Electronic Supplementary Material (ESI) for Journal of Materials Chemistry

Supplementary Information for:

Fast detection for organic amine vapors based on fluorescent nanofibrils fabricated from triphenylamine functionalized *β*-diketone-boron difluoride

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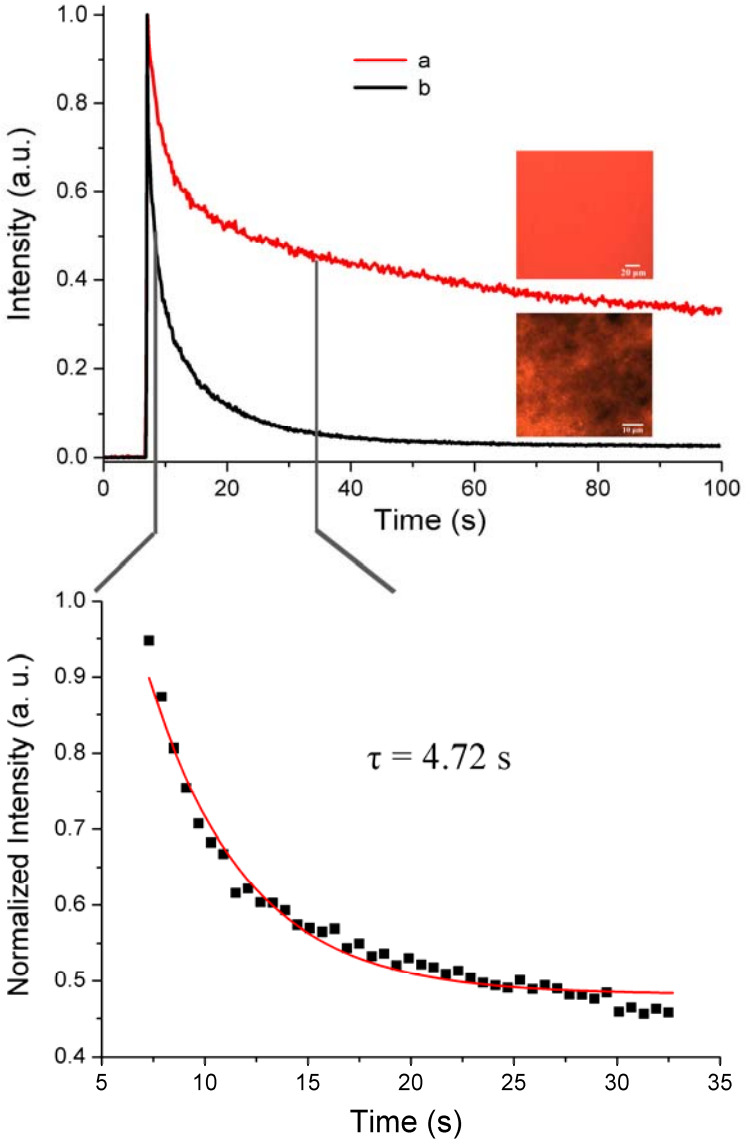

Fig. S1 Time-courses of the fluorescence quenching of the amorphic (a) and nanofibrils-based (b) films upon exposed to the saturated vapor of aniline, the intensity was monitored at 640 nm.

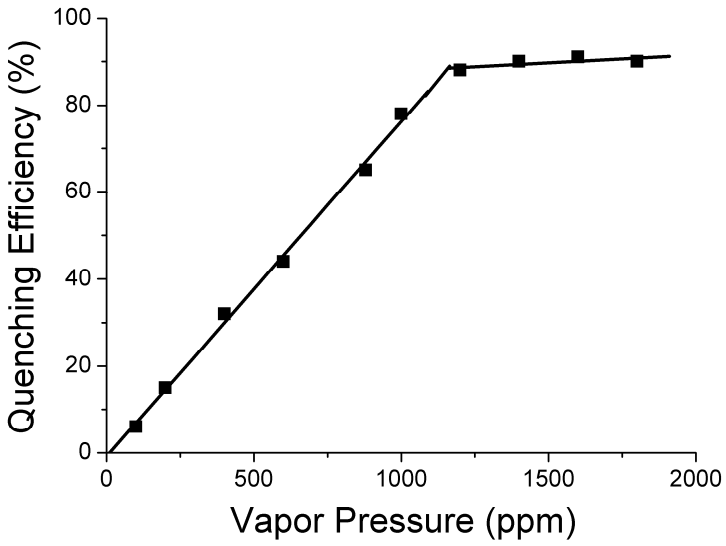

Fig. S2 The concentration-dependent fluorescence quenching efficiency of the nanofibrils **1** deposited on glass slide exposed to pyridine vapor for 10 s.

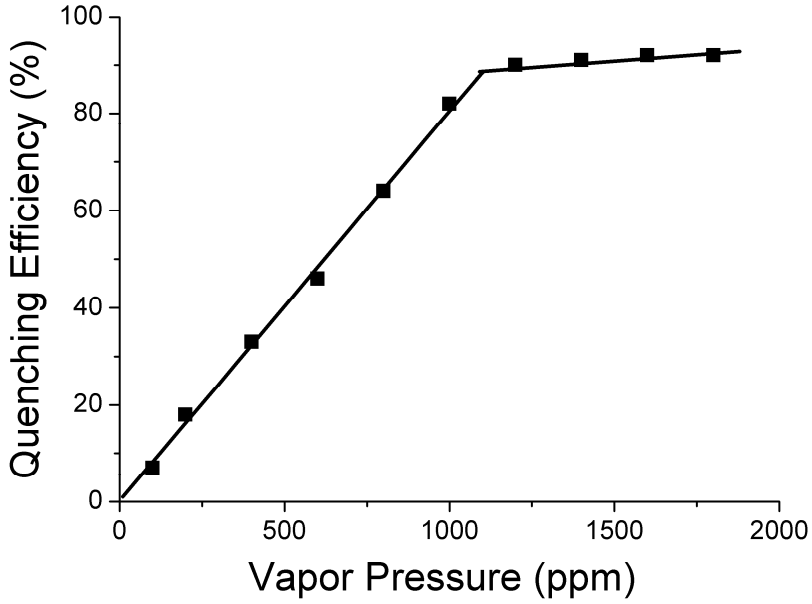

Fig. S3 The concentration-dependent fluorescence quenching efficiency of the nanofibrils **1** deposited on glass slide exposed to triethylamine vapor for 10 s.

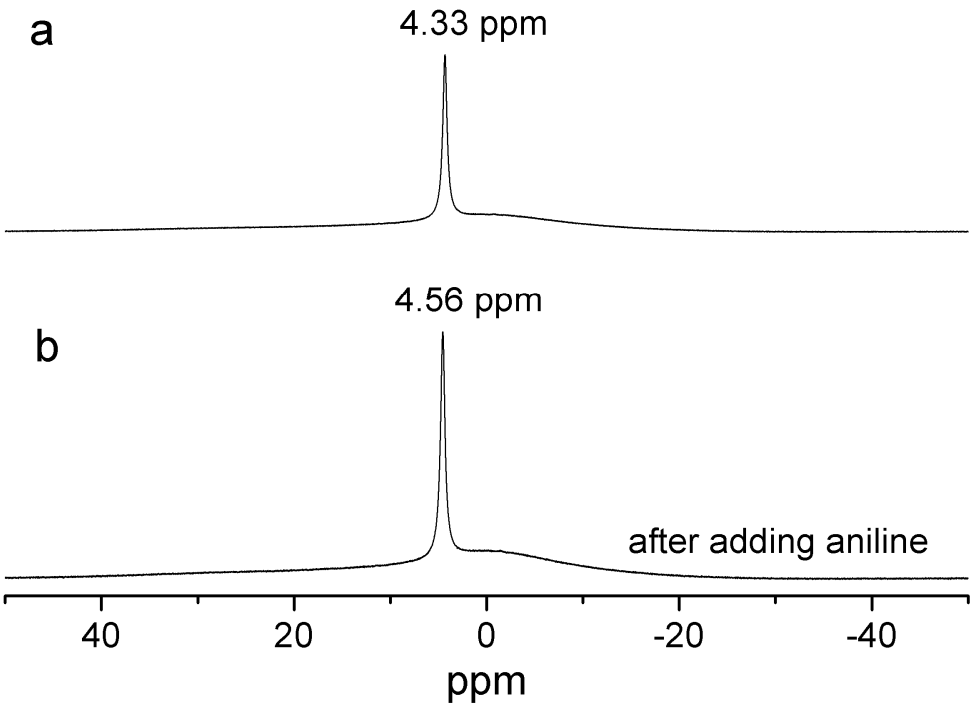

Fig. S4 ^{11}B NMR (160.4 MHz) spectra of compound **1** (a) and after adding aniline (b).

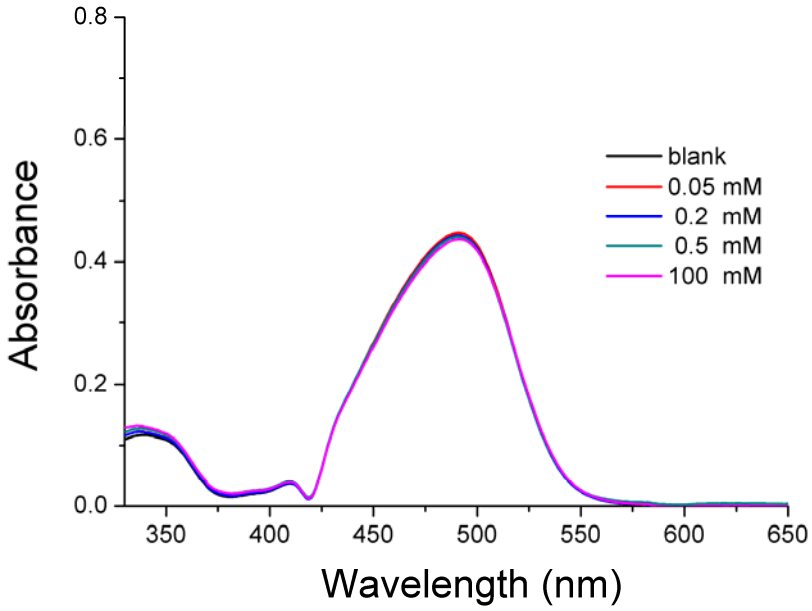

Fig. S5 UV-vis absorption spectra of **1** upon adding different amount of aniline in toluene (5 μM).

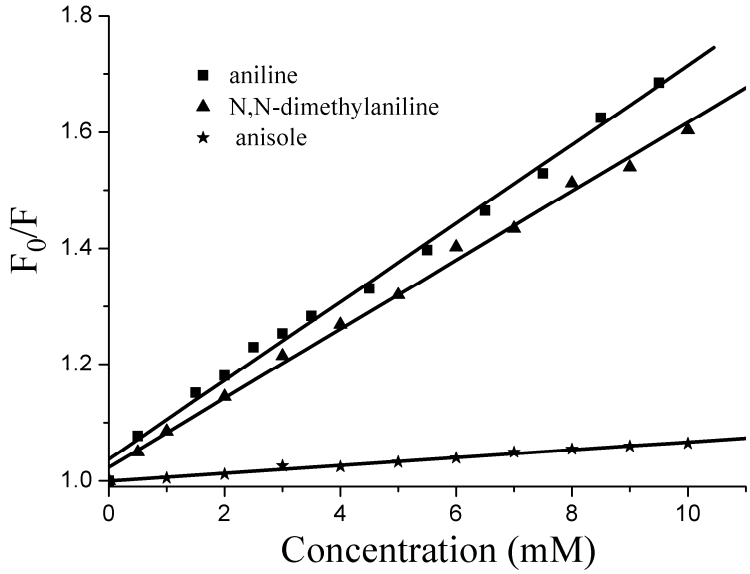

Fig. S6. Stern-Volmer plots for **1** in toluene (5×10^{-6} M) in response to aniline, N,N-dimethylaniline, anisole. The fluorescence intensity was monitored at 590 nm (λ_{ex} = 490 nm).

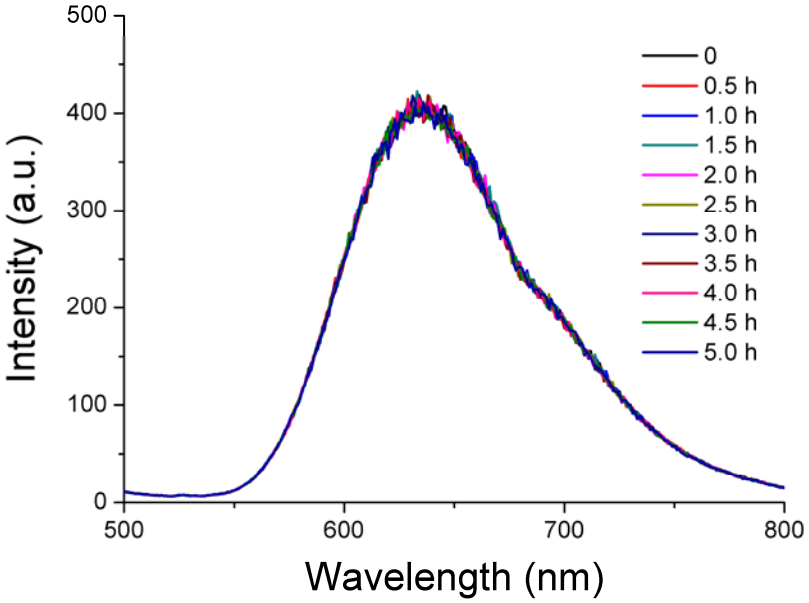

Fig. S7 The time-dependent of the fluorescence spectra of the nanofibrils **1** deposited on glass slide exposed to natural light at room temperature.