SUPPORTING INFORMATION

Photonic gratings of the metal-organic framework {Fe(bpac)[Pt(CN)₄]} with synergetic spin transition and host-guest properties

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Fig. S1 (left) Temperature dependence of the magnetic susceptibility \times temperature product for a bulk powder of 1 (hydrated (red) and dehydrated (blue) sample) and (right) the corresponding variation of the Raman intensity ratio of the 1014 and 1028 cm⁻¹ Raman modes (dehydrated sample). The dashed line is a guide to the eye.



Fig. S2 Temperature dependence of the diffraction efficiency ($\lambda = 650$ nm) in the heating and cooling modes for desolvated gratings of 1 with different thicknesses (10, 15, 20 and 25 deposition cycles)



Fig. S3 (left column) LSPR spectra of hybrid gold/SCO gratings at 213 and 333 K for different thicknesses of the SCO compound 1 (0, 10, 15 and 25 deposition cycles). (right column) Temperature dependence of the resonance wavelength in the heating (open circles) and cooling (filled circles) modes.



Fig. S4 Comparison of the shift of the spin transition curve of **1** upon the adsorption of aromatic compounds for thin film (left) and bulk powder (right) samples