Deep Red Luminescent Hybrid coPolymer Materials With High Transition Metal Clusters Content.

Maria Amela-Cortes, Alexandre Garreau, Stéphane Cordier, Eric Faulques, Jean-Luc Duvail, and Yann Molard

Electronic Supplementary Informations

Figure 1s: Thermograms obtained by TGA measurements left: % weight of sample; right: differential of weight loss of PM50 (plain line), PM10 (dashed line), PM1 (dotted line)

Figure 2s: DSC thermogramms obtained for all samples, a) on heating, b) on cooling at 10 K.min
Figure 3s: $^1$H 400 MHz NMR spectra of a) PM20 (soluble part), b) PM10, c) PM1, d) PM0 in CDCl$_3$.

Figure 4s: Picture of pieces of PM20 (left) and PM50 (right) under daylight (top) and UV irradiation at 350-380 nm (bottom). The thickness of both samples is 1.2 mm and 0.8 mm for PM20 and PM50 respectively.
**Figure 5:** EDAX analysis of PM10 sample.

**Figure 6:** TEM pictures of PM20 at different scales (a, b, c); TEM pictures of the same area before d) and after e) EDX analysis; f) graph of edx analysis of PM20.
Figure 7s: TEM pictures of PM50 at different scales (a, b, c); TEM pictures of the same area before b) and after d) EDX analysis; e) graph of edx analysis of PM50.

Figure 8s: Emission decay profiles as a function of temperature for (left) \([n-\text{C}_4\text{H}_9\text{N}]_2[\text{Mo}_6\text{Br}_{14}]\) in its powdered form and (right) PM10.
Figure 9s: Representation of \([((n-C_4H_9)_4N)_2MoBr_{14}\) (black circle) and PM10 (white circle) \((x;y)\) coordinates in the CIE chromaticity diagram from 293 K to 20 K.