



Supporting Information

Designed Synthesis of Multiluminescent Materials Using Lanthanide Metal-Organic Frameworks and Carbon Dots as Building-Blocks

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[ejic201900876-sup-0001-SupMat.pdf](#)

The supporting information contains additional FTIR, UV-Vis and photoluminescence spectra.

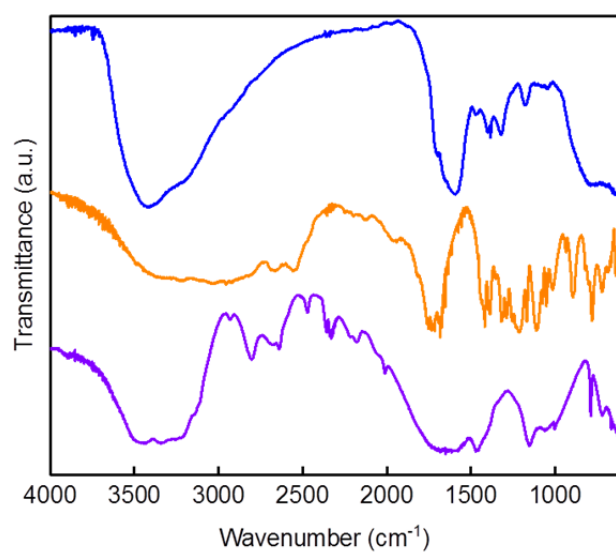


Fig. S1. The FTIR spectra of urea (purple), citric acid (orange) and the CDs (blue).

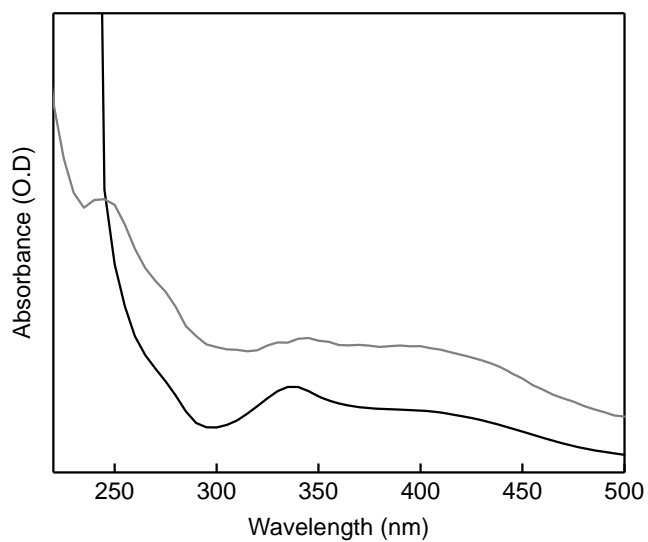


Fig. S2. The UV-Vis spectra of the CDs in water (black) and methanol (grey).

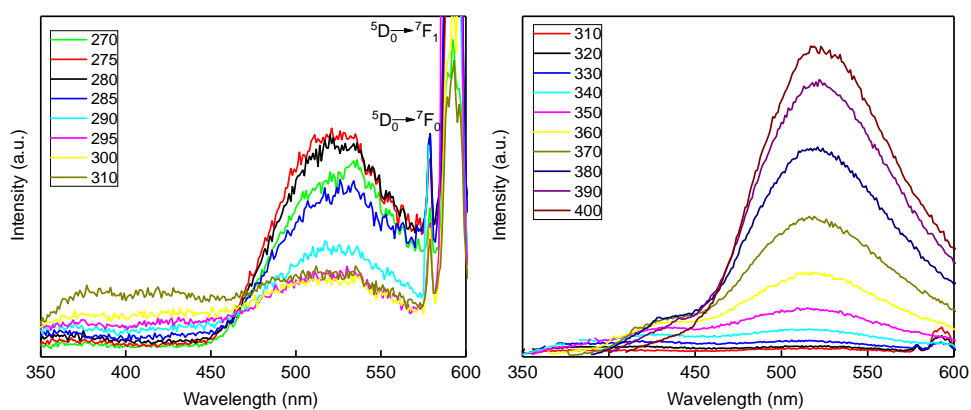


Fig. S3. The emission spectra of the CDs@EuW-MOF (0.33 mg mL^{-1}) in methanol measured at various excitation wavelengths. Left: green to dual emission characteristics excited from 270 to 310 nm. Right: dual emission characteristics excited from 310 to 400 nm.

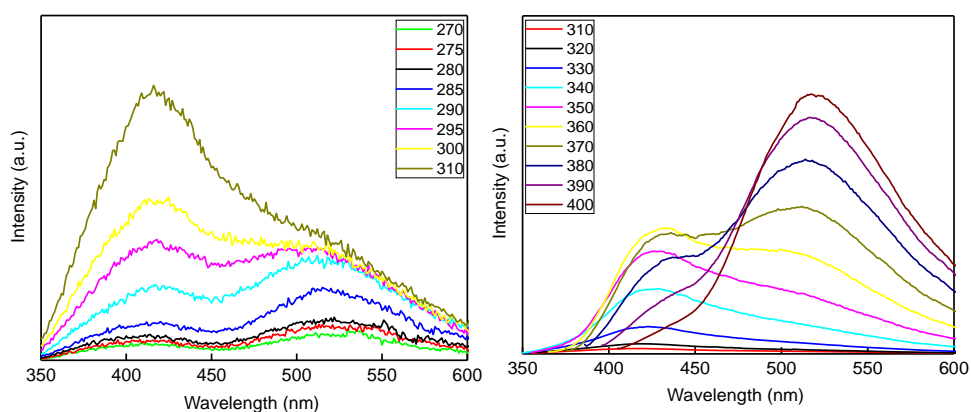


Fig. S4. The emission spectra of the diluted CDs + Hmpca (0.33 mg mL^{-1}) in methanol measured at various excitation wavelengths. Left: dual to blue emission characteristics excited from 270 to 310 nm. Right: blue to dual emission characteristics excited from 310 to 400 nm.

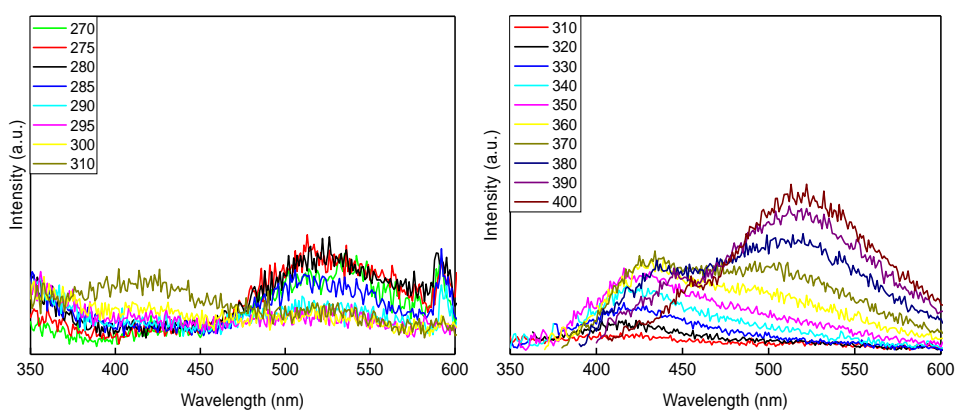


Fig. S5. The emission spectra of the diluted CDs + EuW-MOF (0.33 mg mL^{-1}) in methanol measured at various excitation wavelengths. Left: green to blue emission characteristics excited from 270 to 310 nm. Right: blue to dual emission characteristics excited from 310 to 400 nm.

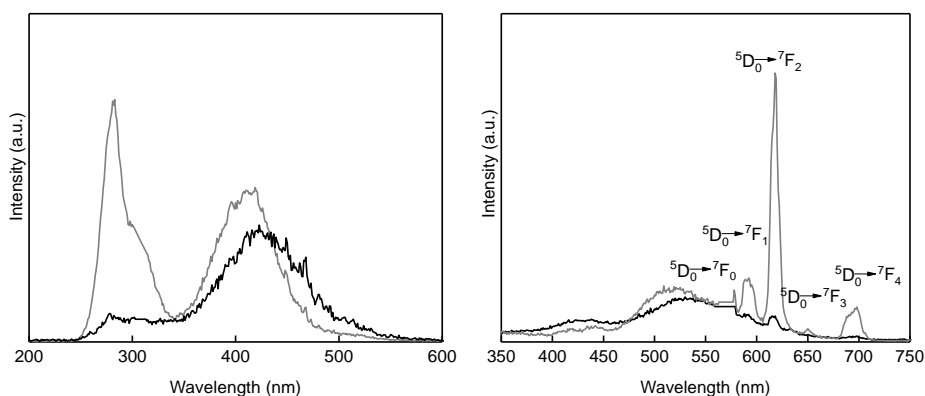


Fig. S6. Excitation ($\lambda_{em} = 617 \text{ nm}$) (left) and emission ($\lambda_{ex} = 280 \text{ nm}$) spectra (right) of 0.33 mg mL^{-1} of the CDs@EuW-MOF suspensions in water (black) and methanol (grey).

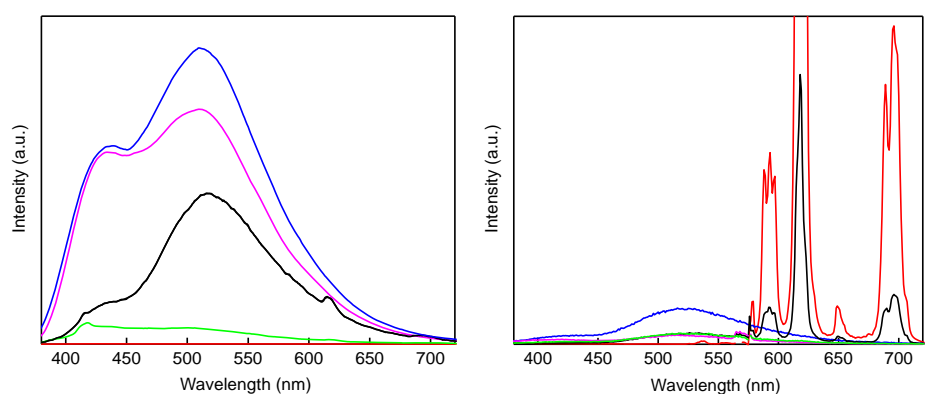


Fig. S7. The comparison of the emission spectra of the CDs@EuW-MOF (black), CDs (blue), CDs + Hmpca (pink), CDs + EuW-MOF (green), EuW-MOF (red) at $\lambda_{ex} = 360 \text{ nm}$ (left) and 285 nm (right).

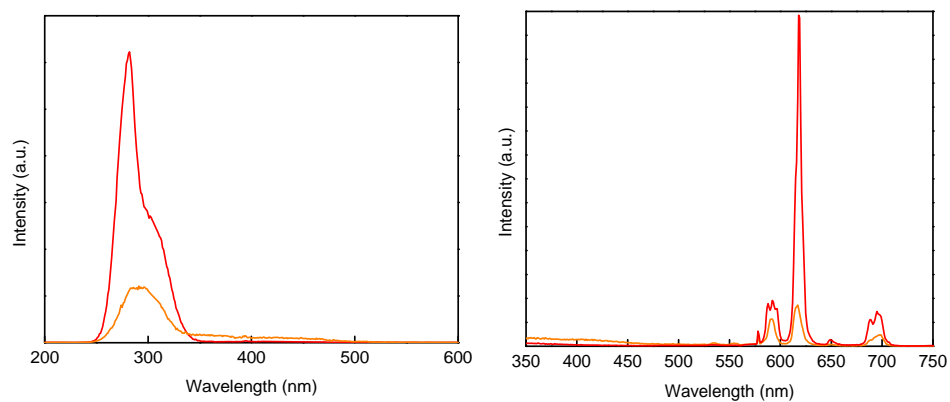


Fig. S8. Excitation ($\lambda_{em} = 617$ nm) (left) and emission ($\lambda_{ex} = 280$ nm) spectra (right) of 0.33 mg mL^{-1} of the EuW-MOF suspensions in water (orange) and methanol (red).