

Electronic supporting information

Magnetize Nanoscale Metal-Organic Framework (MNMOFs) as a viable fluorescent quencher material for ssDNA based on a Novel Quenching-Quenching mechanism for detection of mercury ions

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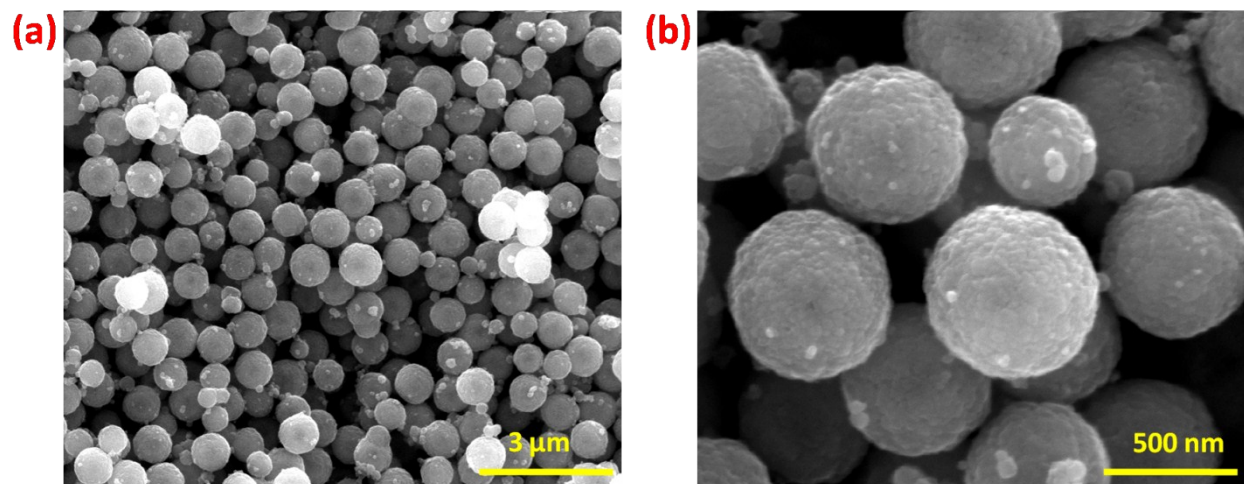


Fig.S1 (a,b) SEM Images Fe_3O_4 NPs

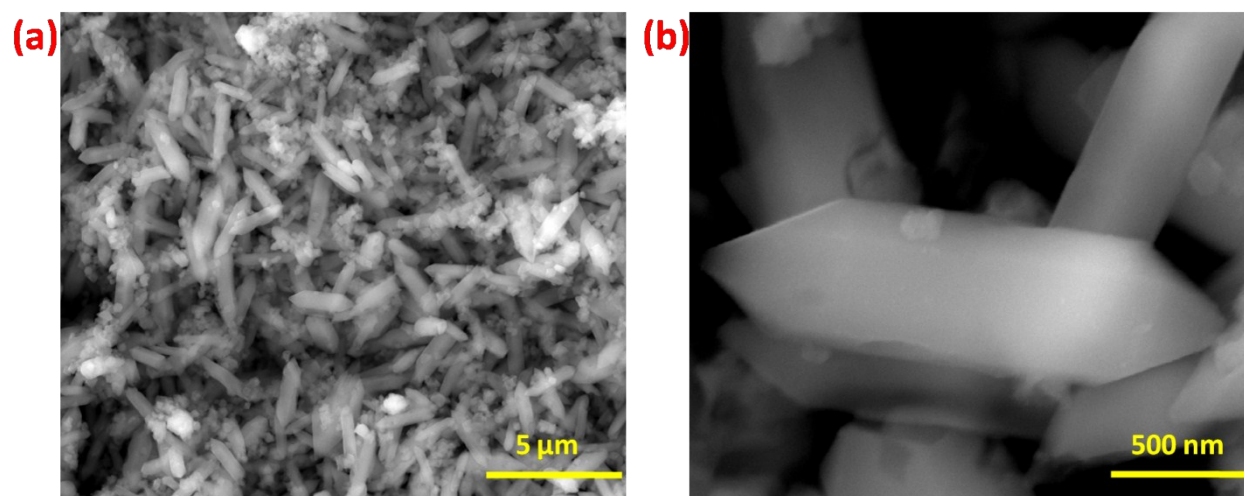


Fig.S2 (a,b) SEM Images MIL-101- NH_2 by hydrothermal method synthesis method

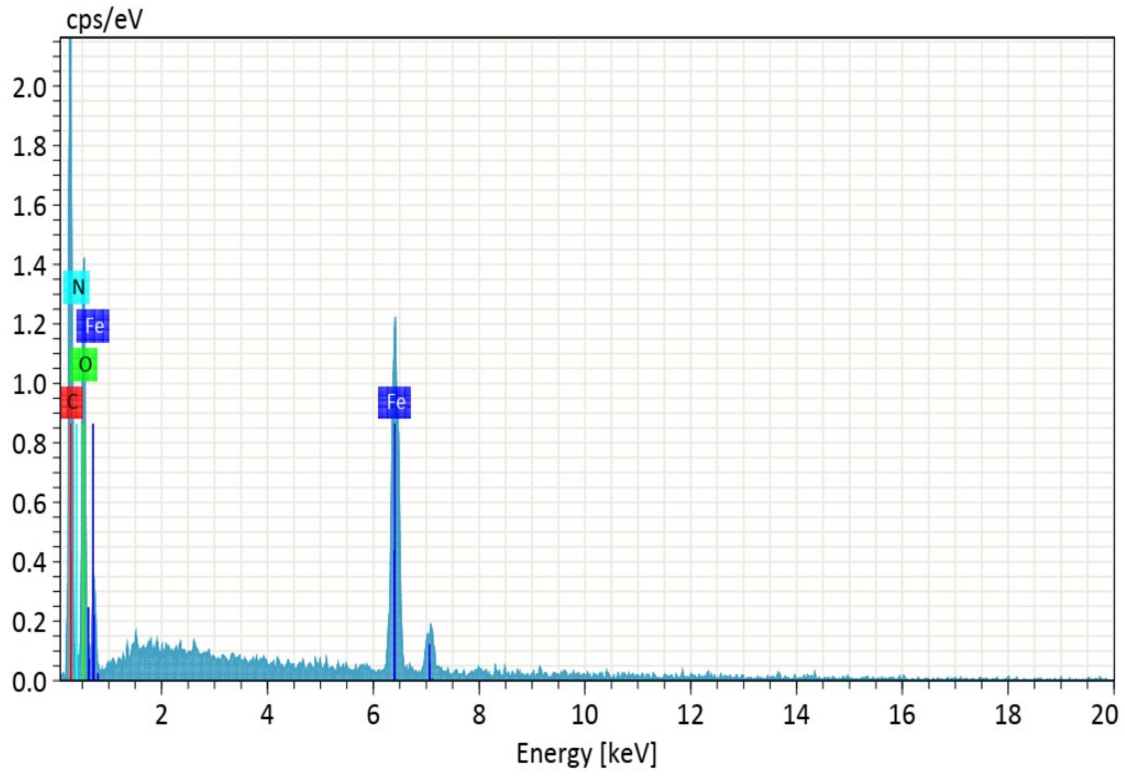


Fig.S3 EDX spectra of MNMOF

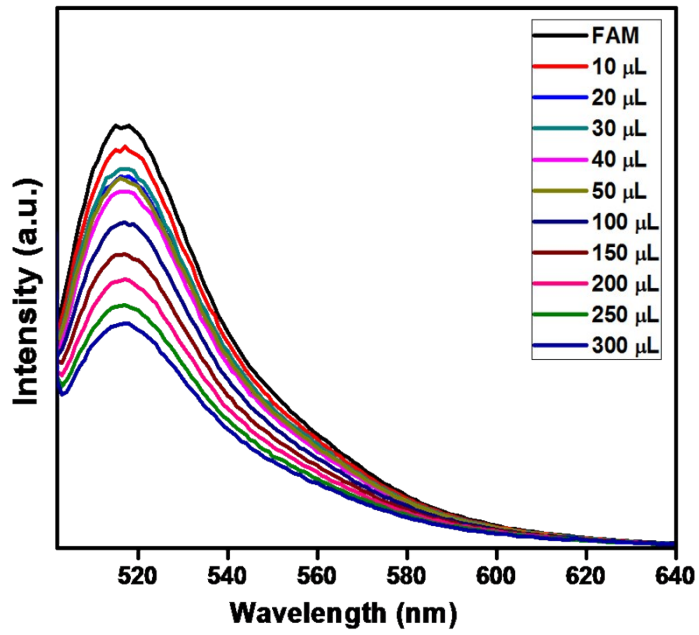


Fig.S4 Different concentration of NMOFs with FAM-ssDNA

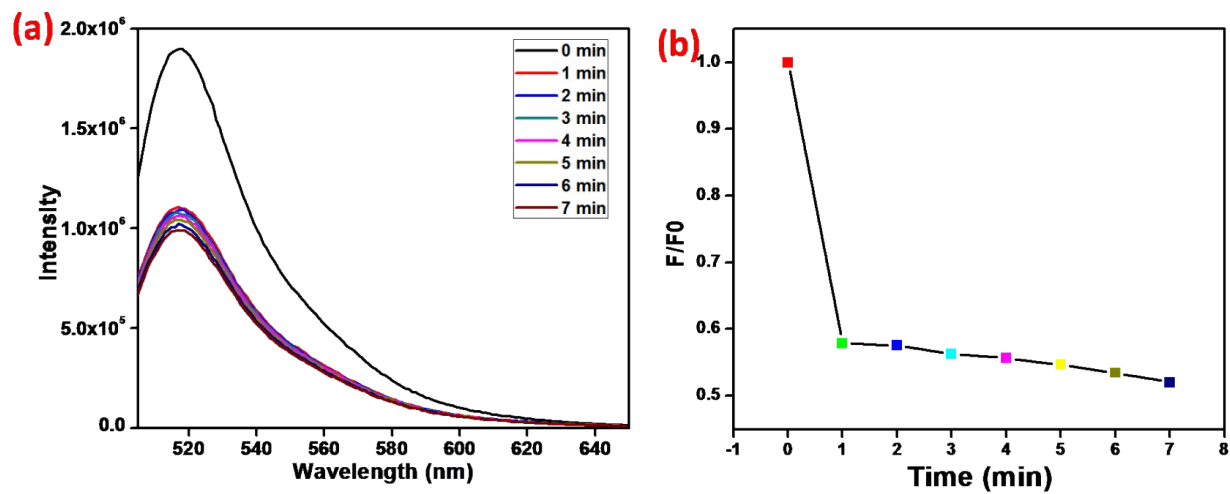


Fig.S5. Time dependent fluorescent quenching of FAM-ssDNA

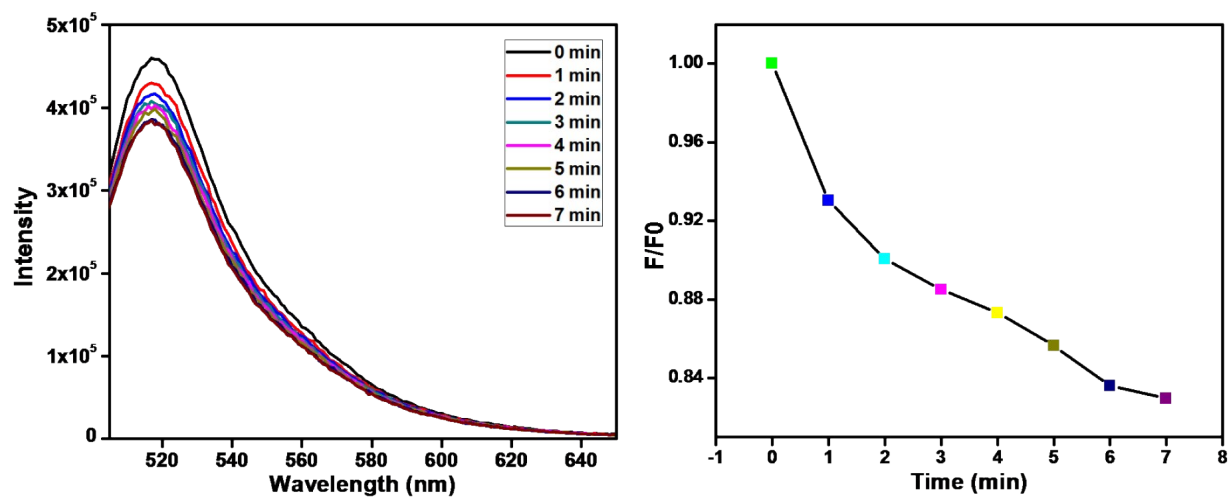


Fig.S6 Time dependent fluorescent quenching of Hg^{2+} FAM-ssDNA

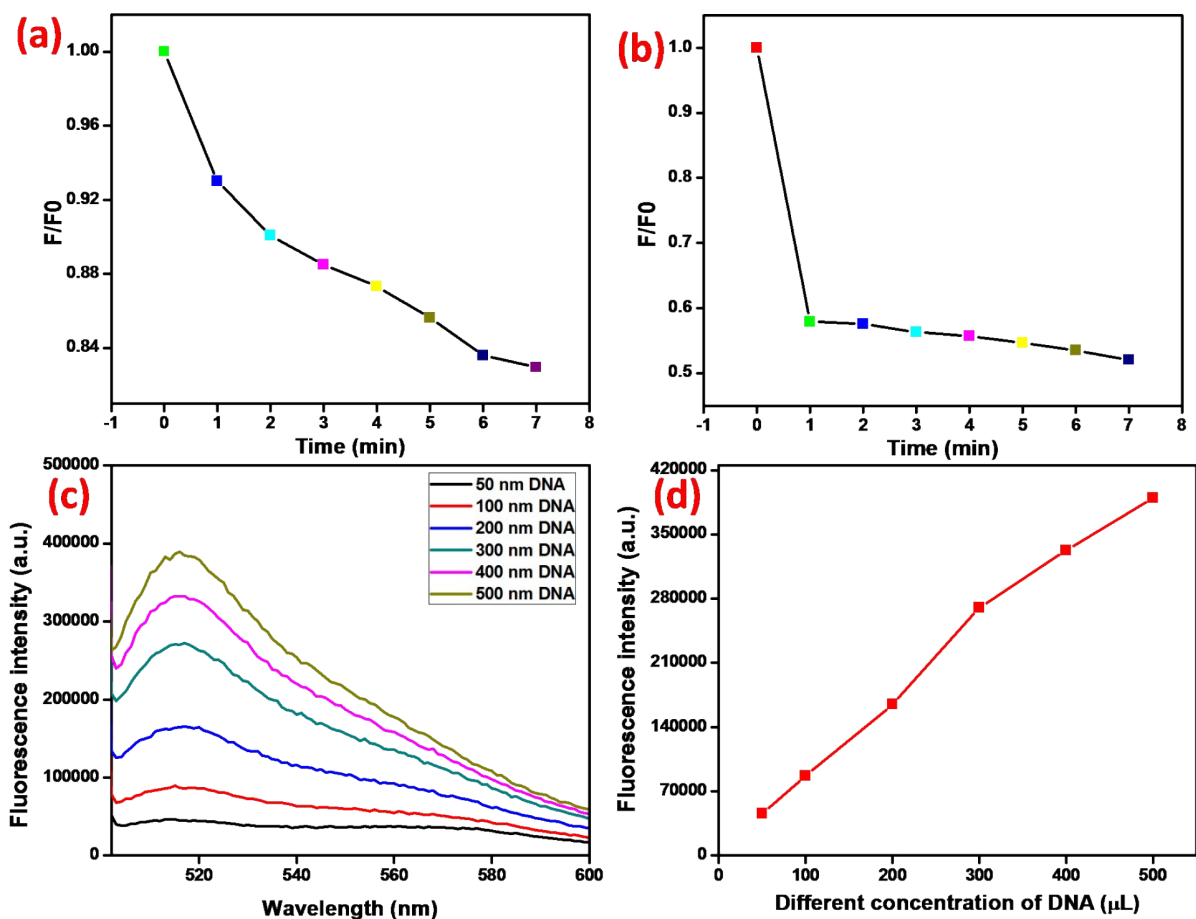


Fig.S7 (a) adsorption of FAM-ssDNA and MNMOF, (b) adsorption of FAM-ssDNA and MNMOF+Hg²⁺, (c) different concentration of FAM-ssDNA into 1wt% of MNMOF, (d) the relative fluorescence intensity detection of adsorption of FAM-ssDNA with MNMOF.

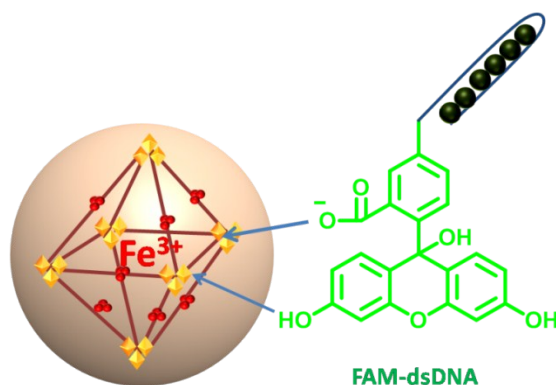


Fig.S8 illustration of FAM-ssDNA+Hg²⁺ with MNMOF.

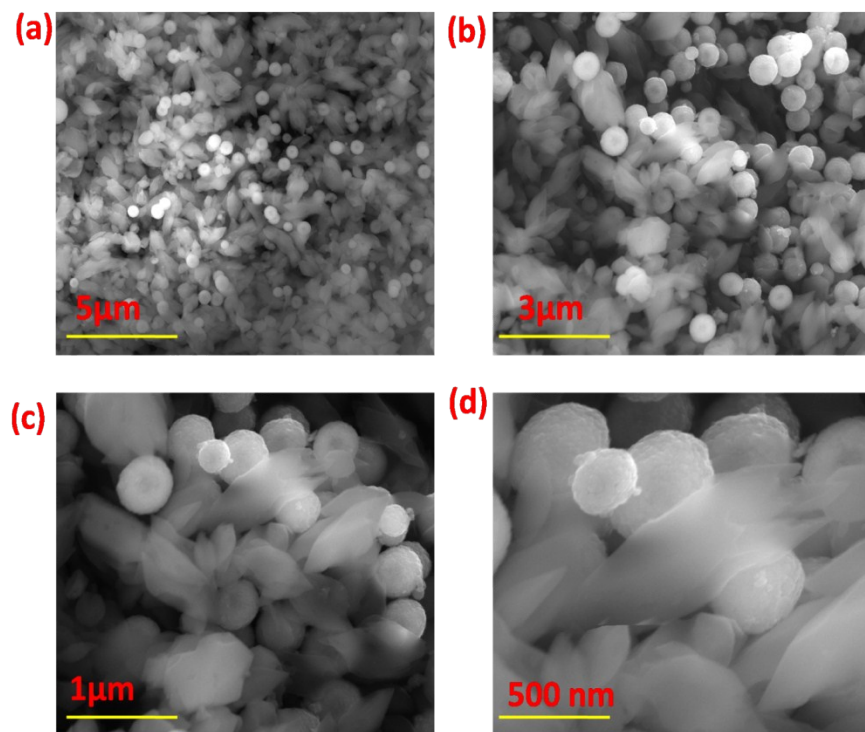


Fig. S9 SEM images with various magnitudes