

Supplementary Information

An “off-on” phosphorescent aptasensor for the detection of thrombin based on PRET

Yan Xiong, Meiyu Liang, Yue Cheng, Jiarui Zou, Yan Li*

*Key Laboratory of Inorganic-Organic Hybrid Functional Materials Chemistry
(Tianjin Normal University), Tianjin Key Laboratory of Structure and Performance
for Functional Molecule, College of Chemistry, Tianjin Normal University, Tianjin,
300387, P.R. China*

* E-mail: nkliyan398@gmail.com

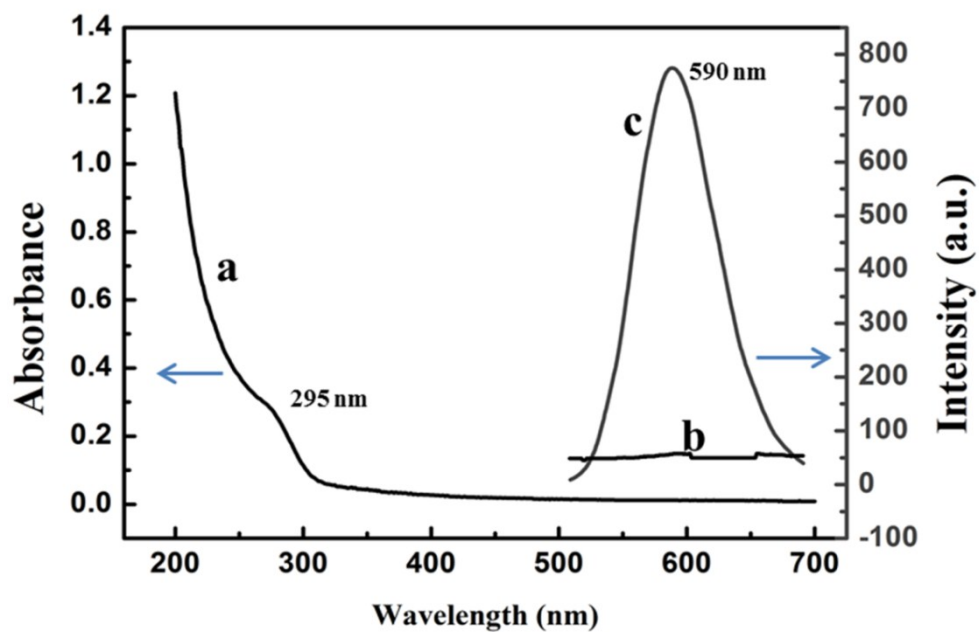


Fig. S1. The excitation spectrum (curve a), RTP emission spectrum of phosphorescent QDs after aging at 50 °C under open air for 2 h (curve c) and not aging (curve b).

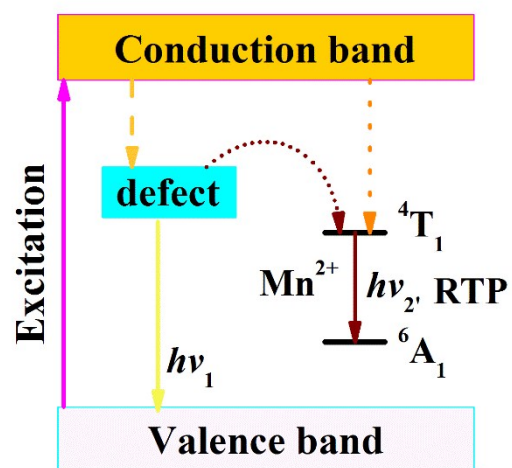


Fig. S2. schematic illustration of electronic transition.

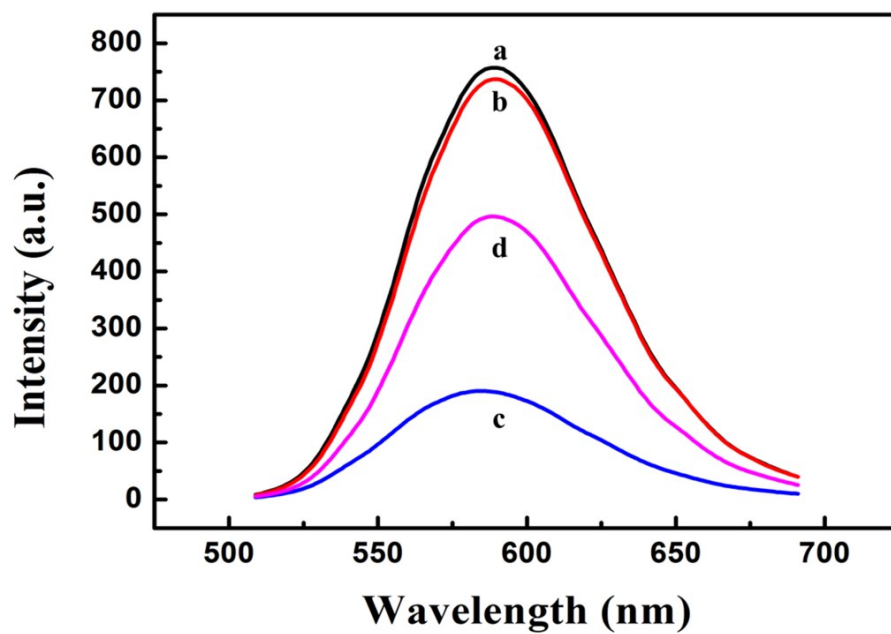


Fig. S3. Phosphorescence spectra of QDs (curve a), QDs+thrombin (curve b), QDs+TBA-BHQ₂ (curve c), and QDs/TBA-BHQ₂+thrombin (curve d).

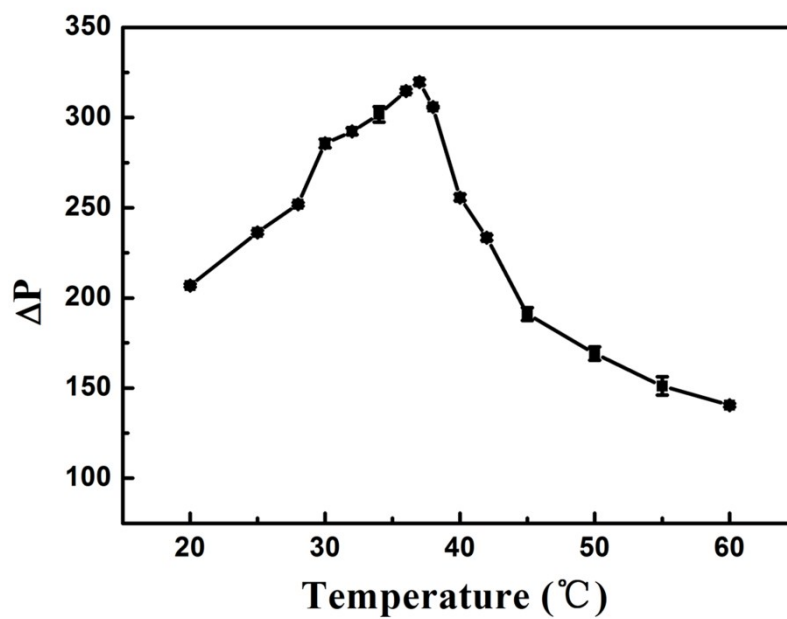


Fig. S4. The influence of different temperature on the “off-on” phosphorescence aptasensor system.