It is widely accepted that it is possible to use FT–IR for probing the absence or presence of the IR active functional groups in an MOF.Hence, upon the exposure of a molecule to the radiations generated by thermal emission of a hot source (e.g., IR energy), it is absorbed merely at the frequencies relative to its molecular mode of vibration in an area of electromagnetic spectra between the short waves (micro–waves) and visible (red); therefore, variations in the vibrational motion result in the bands in the vibrational spectra so that all of them would be characterized by amplitude and its frequency [68,69].Due to the instability of several MOFs against mechanical stress, the sample must be ground carefully.

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