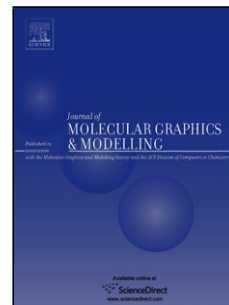


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A Recognition Mechanism Study: Luminescent Metal-Organic Framework for the Detection of Nitro-explosives

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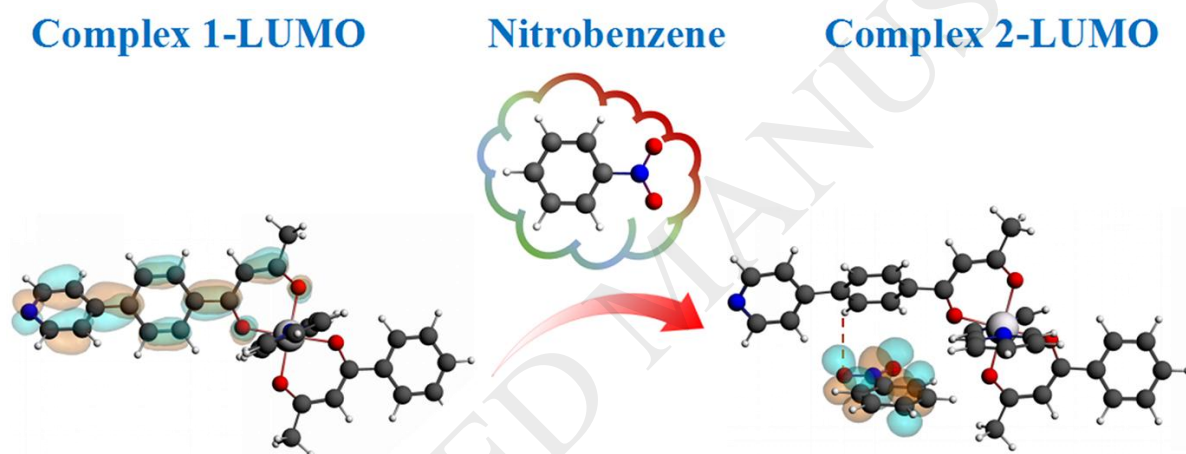
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Graphical abstract



Highlights

- TDDFT method is utilized to study the hydrogen bond in the excited state.
- 2. The presence of nitrobenzene causes the change of luminescence mechanism of LMOF-1.
- 3. The increased of hydrogen bond can largely facilitated the fluorescence quenching.
- 4. LMOF-1 can be used as a fluorescent probe for the detection of nitrobenzene.
- 5. A recognition mechanism for nitro-explosives by LMOF-1 is studied.

Abstract

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