Mechanochemical Synthesis, Characterization, and Structure Determination of New Alkaline Earth Metal-Tetrafluoroterephthalate Frameworks: Ca(*p*BDC-F_4)·4H_2O, Sr(*p*BDC-F_4)·4H_2O, and Ba(*p*BDC-F_4)

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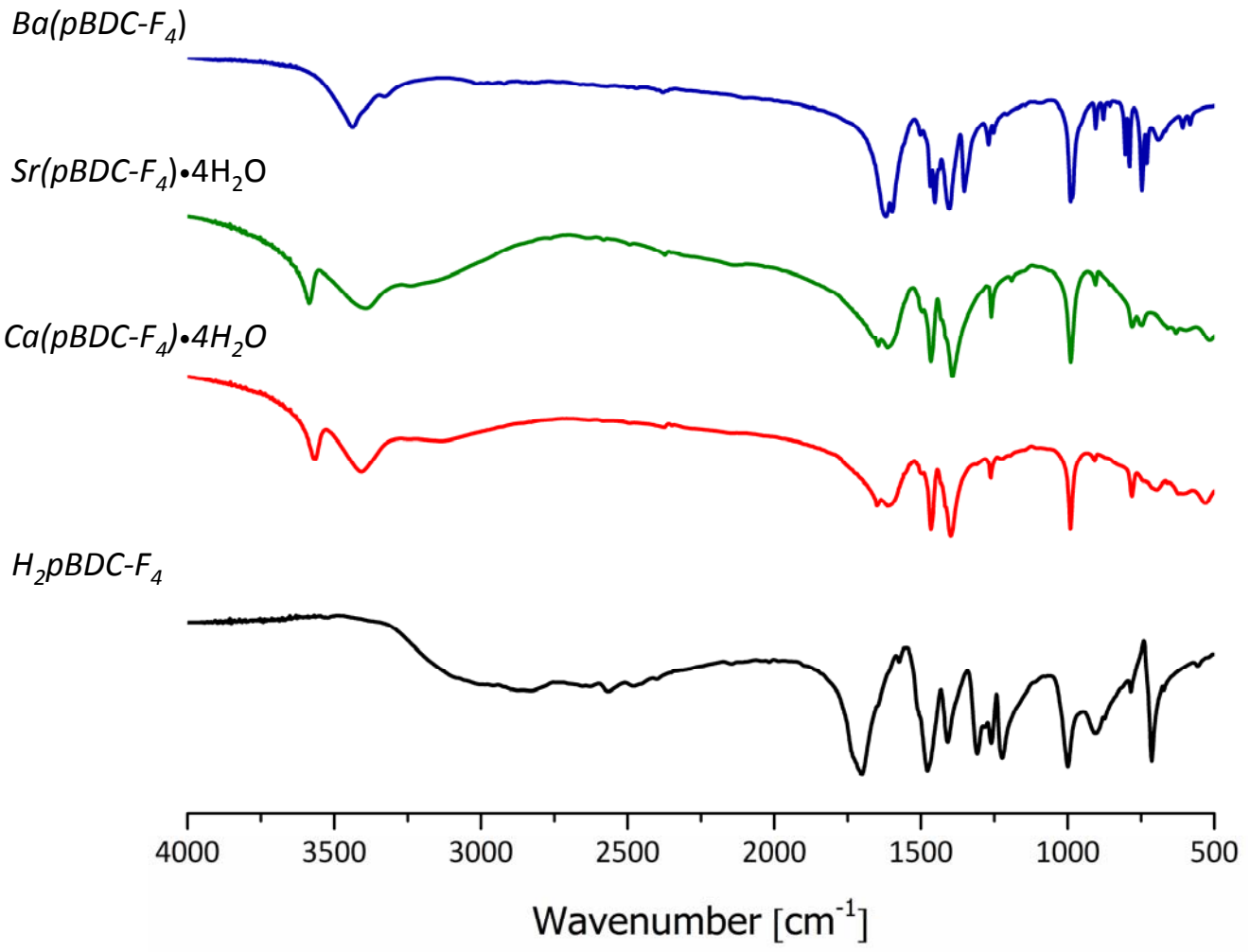

Figure S1: *FT-IR spectra of the reactant H_2pBDC-F_4 (black), and products Ca(pBDC-F_4)•4H_2O (red), Sr(pBDC-F_4)•4H_2O (green), and Ba(pBDC-F_4) (blue).*

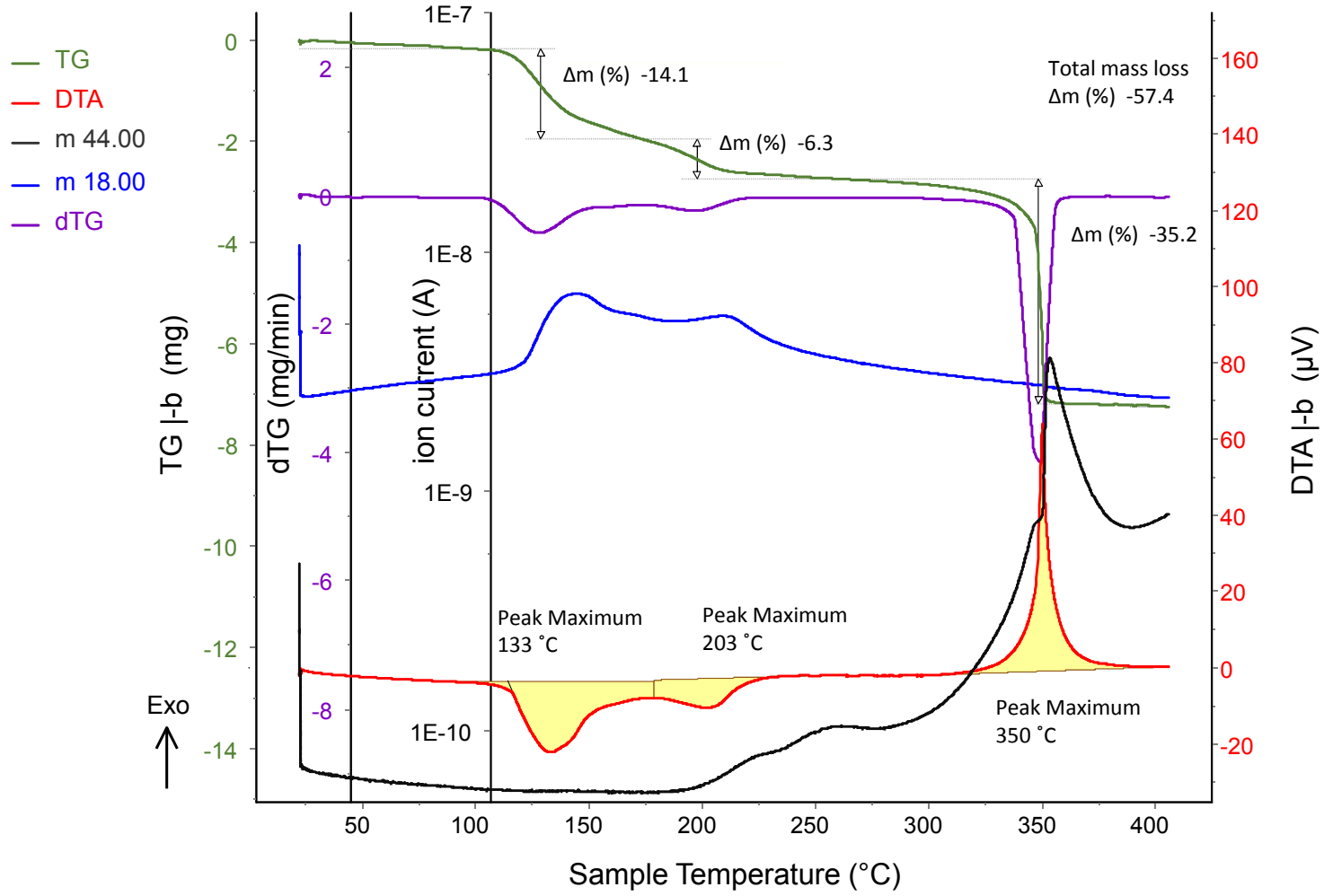

Figure S2: *Thermoanalytical curves of Ca(pBDC-F_4)•4H_2O*

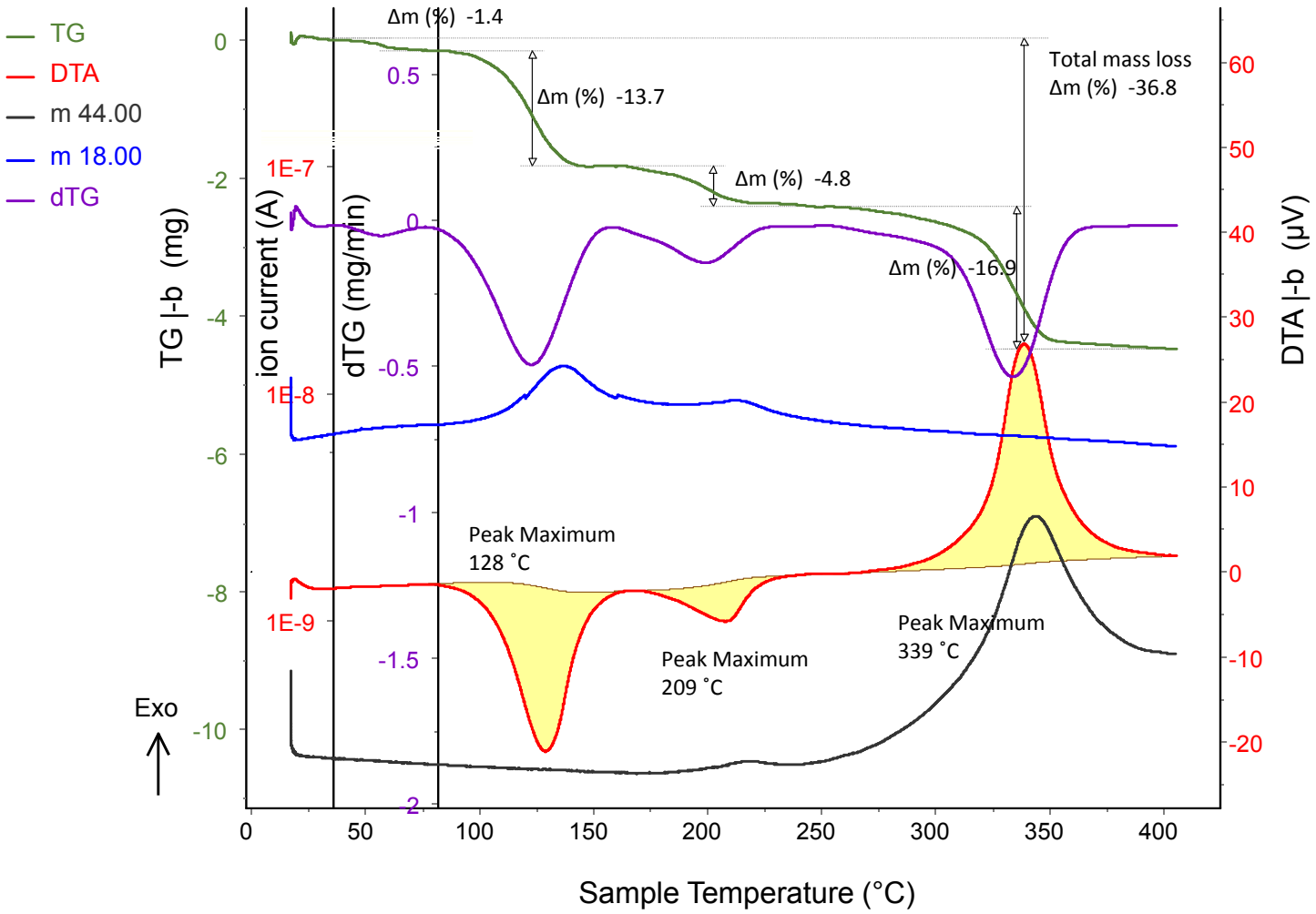

Figure S3: *Thermoanalytical curves of $Sr(pBDC\text{-}F_4)\bullet 4H_2O$*

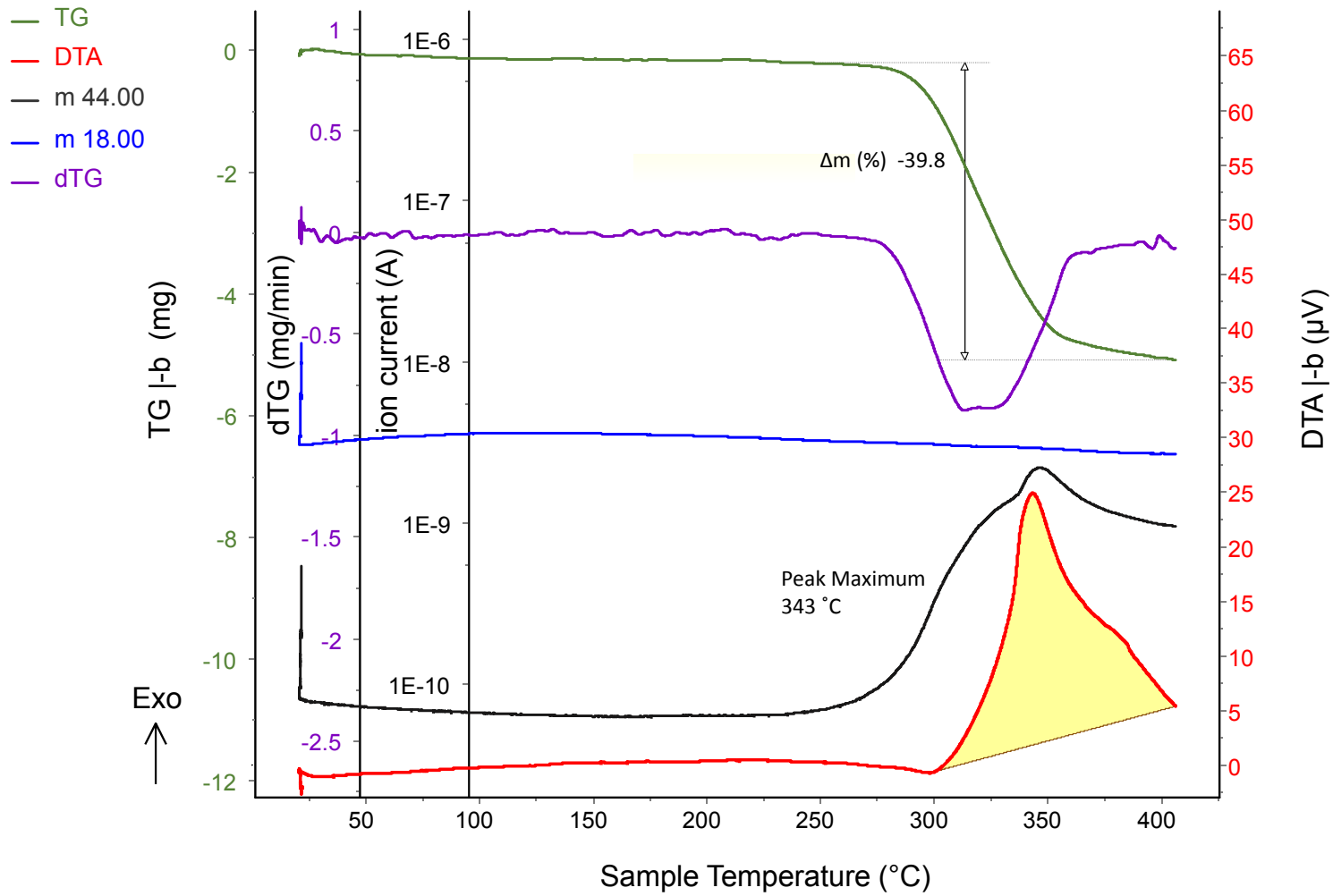

Figure S4: *Thermoanalytical curves of Ba(pBDC-F_4)*

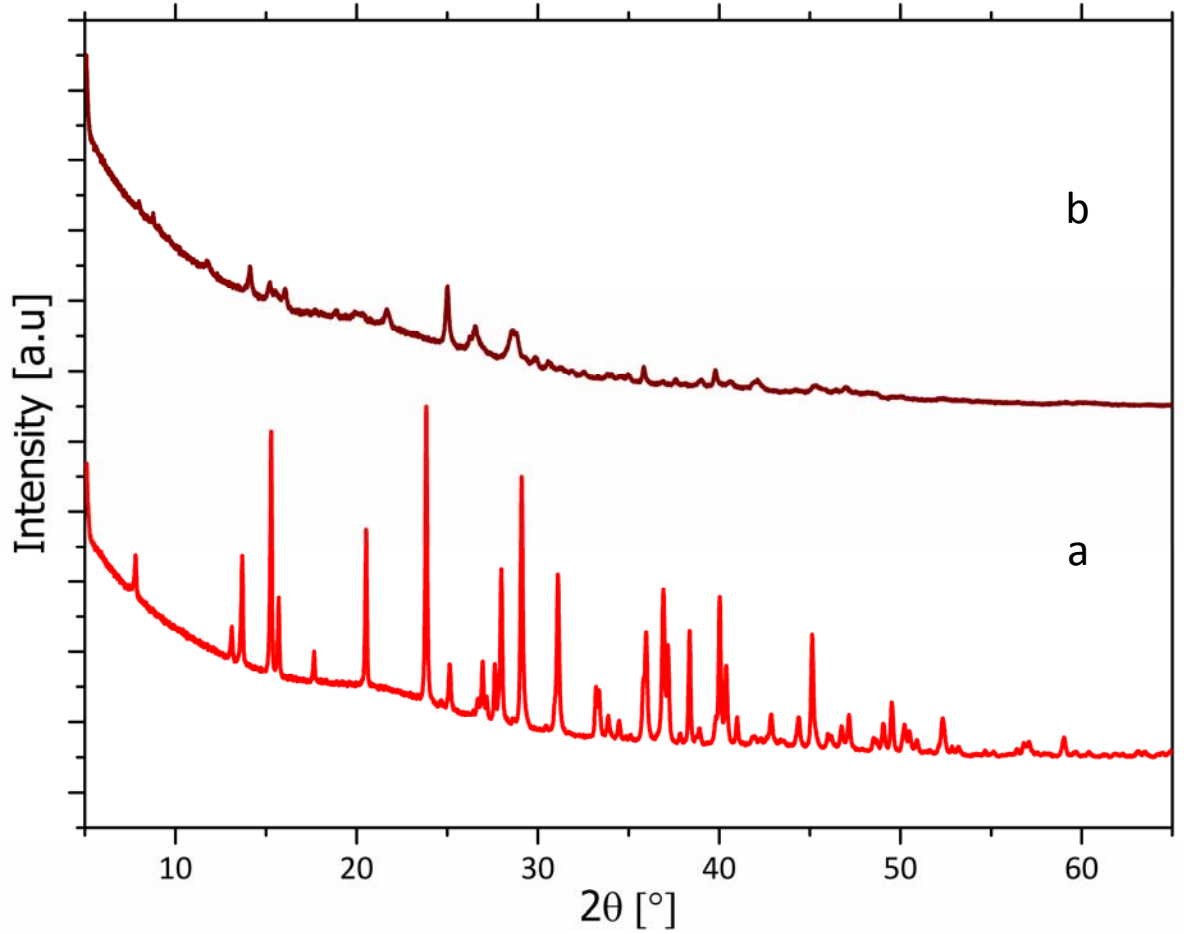

Figure S5: *Powder X-ray patterns for the product Ca(pBDC-F_4)•4H_2O; (a)as-synthesized and (b) the compound dehydrated at 250 ˚C for 60 min.*

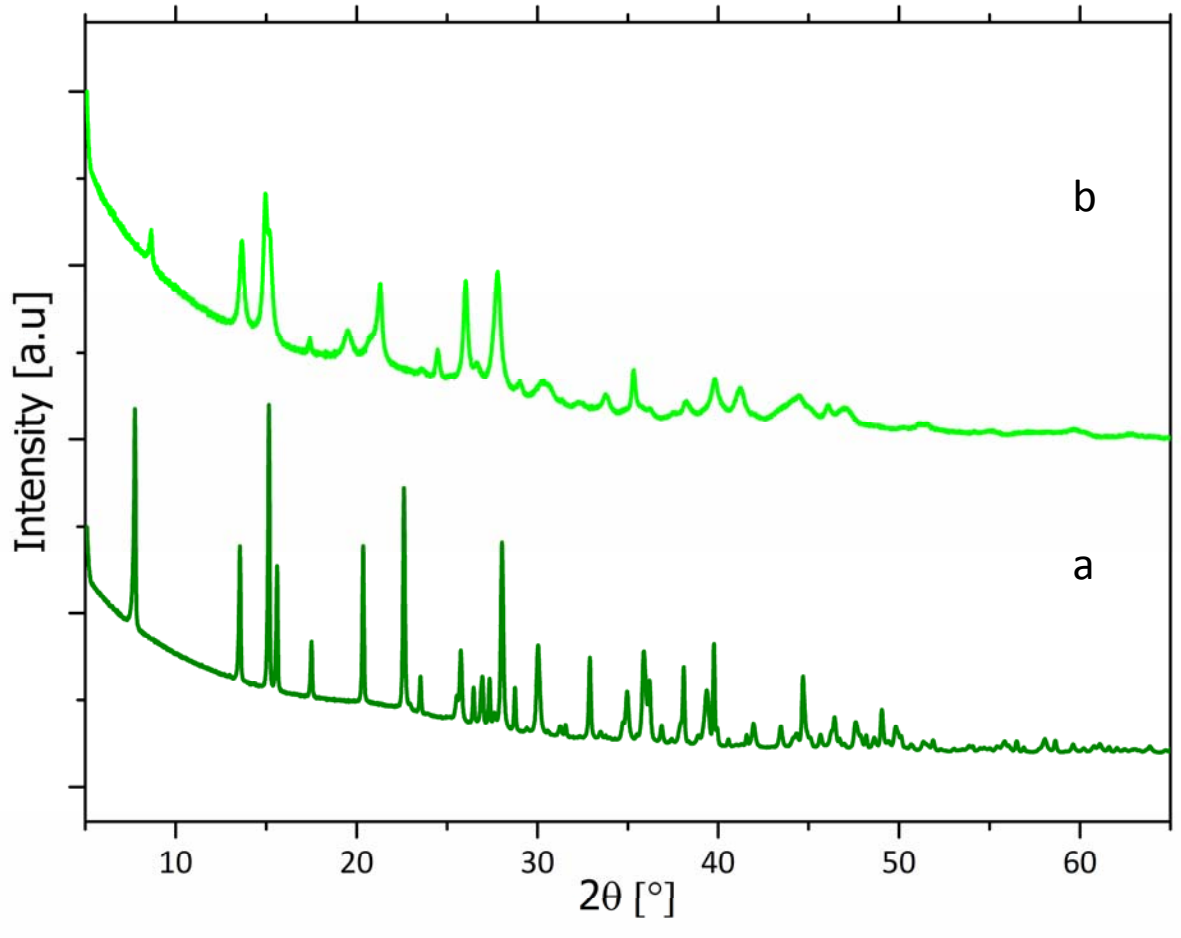

Figure S6: *Powder X-ray patterns for the product Sr(pBDC-F_4)•4H_2O; (a)as-synthesized and (b) the compound dehydrated at 250 ˚C for 60 min.*

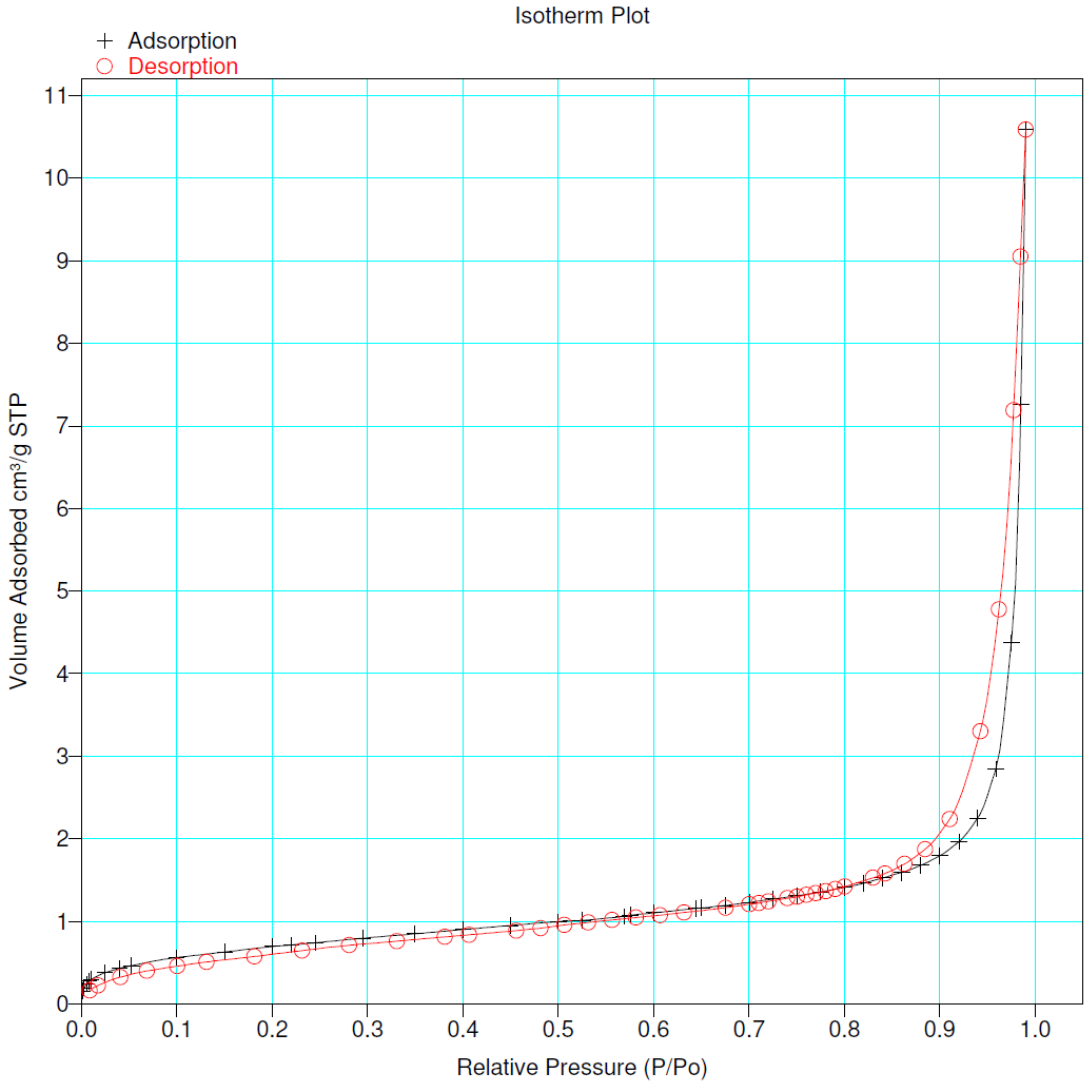

***Figure S7**: Adsorption (crosses) and desorption pore volume (circles) isotherm for nitrogen at 77 °C of the compound $Ca(pBDC\text{-}F_4)\bullet 4H_2O$.*

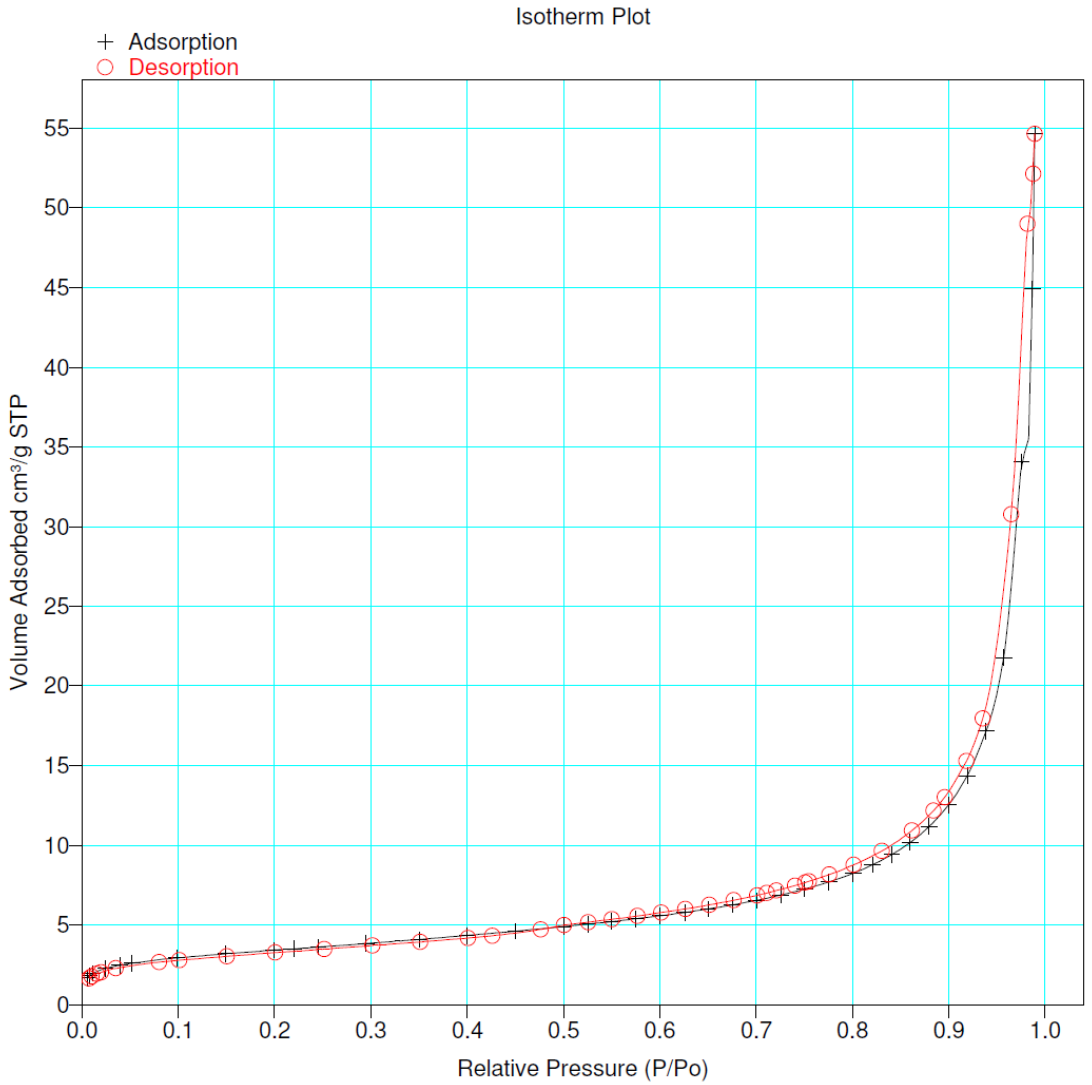

***Figure S8**: Adsorption (crosses) and desorption pore volume (circles) isotherm for nitrogen at 77 °C of the compound Sr(pBDC-F_4)•4H_2O.*

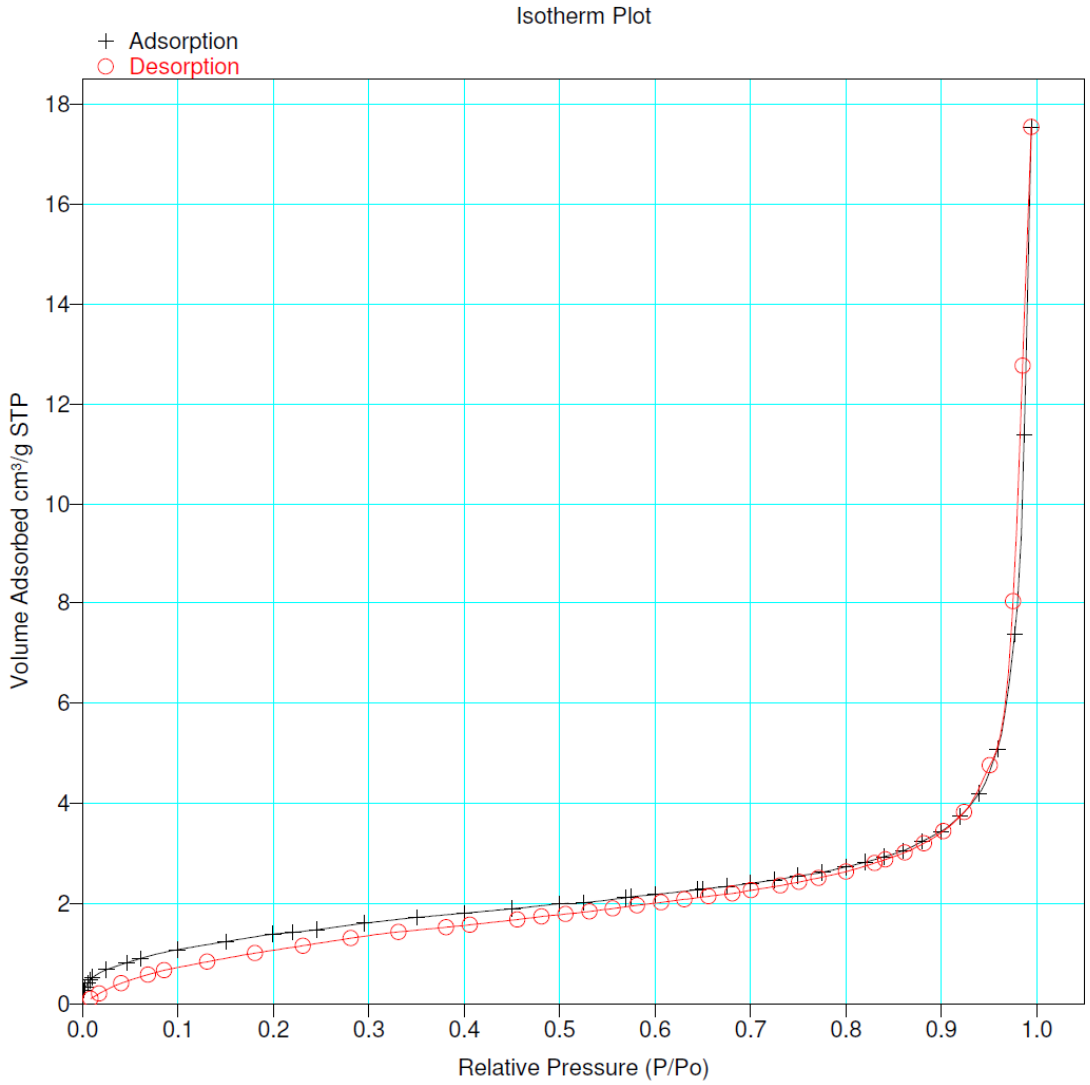

***Figure S9**: Adsorption (crosses) and desorption pore volume (circles) isotherm for nitrogen at 77 °C of the compound Ba(pBDC-F_4).*