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Supporting Information

Luminescent Properties of Lanthanoid-Poly(Sodium Acrylate) Composites: Insights on the Interaction Mechanism

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Figure S.1. EDX spectra and elemental maps of freeze-dried Eu³⁺/PSA (top) and Tb³⁺/PSA (bottom).



Figure S.2. Comparison of emission intensity of Eu^{3+}/PSA at 616 nm (A) and Tb³⁺/PSA at 545 nm (B) of composites alone (*I*₀) and interacting with different metal ions in aqueous solution under the same conditions (*I*).



Figure S.3. Emission intensities of (A) Eu³⁺/PSA at 616 nm and (B) Tb³⁺/PSA at 545 nm with different concentration of Cu²⁺ ions in aqueous solution at several delays after sample preparation.



Figure S.4. Effects of pH on the emission intensities of Eu^{3+}/PSA at 616 nm (top) and Tb³⁺/PSA at 545 nm (bottom), without Cu^{2+} (black) and with 3.33 mM of Cu^{2+} (red).



Figure S.5. Emission spectra of Eu³⁺/PSA, ${}^{5}D_{0} \rightarrow {}^{7}F_{2}$ transition emission intensity at 616 nm (inset) of Eu³⁺/PSA with different concentrations of Cu²⁺.

