

# **Supplementary Materials for Fabrication of Ni-MOF-74@PA-PEI for Radon Removal under Ambient Conditions**

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## 1. Experimental section

The amount of MOF loaded on the substrate can be given as a loading fraction, which means the total mass of MOF on the substrate per unit mass of the substrate. The loading rate of Ni-MOF-74 on PA-PEI substrate is calculated according to the equation below:

$$\text{Loading amount} = \frac{m_{\text{MOF@PA-PEI}} - m_{\text{PA-PEI}}}{m_{\text{PA-PEI}}} \times 100\%$$

## 2. Characterization of samples

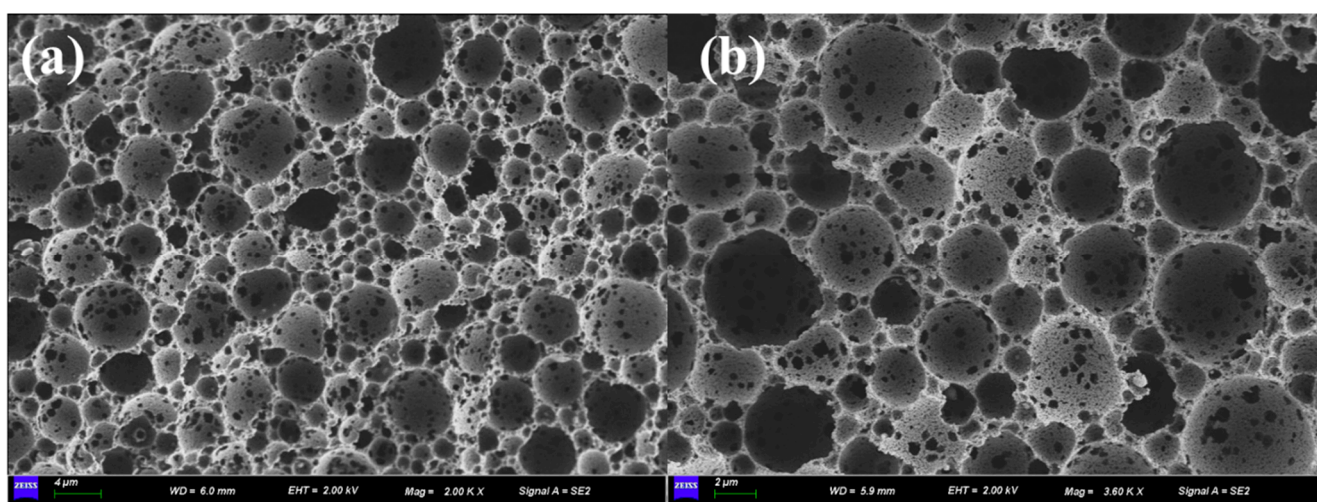
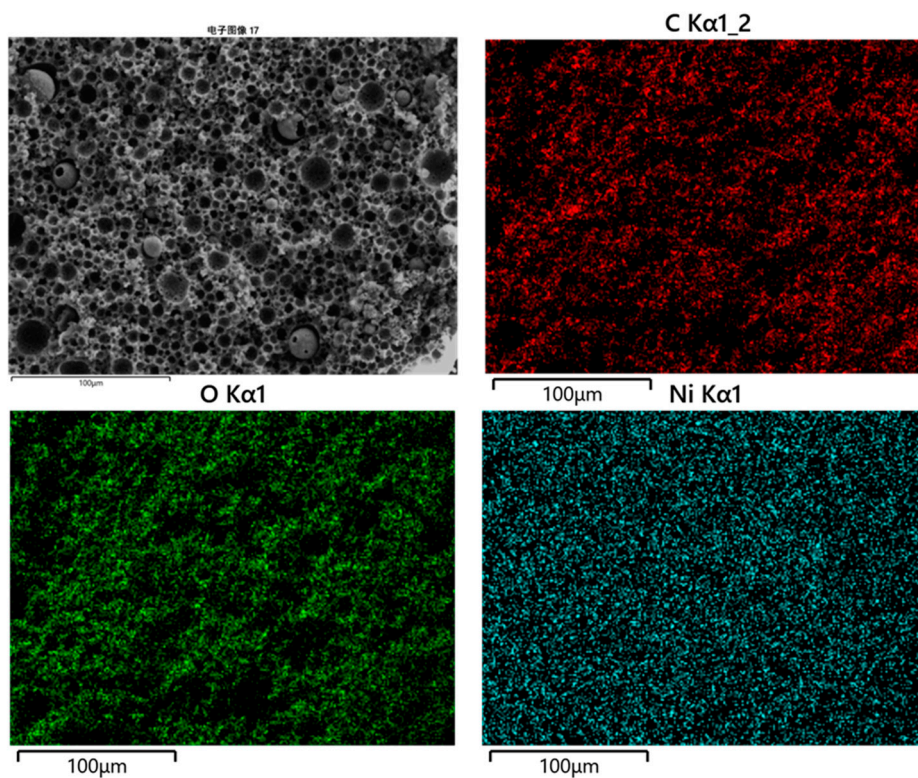
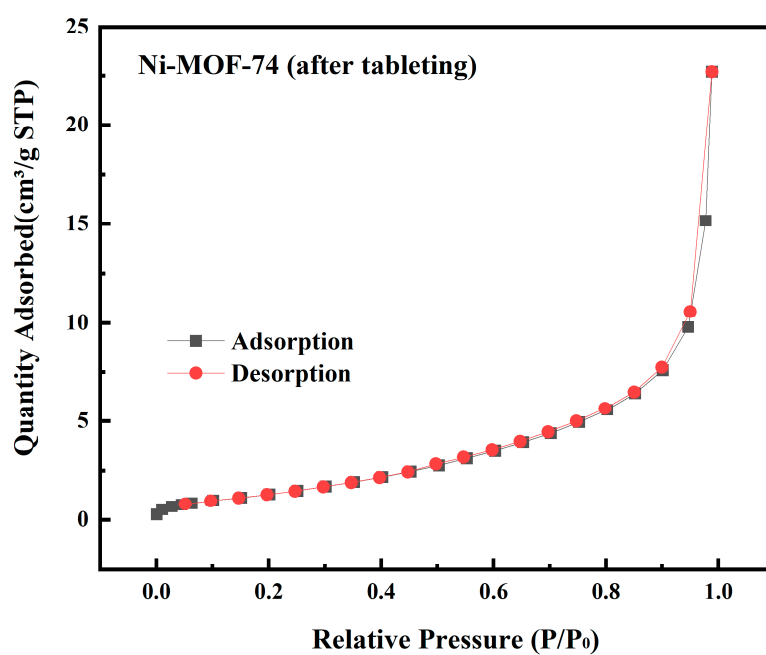


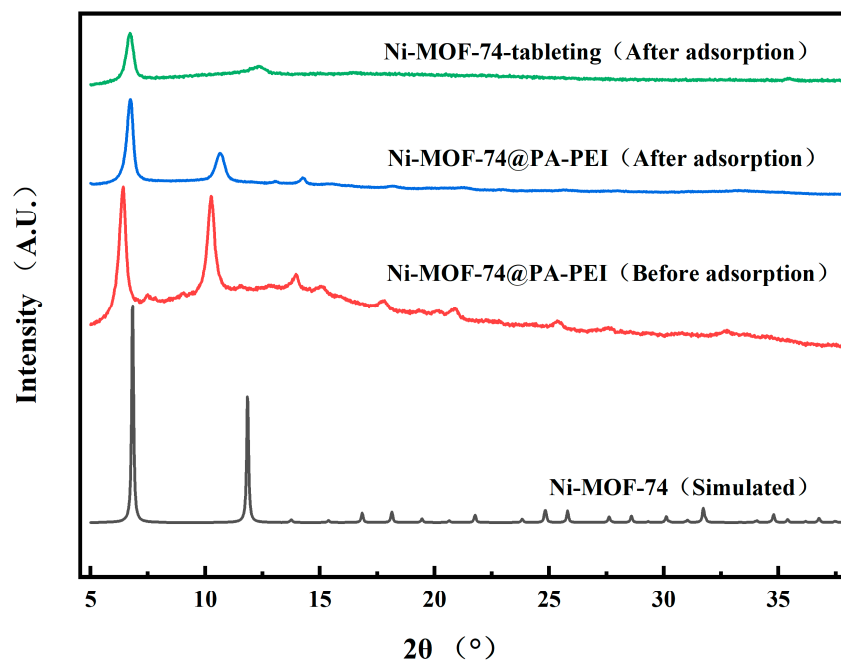
Figure S1. Internal pore structure of PA-PEI



**Figure S2.** SEM/energy dispersive X-ray spectroscopy mappings of interior of Ni-MOF-74@PA-PEI.



**Figure S3.** N<sub>2</sub> adsorption/desorption isotherms of Ni-MOF-74(after tableting)



**Figure S4.** X-ray diffraction patterns of several materials.