

Electronic supplementary information for the contribution entitled:

An Alkaline One-pot Metathesis Reaction to give $[\text{Cu}_3(\text{BTC})_2]$ MOF at r.t., with Free Cu Coordination Sites and Enhanced Hydrogen Uptake Properties

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Author Contributions

[‡] These authors contributed equally in the results presented in the current manuscript.

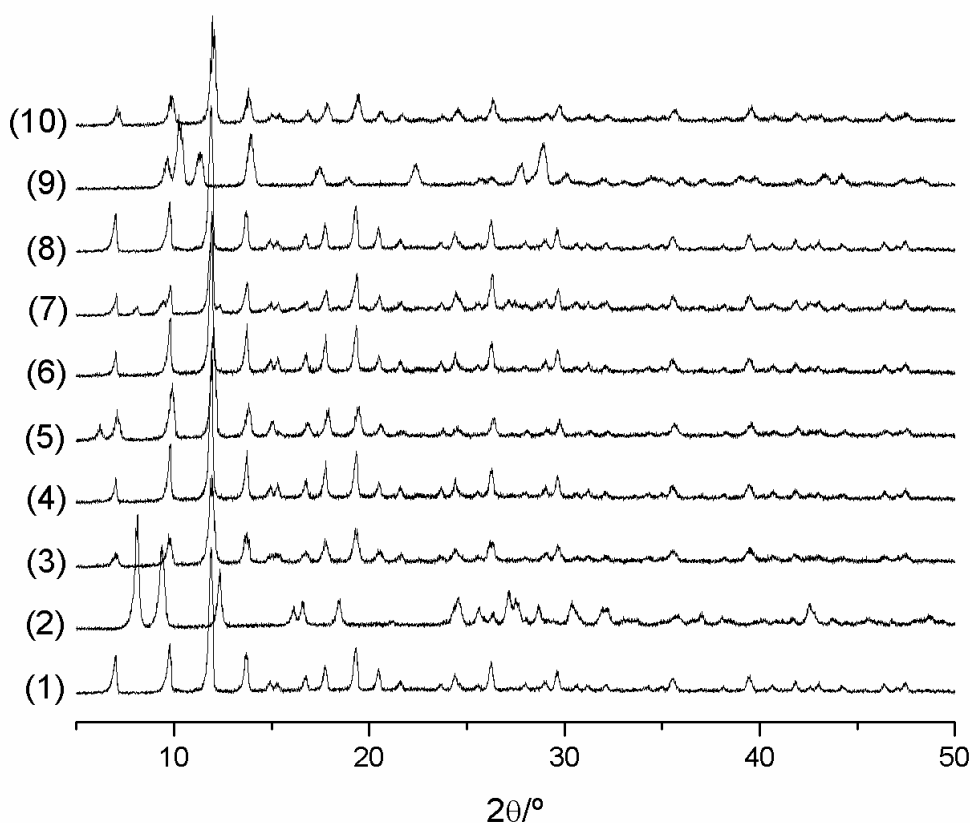


Figure S1. X-ray diffraction patterns of $[\text{Cu}_3(\text{BTC})_2]$ materials and related compounds obtained according to entries in Table 1.

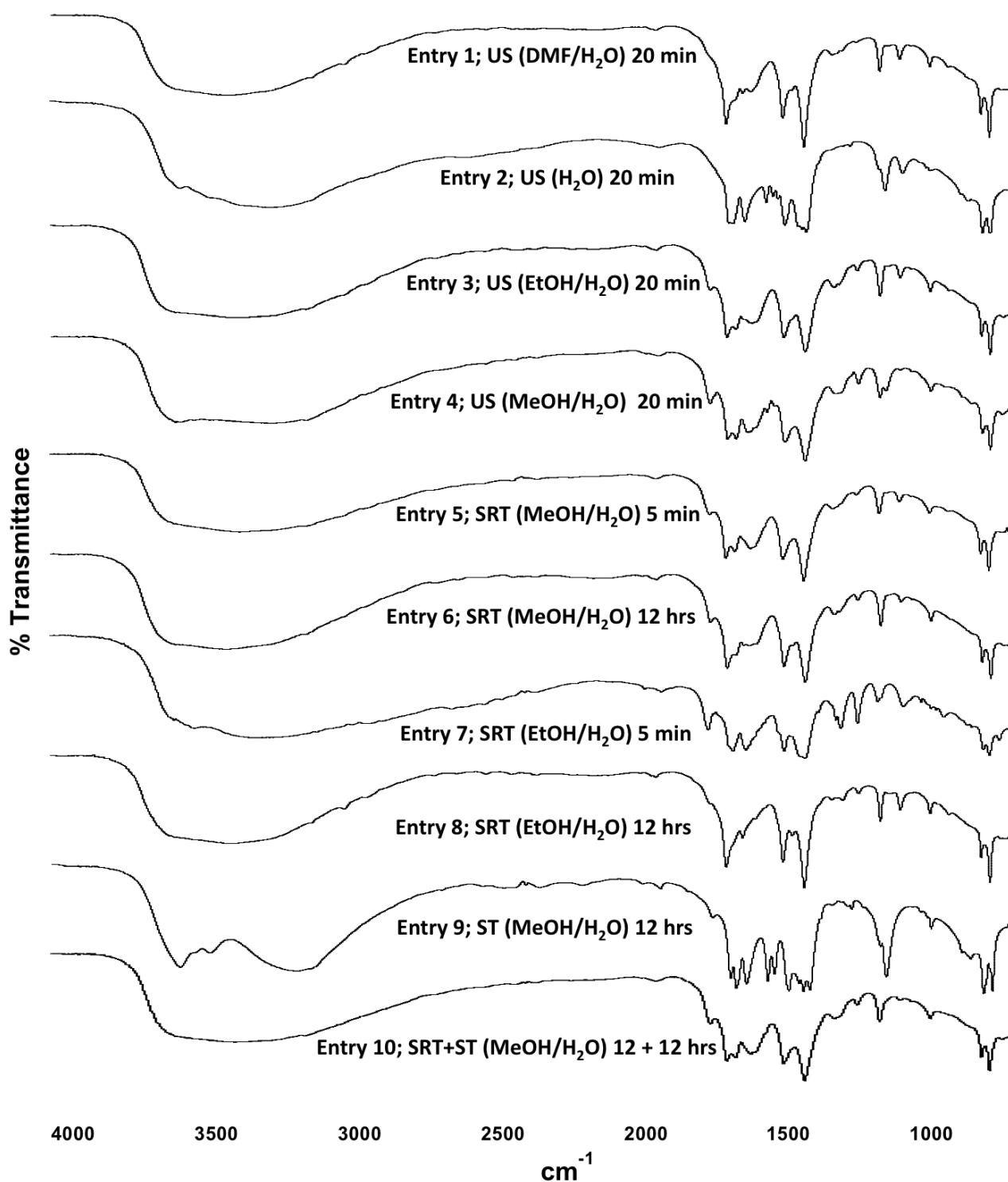
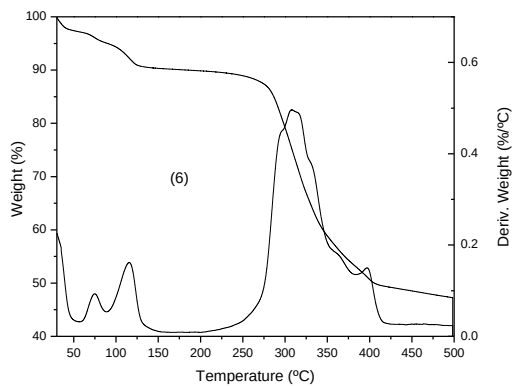
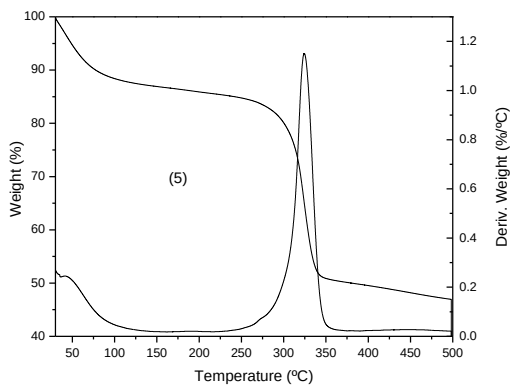
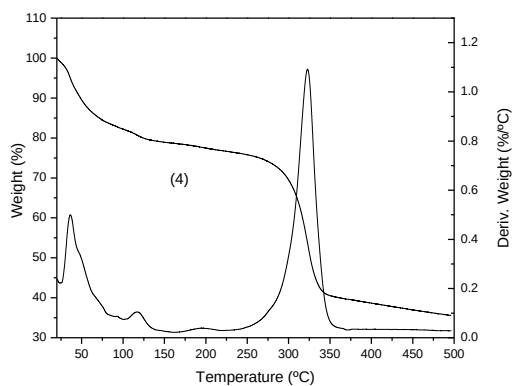
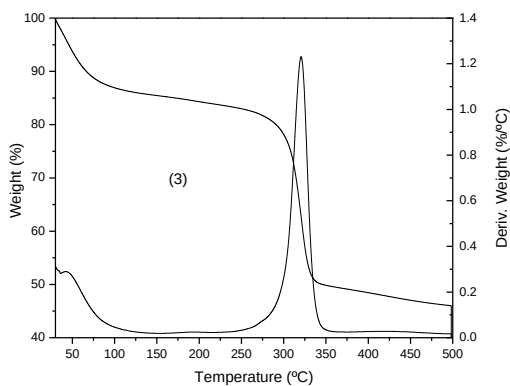
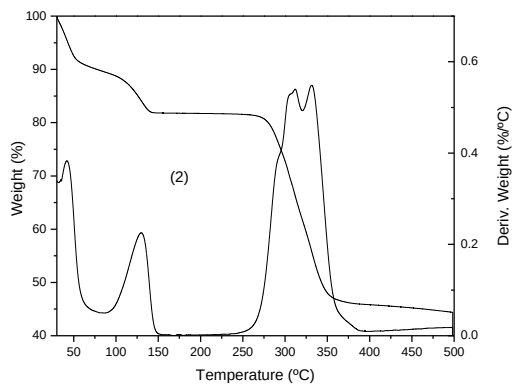
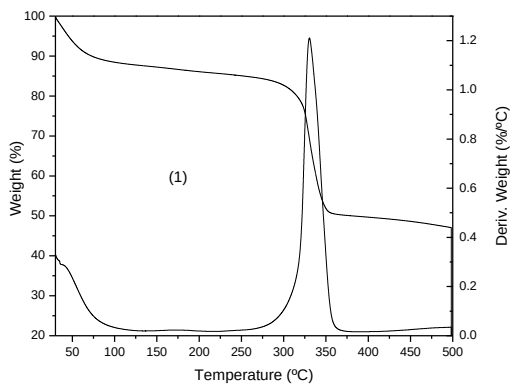


Figure S2. FT-IR spectra of [Cu₃(BTC)₂] (entries 1,3-8 and 10) or related materials (entries 2, 9) according to Table 1.



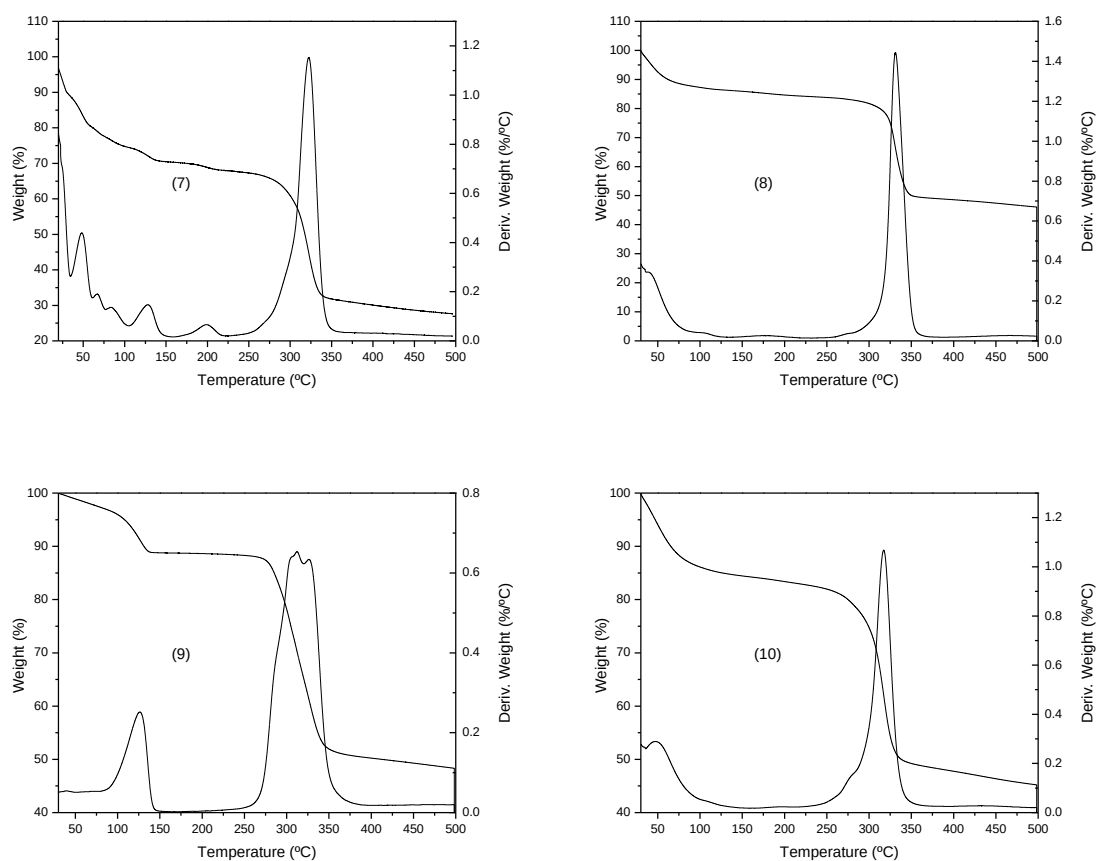


Figure S3. Thermogravimetry analysis of samples 1-10. Samples 1-4 were synthesized by ultrasound with different solvent: 1) DMF/H₂O, 2) H₂O, 3) EtOH/H₂O, 4) MeOH/H₂O. Samples 5-8 were made with stirred at room temperature: sample 5) MeOH/H₂O stirred during 5 minutes, 6) MeOH/H₂O stirred during 12 hours, 7) EtOH/H₂O stirred during 5 minutes, 8) EtOH/H₂O stirred during 12 hours. Sample 9) was synthesized by hydrothermal conditions at 100 °C for 12 hrs, and sample 10) was synthesized in two steps: first by stirred during 12 hours at room temperature and second one by hydrothermal conditions at 100 °C during the same time.