

Supplementary Information for:

Zr- and Hf-based Nanoscale Metal-Organic Frameworks as Contrast Agents for Computed Tomography

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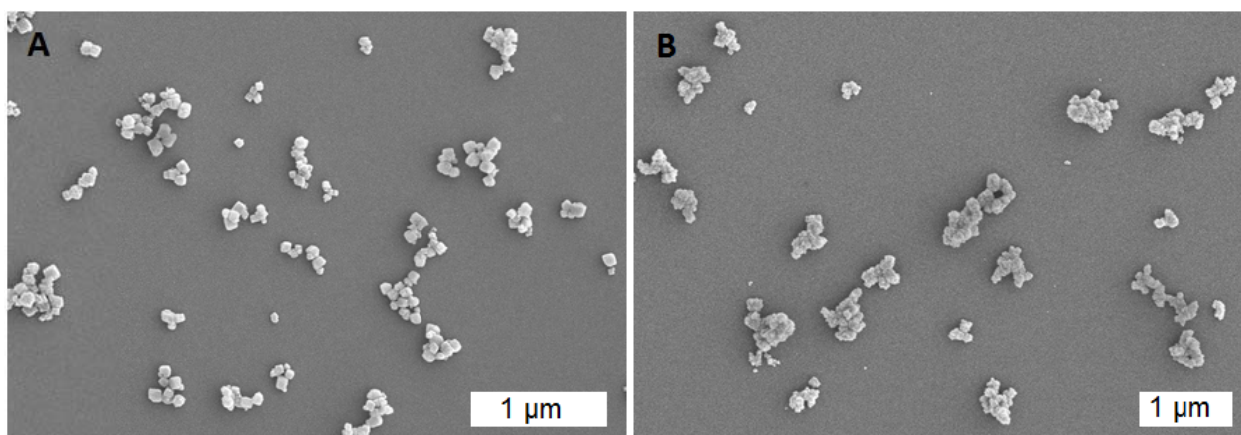


Figure S1. SEM images of (A) Zr-UiO and (B) Hf-UiO.

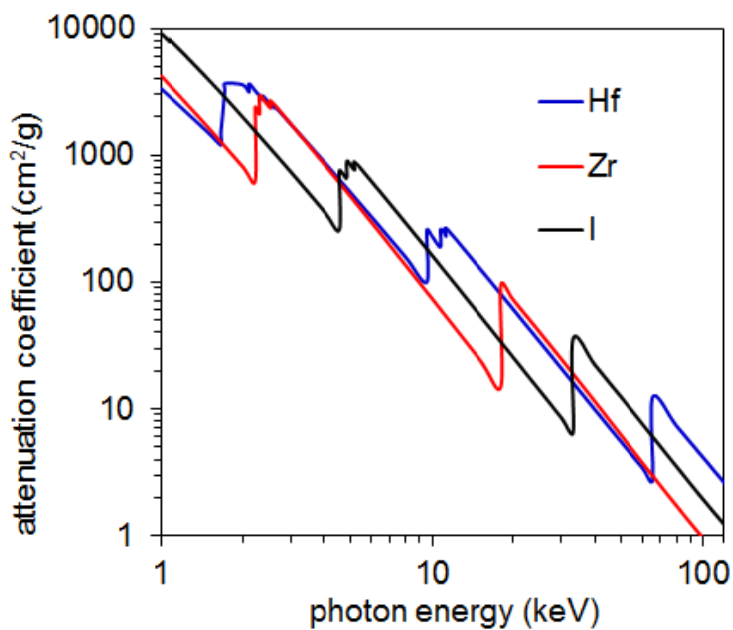


Figure S2. Attenuation coefficient vs. photon energy for Hf, Zr, and I, reproduced from data reported by NIST. Here the attenuation is expressed in cm^2/g units on a logarithmic scale. In Fig. 2E, it is expressed in mol^{-1} units on a linear scale, for easy visualization of the relative attenuation of these elements at the relevant energies.

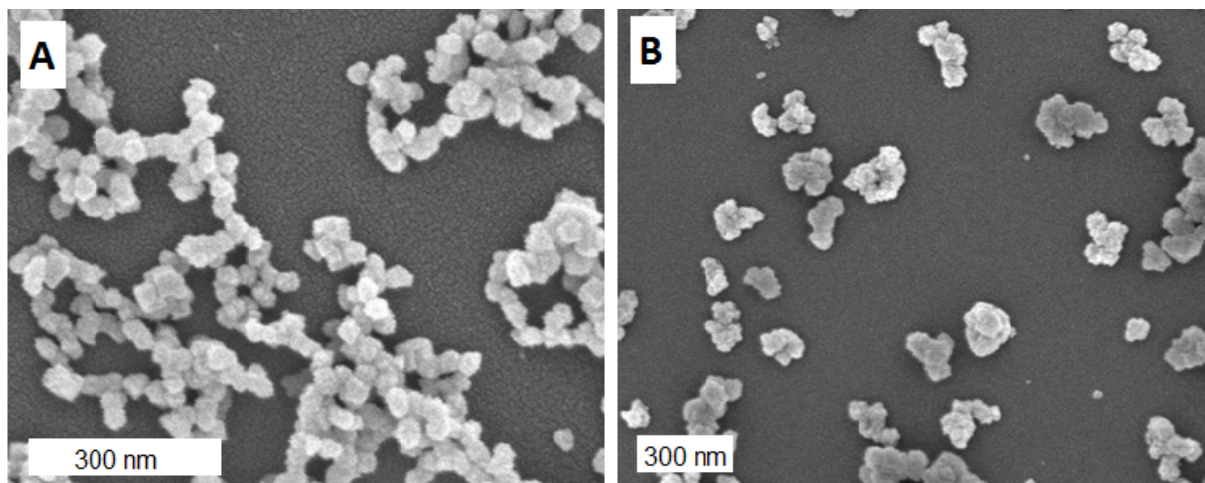


Figure S3. SEM images of (A) **Hf-UiO@SiO₂** and (B) **Hf-UiO@SiO₂@PEG**.

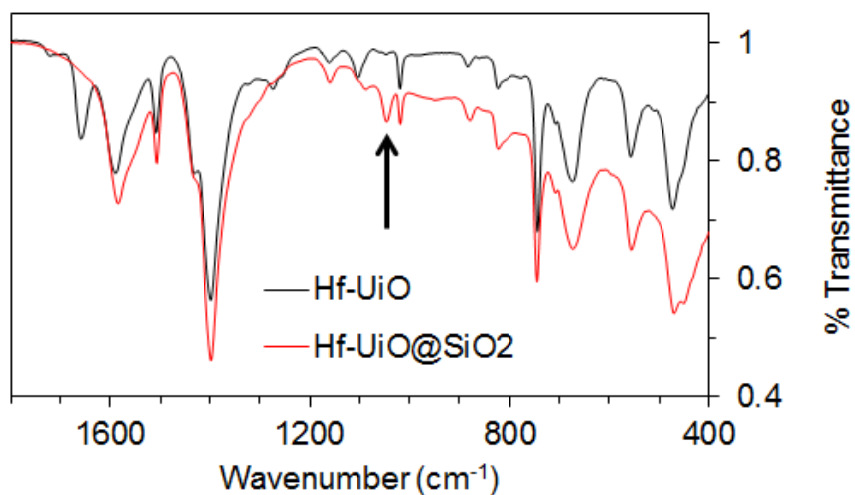


Figure S4. IR spectra of **Hf-UiO** and **Hf-UiO@SiO₂**. The arrow indicates the peak coming from SiO₂.

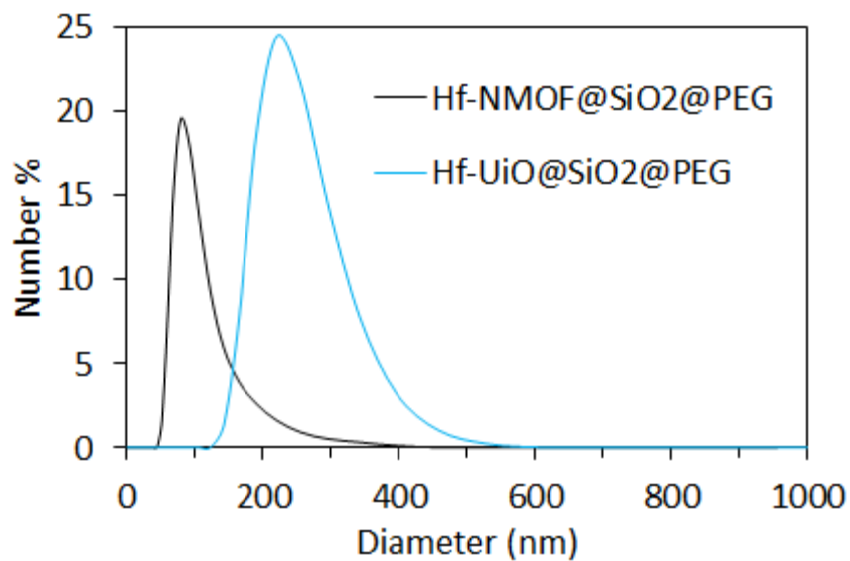


Figure S5. DLS size distribution by number of **Hf-NMOF@SiO₂@PEG** in 10 mM PBS.

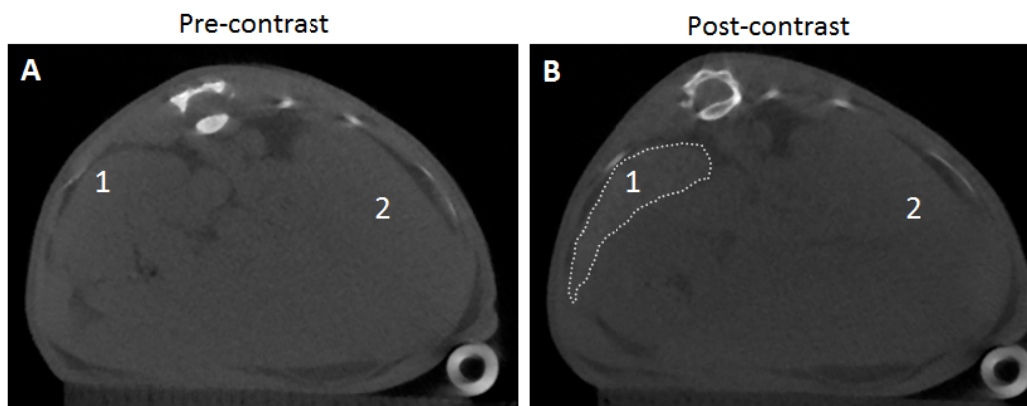


Figure S6. Axial CT slices of a mouse (A) pre-contrast and (B) 15 min after injection of **Hf-NMOF@SiO₂@PEG** (2.0 mg Hf). The labels are: 1-spleen, 2-liver. The spleen, which showed a 101 HU increase in attenuation, is outlined. The attenuation in the liver increased by 41 HU, but the increase is not visually obvious.