Supporting Information

Facile Synthesis of Boron and Nitride Doped MoS₂ Nanosheets as Fluorescence Probes for Ultrafast, Sensitive, and Label-free Detection of Hg²⁺



Fig. S1 EDS of B,N-MoS₂.



Fig. S2 PL intensities of B,N-MoS₂ dispersion under various conditions in aqueous solution (excitation at 280 nm; $[Fe^{3+}] = 25 \ \mu\text{M}$; $[Hg^{2+}] = 2 \ \mu\text{M}$, $[TEA] = 1000 \ \mu\text{M}$).



Fig. S3 VB XPS analysis of B,N-MoS₂.