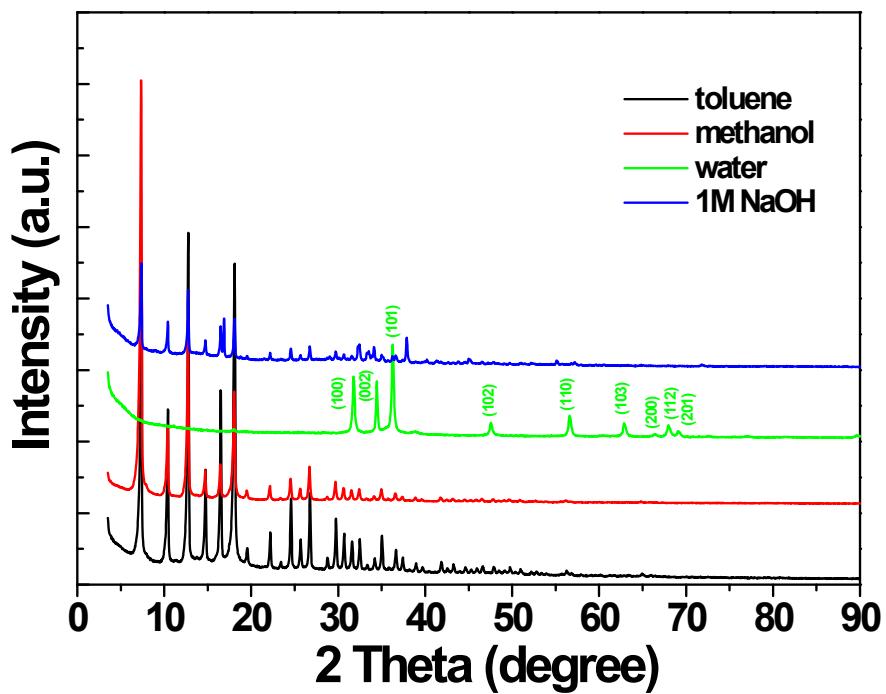


Fig. S3. XRD patterns of Cu_{10%}ZIF-8 crystals after one week heating in refluxing toluene, methanol, water, and 1M NaOH.

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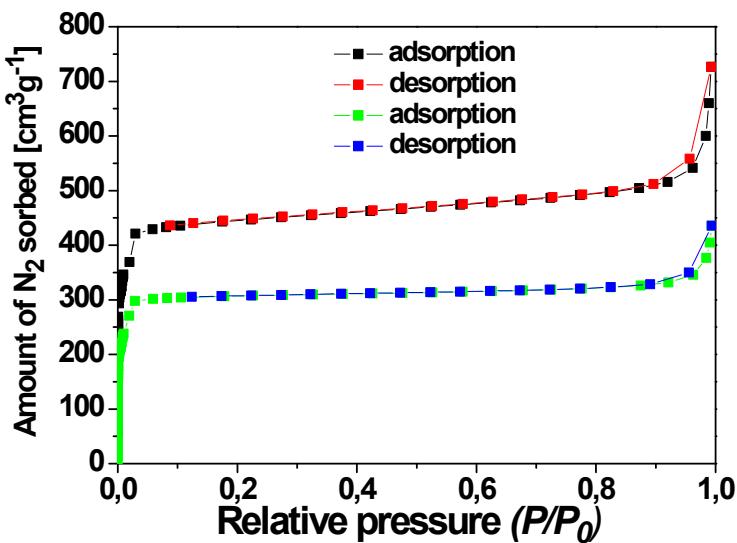


Fig. S4. N₂ adsorption/desorption curves at 77K for Cu_{5%}/ZIF materials before and after 5 cycles of Combes condensation. Black and red data correspond to the adsorption and desorption branches of the as-synthesized particles, respectively. Green and blue data correspond to the adsorption and desorption branches of the particles after 5 Combes condensations, respectively.