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SUPPORTING INFORMATION

Development of a new evaluation method and application of a novel fluorescent nanosensor based on molecularly imprinted polymer for the rapid fluorescence detection of Procymidone

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Fig S1. FT-IR spectra of SiO_2 (a), SiO_2-APTES-FITC (b) and @MIH-prm (c)

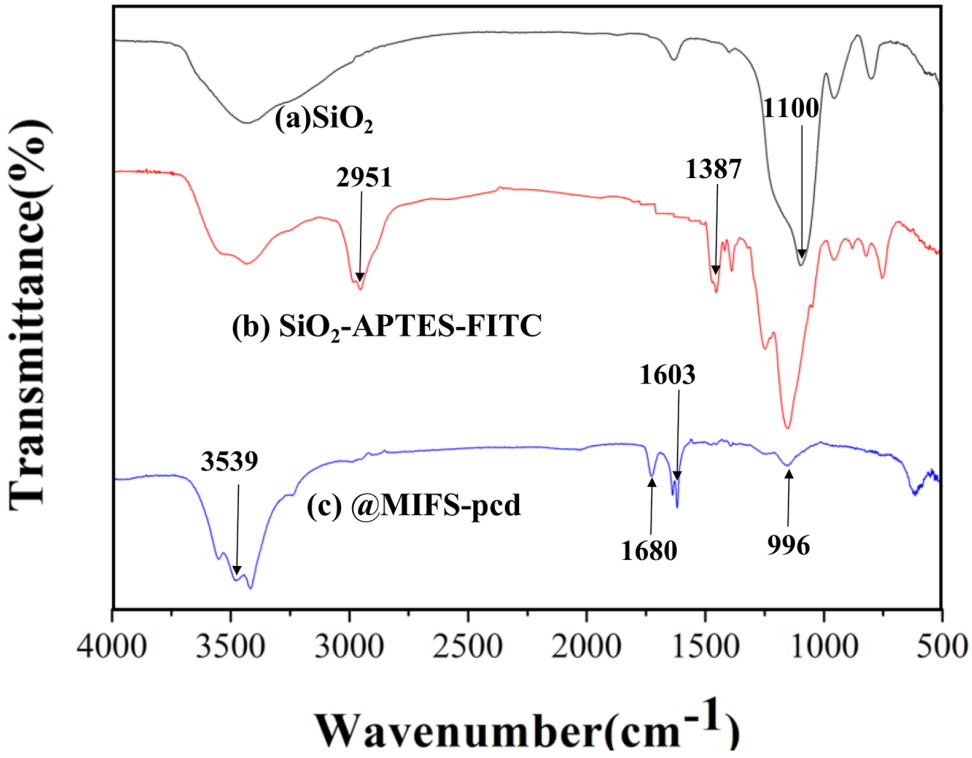


Fig S2. Fluorescence intensity curves of @MIH-prm for different concentration of @MIH-prm (0.0166 mg/ml (a), 0.033 mg/ml (b), 0.05 mg/ml (c), 0.066 mg/ml (d), 0.083 mg/ml (e) and 0.10 mg/ml (f)). The relationship between the percentage of quenching degree (g)

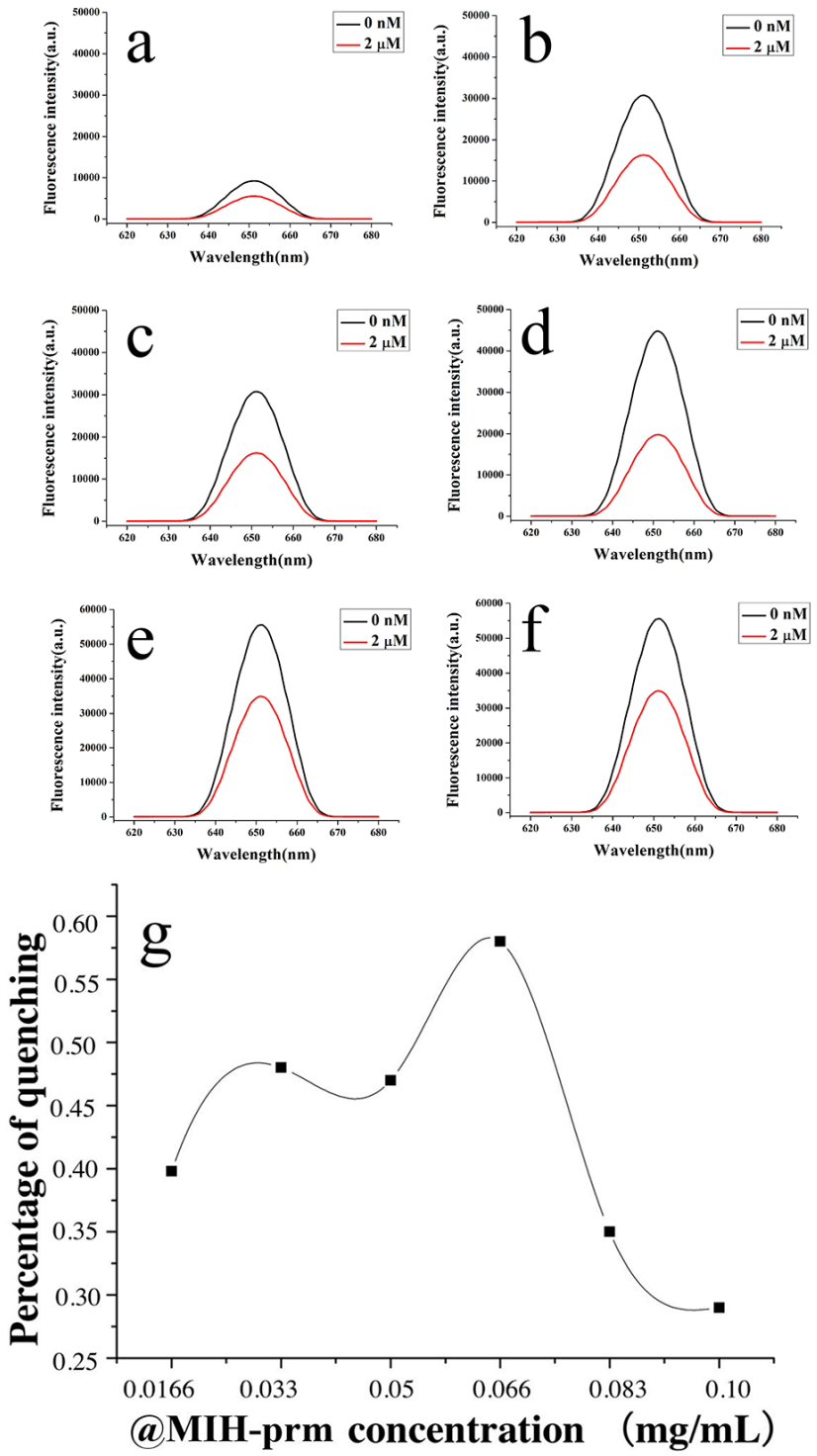
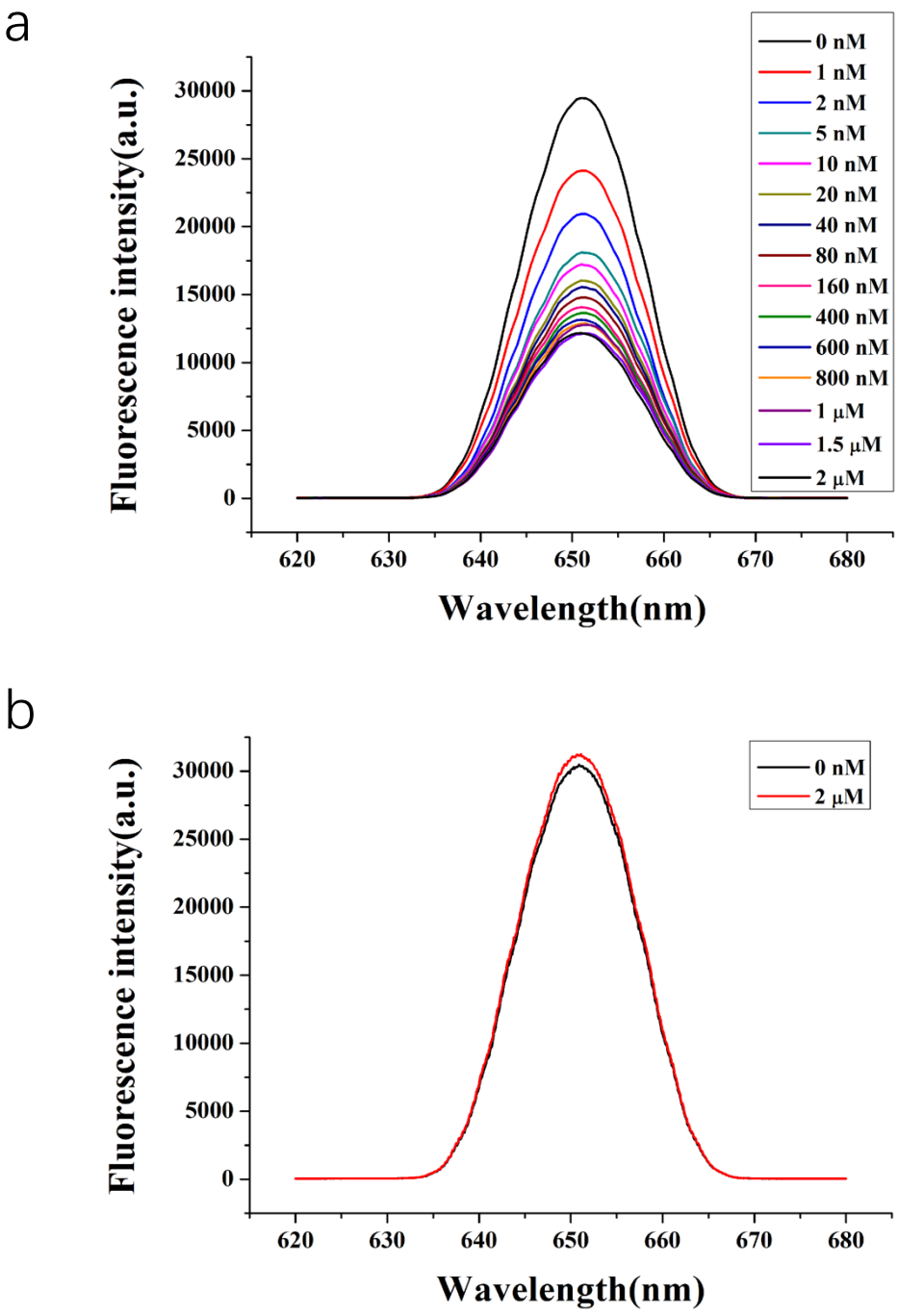
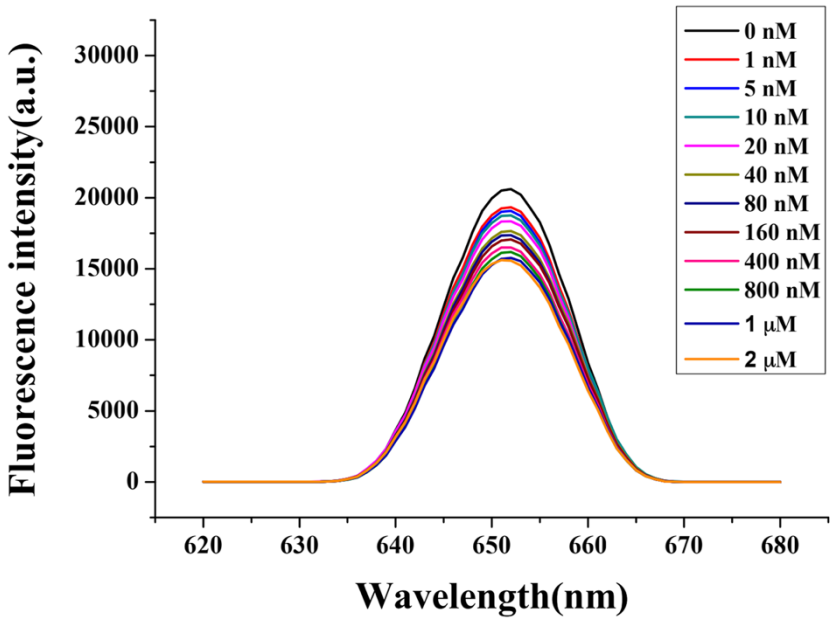


Fig S3. The fluorescence intensity curves of @MIH-prm/@NIHs (the fluorescence response of @MIH-prm (a), @MIH-prm control group (b), @NIHs (c) and @NIHs control group (d)



c


Fluorescence intensity(a.u.)
30000
25000
20000
15000
10000
5000
0
620
630
640
650
660
670
680
Wavelength(nm)
0 nM
1 nM
5 nM
10 nM
20 nM
40 nM
80 nM
160 nM
400 nM
800 nM
1 μM
2 μM

d

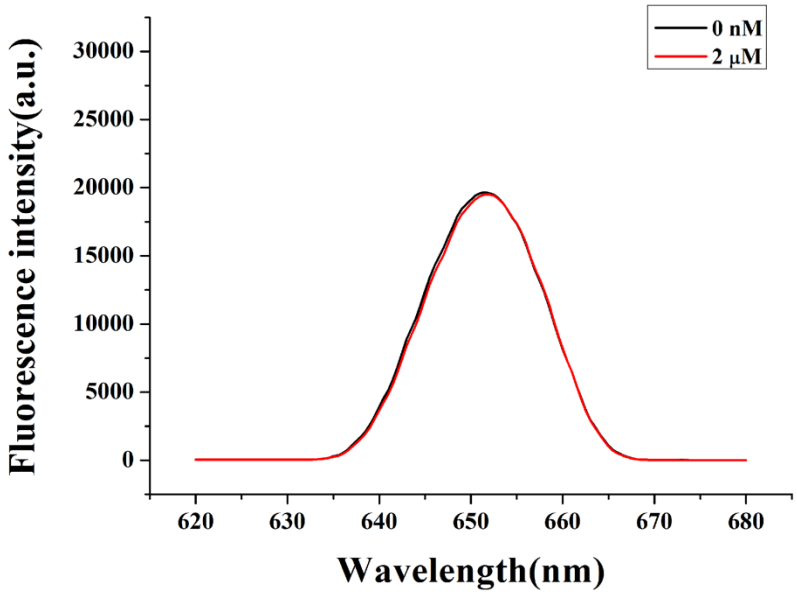

Fluorescence intensity(a.u.)
30000
25000
20000
15000
10000
5000
0
620
630
640
650
660
670
680
Wavelength(nm)
0 nM
2 μM

Fig S4. @MIH-prm (a) in PRM solution (800 nM in water/solution) for 30 min. For the kinetics test, several PRM groups were mixed with @MISF-PRM in a colorimetric tube, and the fluorescence intensity was recorded at different time intervals.