

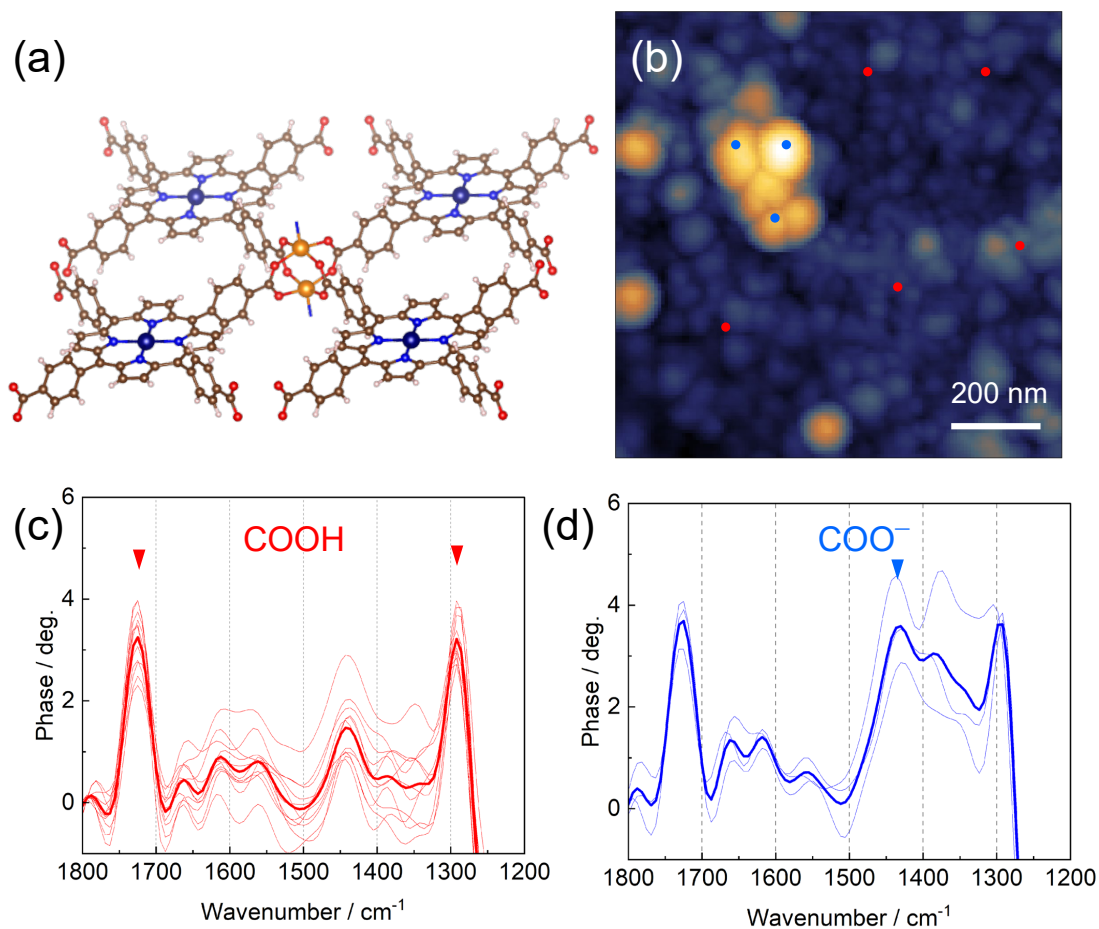


Figure (a) Structural model of NAFS-1. Pyridine molecules are omitted for clarity to emphasize the central paddle-wheel structures shown. Color code: Cu (orange), Co (dark blue), C (brown), N (blue), O (red), and H (white). (b) AFM topography of a 10-layer NAFS-1 sample prepared by the conventional method (with water-rinsing after each cycle). The size of the dots corresponds to ~ 20 nm, an approximate size of near-field light confinement. (c,d) Nano-FTIR spectra obtained from the locations indicated by corresponding colors in (b) and other similar regions. Thin lines represent individual spectra from a total of 11 red spots (5 spots indicated in (b)), and 3 blue spots. Thick lines indicate their respective averages.