

## A 2D Cu(II) Coordination Polymer Constructed With 2,5-pyridinedicarboxylic acid Linker: Synthesis, Structural Analysis and It's Selective Transformation into Cu and CuO nanoparticles

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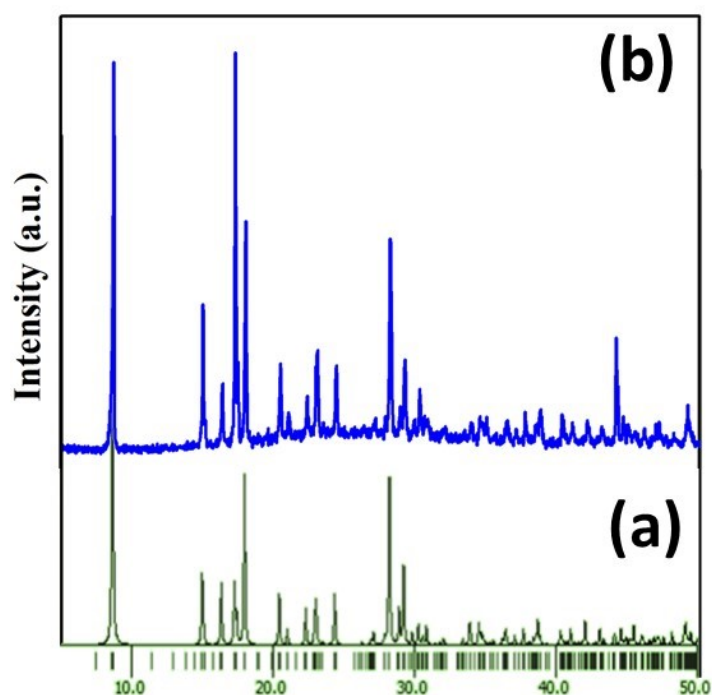
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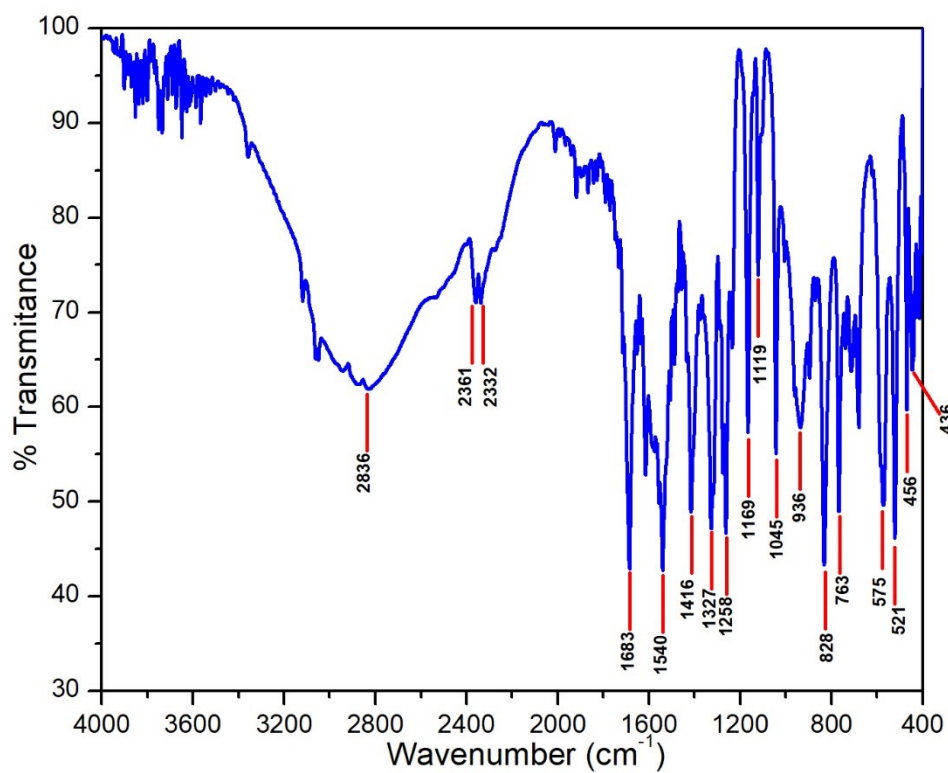
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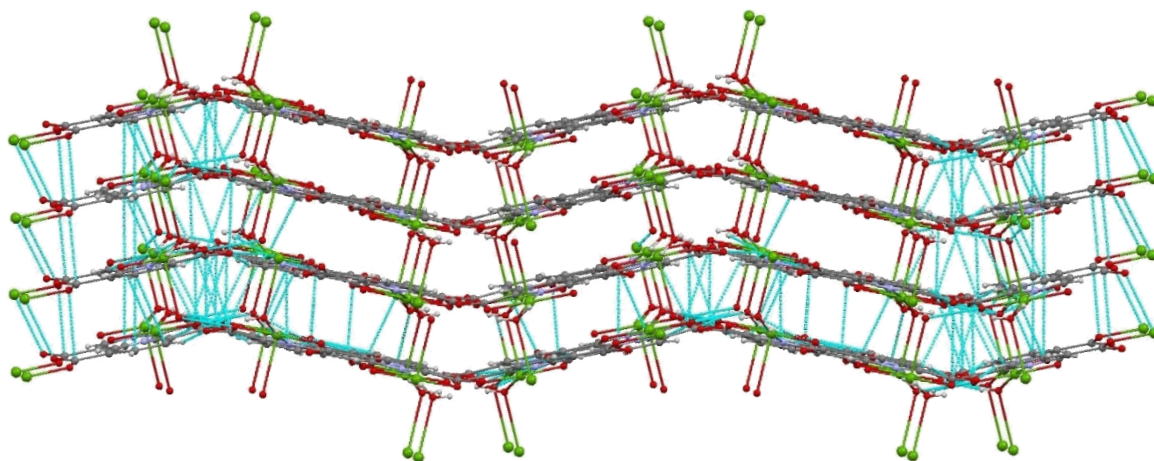
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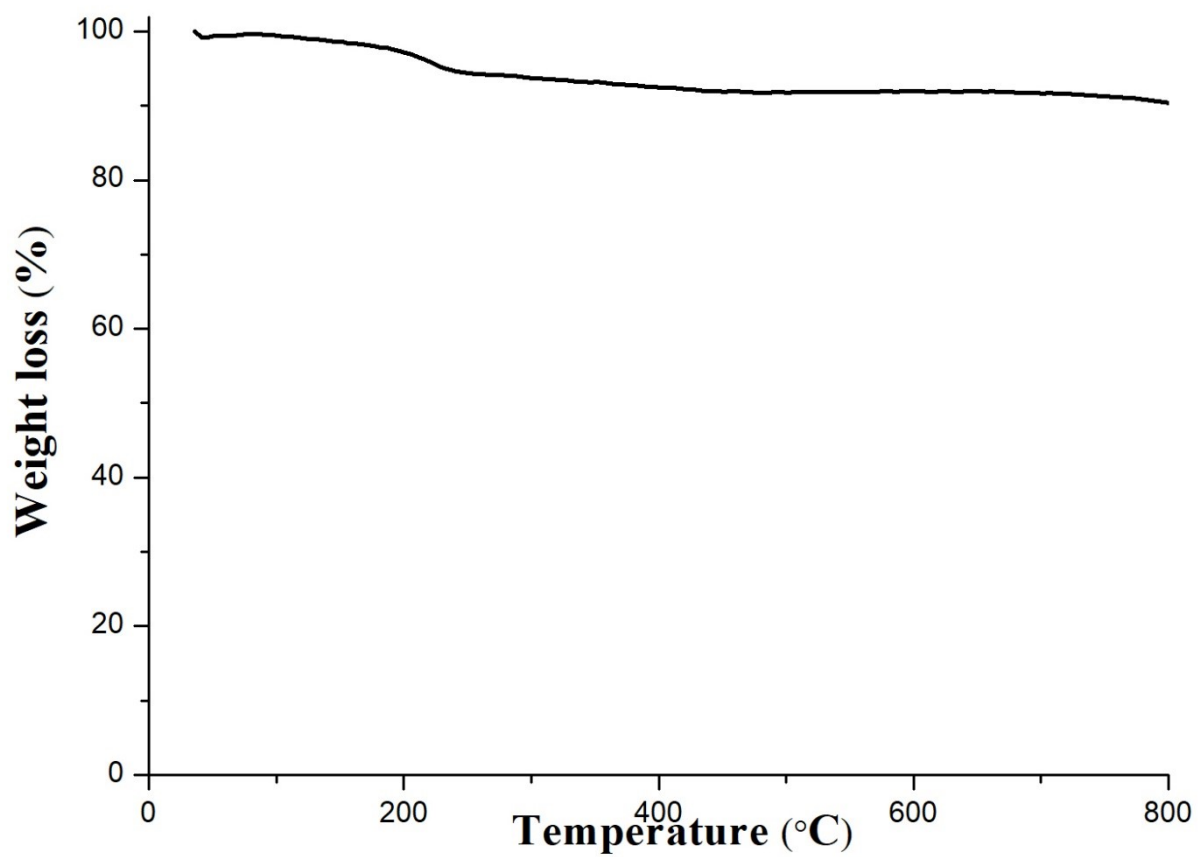
**Figure S1.** (a) simulated and (b) experimental X-ray powder diffraction (pXRD) pattern of  $[\text{Cu}(2,5\text{-PDC})]_n$  (**2D-CuPDC**) respectively.



**Figure S2.** IR spectra of *2D-CuPDC*



**Figure S3.** 2D networks connected through H-bonding and short contacts forming the layered structure (view along *a*-axis) of *2D-CuPDC*.



**Figure S4.** Thermogravimetric analysis of Cu nanoparticles.