Electronic Supplementary Information

A highly emissive inorganic hexamolybdenum cluster complex as a handy precursor for the preparation of new luminescent materials

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Fig. S1 A suspension of \( \{\text{Mo}_6\text{I}_8\}@\text{PS-SH (2)} \) microspheres in water under a) day-light illumination and b) UV-light illumination.
**Fig. S2** The powder X-Ray diffraction patterns of 1, 2 and untreated PS-SH beads.
**Fig. S3** Diffuse reflectance spectra of 1, 2 and pure PS-SH beads. The Kubelka–Munk function, $F(R_\infty) = (1 - R_\infty)^2 / 2R_\infty$, is used as the equivalent of absorbance.
**Fig. S4** The FT-IR spectra of 1, 2, pure PS-SH beads and PS beads after blank experiment.
**Fig. S5** Flow cytometric data for a suspension of \{\text{Mo}_6\text{I}_8\} @PS-SH (2) in water.
Fig. S6 The emission decay profiles of solutions of 1 in (a) aerated and (b) deaerated acetone.
Fig. S7 The emission decay profile of a powdered sample of 1
**Fig. S8** The emission decay profiles of a) a powdered sample of 2 and b) a suspension of 2 in water.
**Fig. S9** Excitation spectra of 1 in an acetone solution (red line) and 2 as a suspension in water (black line).
**Fig. S10** UV-Vis spectrum of an acetone solution of 1