Supporting Information

Luminescent MOF crystals embedded into PMMA/PDMS transparent films as effective NO\textsubscript{2} gas sensors.

Francisco G. Moscoso,*\textsuperscript{a} José Almeida,\textsuperscript{b} Ahmad Sousaraei,\textsuperscript{c} Tânia Lopes-Costa,\textsuperscript{a} Ana M. G. Silva,\textsuperscript{b} Juan Cabanillas-Gonzalez,\textsuperscript{c} Luís Cunha-Silva\textsuperscript{b} and José M. Pedrosa\textsuperscript{a}
**Figure S1:** Cross-section of Tb(BTC)@PMMA films spin-coated at (a) 1000 rpm, (b) 3000 rpm and (c) 6000 rpm.

**Figure S2:** Cross-section of Tb(BTC)@PDMS films spin-coated at (a) 1000 rpm, (b) 3000 rpm and (c) 6000 rpm.
**Figure S3:** Excitation (black line, $\lambda_{em}=545$ nm) and emission spectra (red line, $\lambda_{ex}=350$ nm, and green line, $\lambda_{ex}=305$ nm) of Tb(BTC) powders. The excitation and emission wavelengths are also labelled in the graph. See main text for further details.
Figure S4: PL emission spectra ($\lambda_{ex}$: 305 nm) of Tb(BTC) powder (dotted line), Tb(BTC)@PMMA (red solid line) and Tb(BTC)@PDMS (green solid line).
Figure S5: PL quenching of Tb(BTC)@PDMS (dark grey bars) and Tb(BTC)@PMMA (light grey bars) films (1000 rpm) obtained using 5, 10 and 20 mg·g⁻¹ in PDMS stock solution and 5, 10 and 20 mg·cm⁻³ in PMMA stock solution, under exposure to 50 ppm NO₂ gas.
Figure S6: Kinetics of Tb(BTC)@PDMS films sensing responses (PL at 546 nm) under exposure to different NO\textsubscript{2} concentrations (5-500 ppm).