

Supporting Information

Hydrothermal Synthesis of Co Substituted MnWO₄ Nanostructure for Fluorometric Sensing and Determination of 4-Nitrophenol

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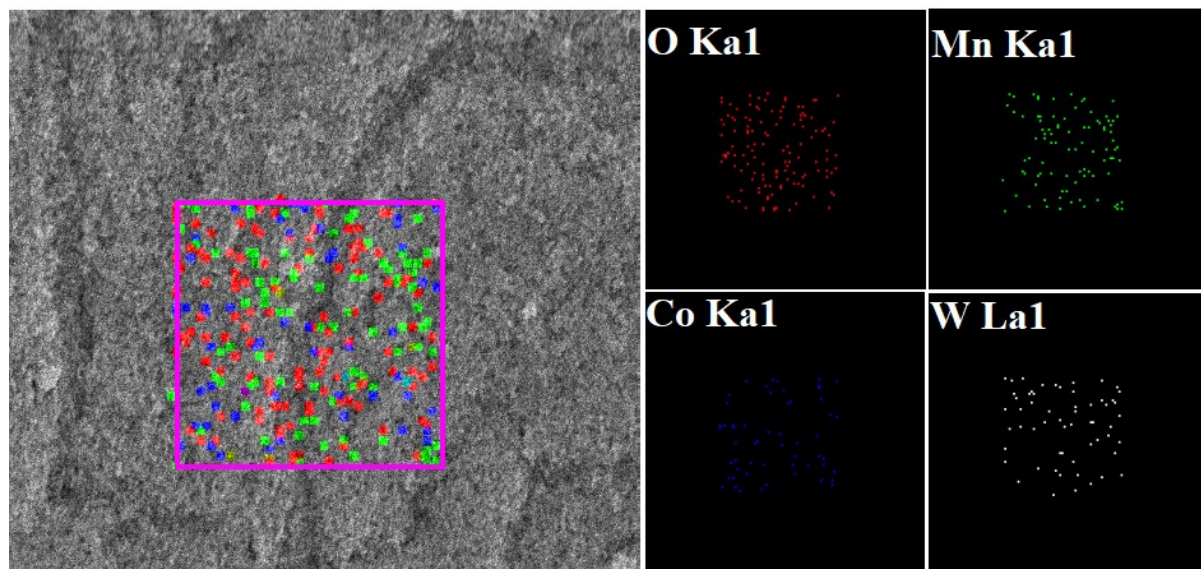


Figure S1. Selected area SEM image of Co-MnWO₄ NPs showing the mapping of O, Mn, Co and W

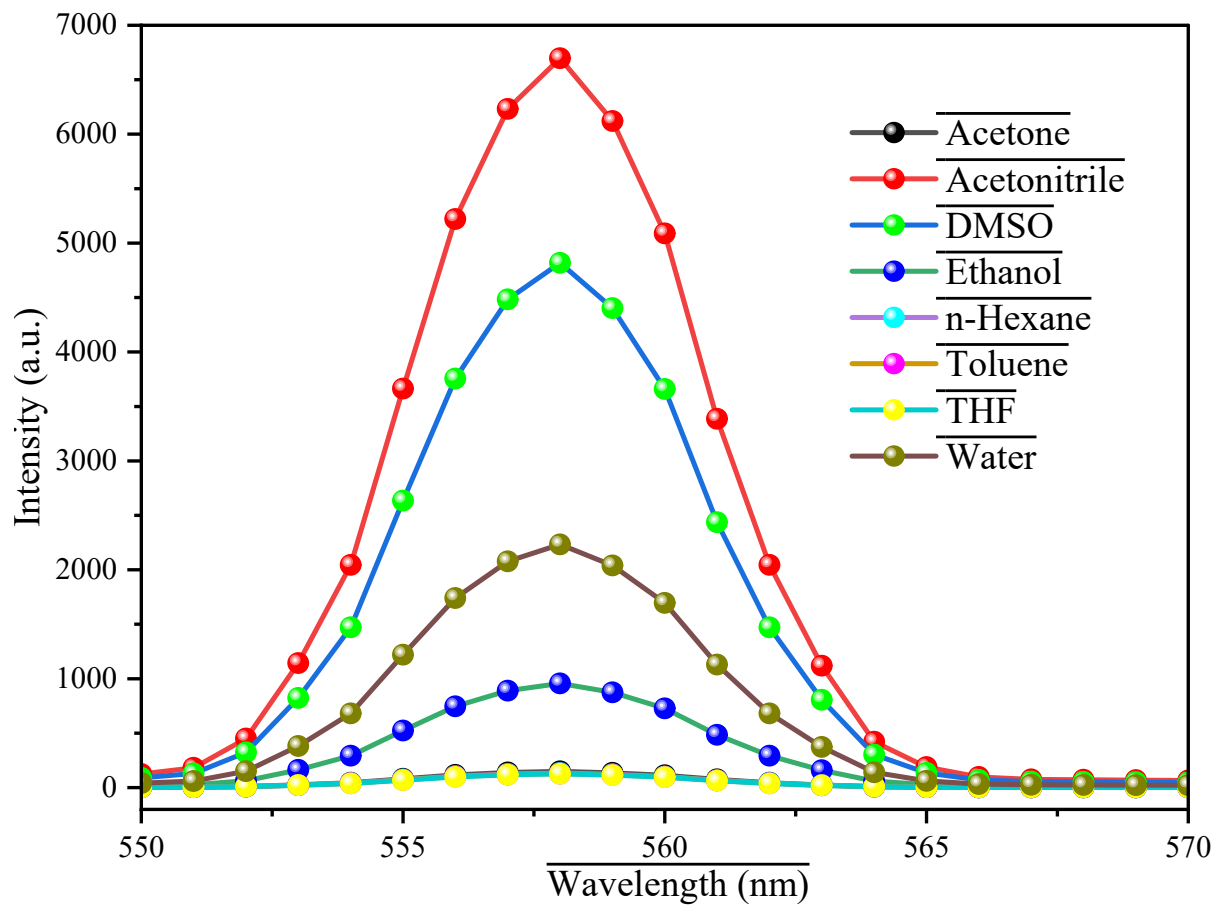


Figure S2. Solvent selection with whom Co-MnWO₄ exhibit maximum fluorescence intensity

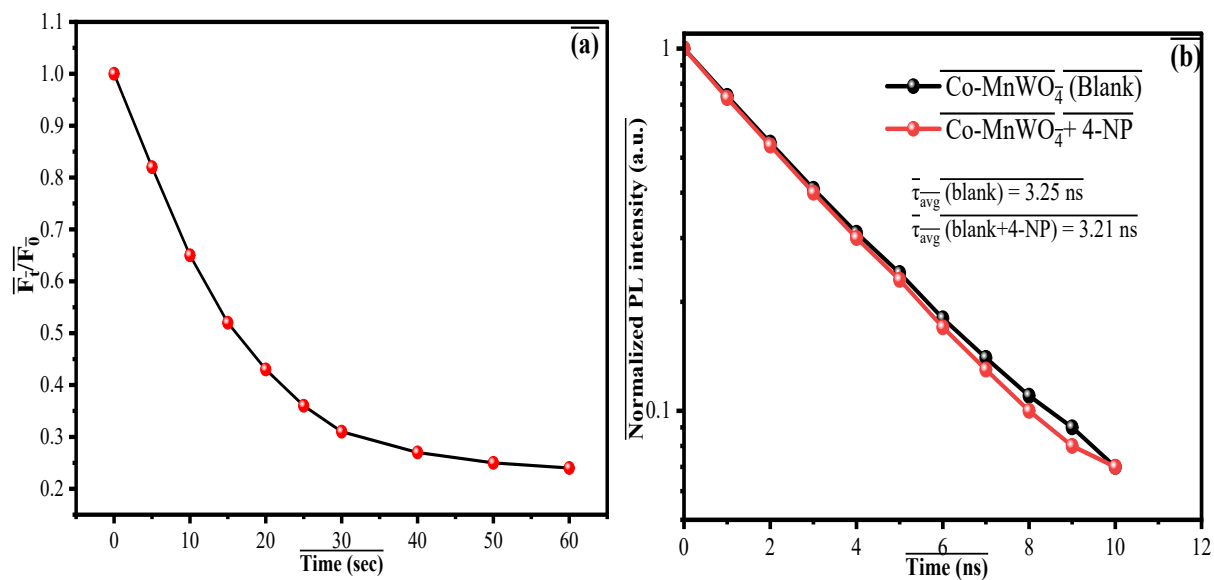


Figure S3. (a) Response time curve of Co-MnWO₄ probe towards 4-NP and (b) TRPL decay curves of the Co-MnWO₄ probe in absence and presence of 4-NP

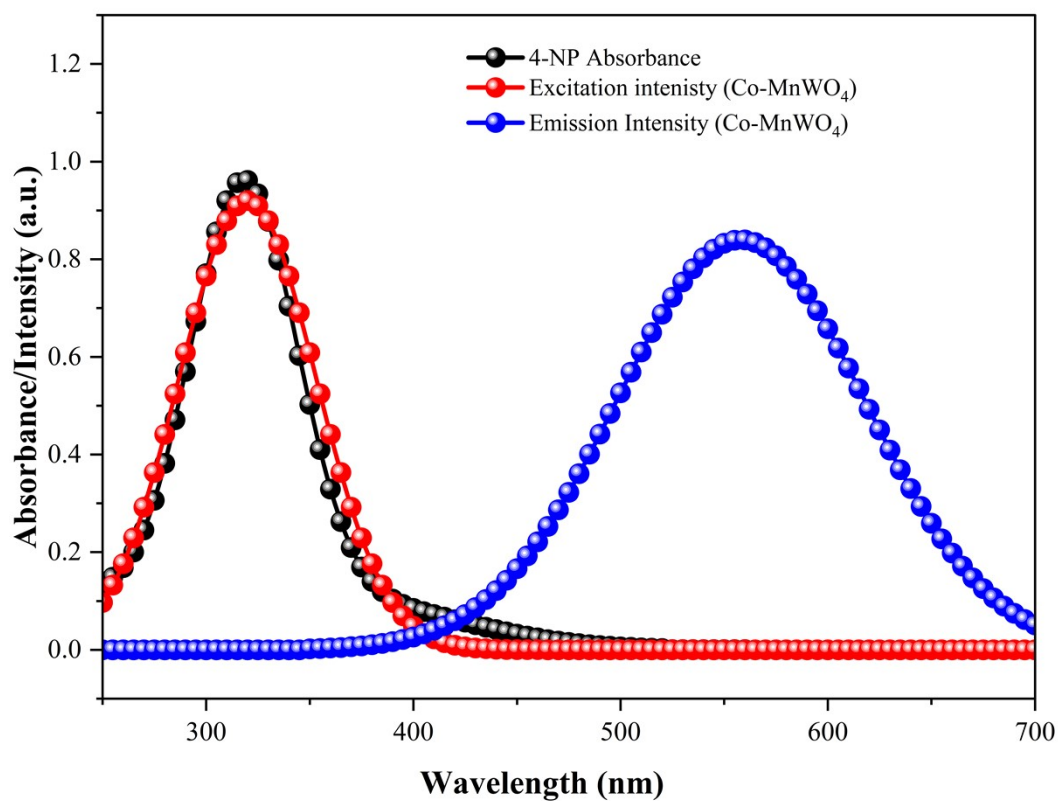


Figure S4. Combined UV absorption spectra of 4-NP and fluorescence excitation and emission spectra of Co-MnWO₄ nanostructure probe

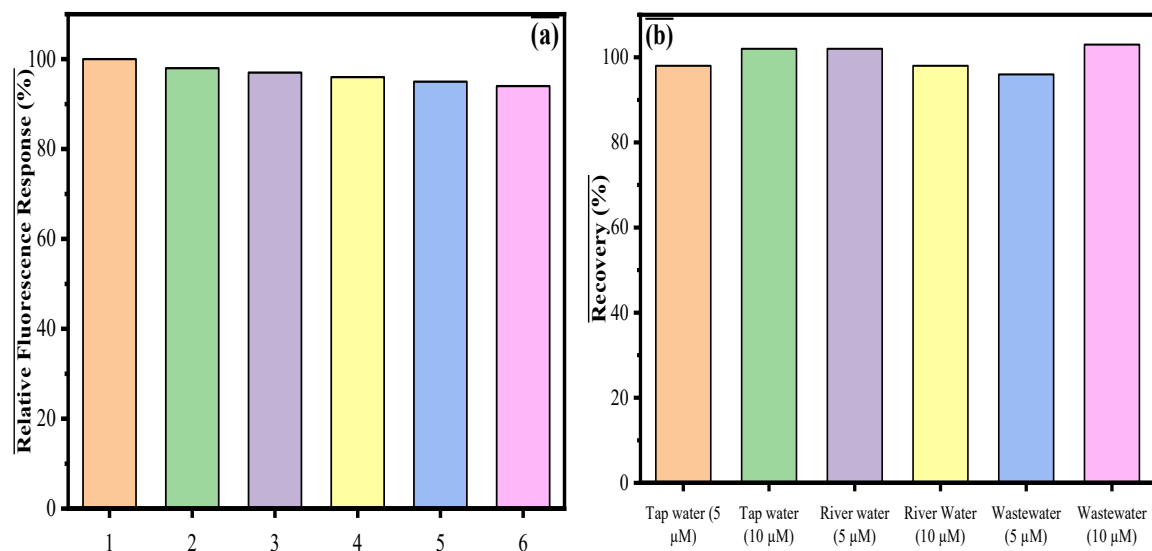


Figure S5. (a) Reusability and cycling ability of Co-MnWO₄ probe towards 4-NP detection and (b) Real sample recovery study of 4-NP detection using Co-MnWO₄ fluorescence probe

Table S1. Sample recovery studies for Co-MnWO₄ towards 4-NP sensing using various water matrix

Sample	Added (μM)	Found (μM)	Recovery (%)	RSD (%)
Tab water	5	4.9	98	2.1
Tab water	10	10.2	102	1.8
River water	5	5.1	102	2.3
River water	10	9.8	98	2
Wastewater	5	4.8	96	2.5
Wastewater	10	10.3	103	2.2