Combining Coordination Modulation with Acid-Base Adjustment for the Control over Size of Metal-Organic Frameworks

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Figure S1. SEM images of Dy(BTC)H₂O synthesized with addition of different amount of TEA (given as equivalent with regard to BTC) to the standard solution. a) 1, b) 3, c) 4 and 5) equivalent of TEA)
Figure S2. Particle size distribution of Dy(BTC)(H$_2$O) synthesized with addition of 3 equivalents of sodium at standard synthesis condition.
Figure S3. Particle size distribution of Dy(BTC)(H₂O) synthesized with addition of 3 equivalents of sodium but at different synthesis time: a) after 10 min stirring at room temperature, b) 10 min at 60 °C.
Figure S4. XRD patterns of Dy(BTC)H₂O synthesized at different crystallization time. In all cases, 3 equivalents of sodium acetate were added as modulator.
Figure S5. Particle size distribution of Dy(BTC)H$_2$O nanocrystals synthesized with addition of both acetic acid (given as equivalent with respect to BTC) and TEA. The pH of all solutions was adjusted to 5.9±0.2 using TEA. Crystallization was performed at 60 °C for 24 hours.
Figure S6. XRD patterns of Dy(BTC)H₂O nanocrystals synthesized with addition of both acetic acid (given as equivalent with respect to BTC) and TEA. The pH of all solutions was adjusted to 5.9±0.2 using TEA. Crystallization was performed at 60 °C for 24 hours.
Figure S7. SEM (top) and XRD (bottom) of nanosized MOF-5. The ratio between Zinc and terephthalic acid is 2.
Figure S8. SEM (top) and XRD (bottom) of nanosized HKUST-1. The ratio between sodium acetate and BTC is 2.