

# Spontaneously Hierarchical Self-assembly of Nanofibres into Fluorescent Spherical Particles:

## A Leap from Organogels to Macroscopic Solid Spheres

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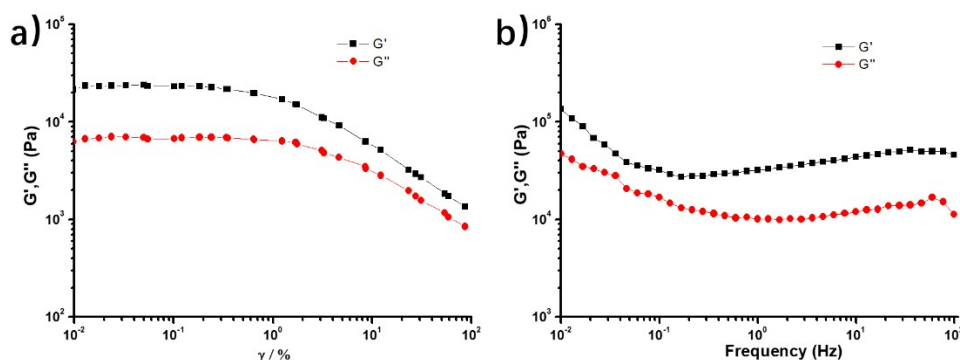


Figure S1. Dynamic oscillatory data for SY1/EA gel (13 mg/mL) at 25°C. (a) Strain sweep at a frequency of 1 Hz. (b) Frequency sweep at a strain of 0.1%.

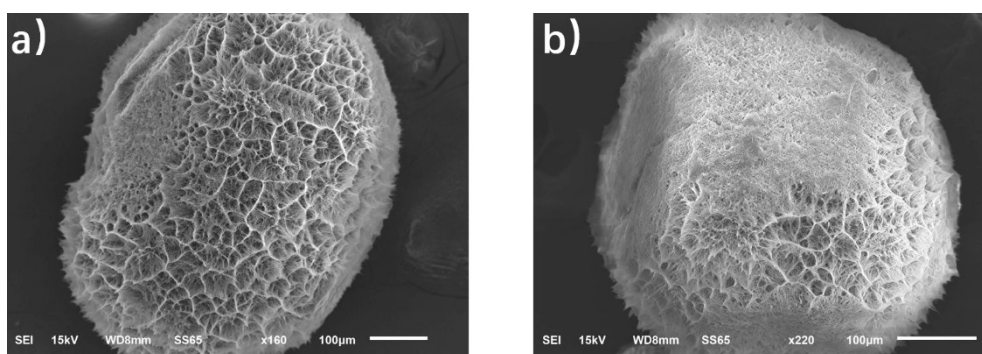


Figure S2. SEM images of the transformed solid from gel in the concentration of a) 15 mg/mL and b) 20mg/mL.

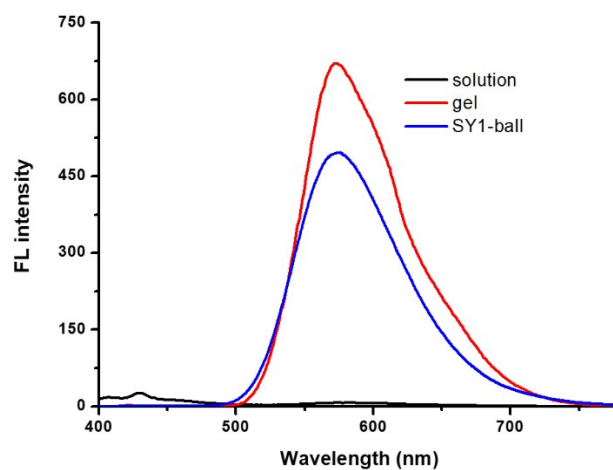


Figure S3. Fluorescence spectra of hot solution, gel and SY1-ball.

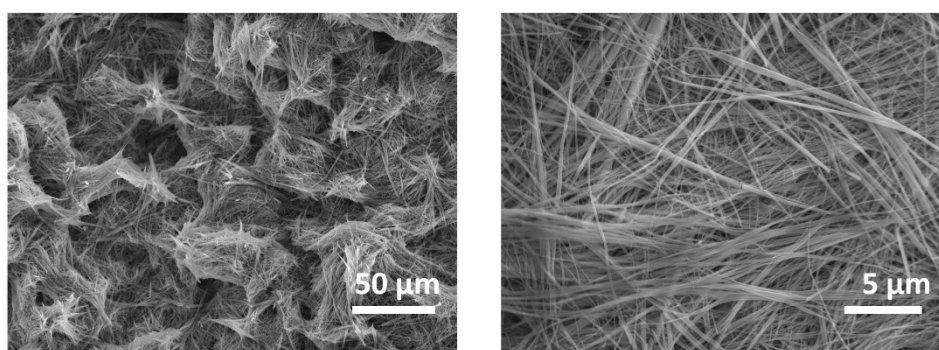


Figure S4. SEM images of the liquid phase after the formation of SY1-balls. The images were measured after the solvent is evaporated.

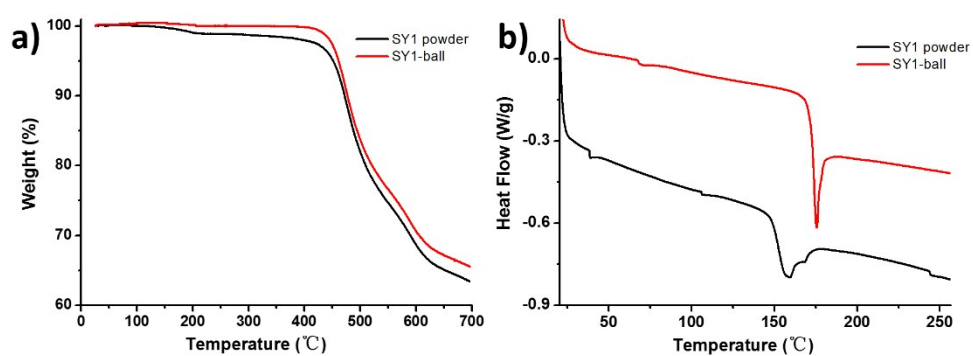


Figure S5. a) TGA and b) DSC curves of as-prepared SY1 powder (black) and SY1-ball (red).

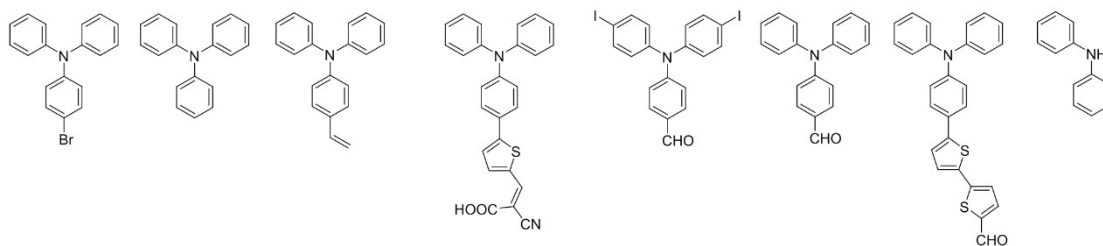


Figure S6. Molecular structure of the other triphenylamine derivatives which we have tried to mix with SY1 in toluene.

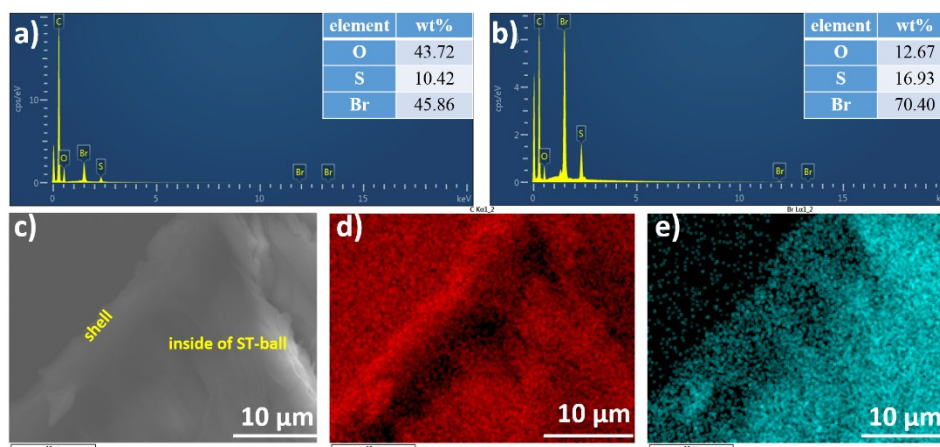


Figure S7. EDS analysis results of ST-ball for a) shell and b) core and the corresponding elements content. C) SEM photograph and elemental mapping images of ST-ball for d) O and e) Br with color superposition (O: purple, Br: blue).

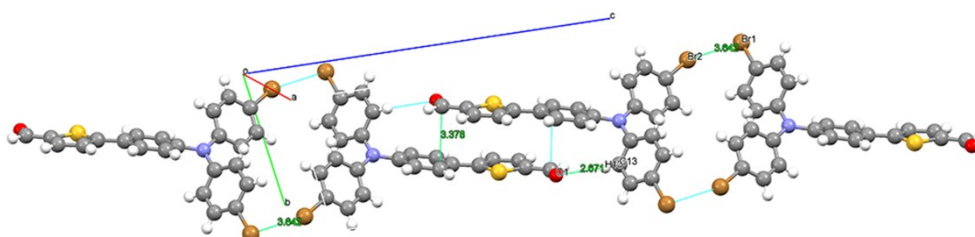


Figure S8. Packing mode of TPA1 in the single crystal, the  $\pi$ - $\pi$ , Br $\cdots$ Br and H $\cdots$ O H-bonding interactions are clearly indicated. Different atoms are denoted in different colors (O: red, Br: brown, N: blue, C: gray, H: white).

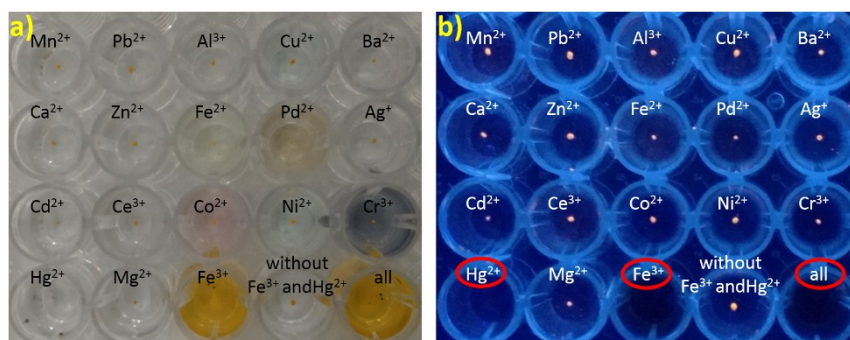


Figure S9. Responses of SY1-balls to various metal ions under a) day light, and b) 365 nm UV light.



Figure S10. EDS spectra of SY1-balls after treatment with a)  $Hg^{2+}$ , b)  $Fe^{3+}$ , c) all the tested ions.

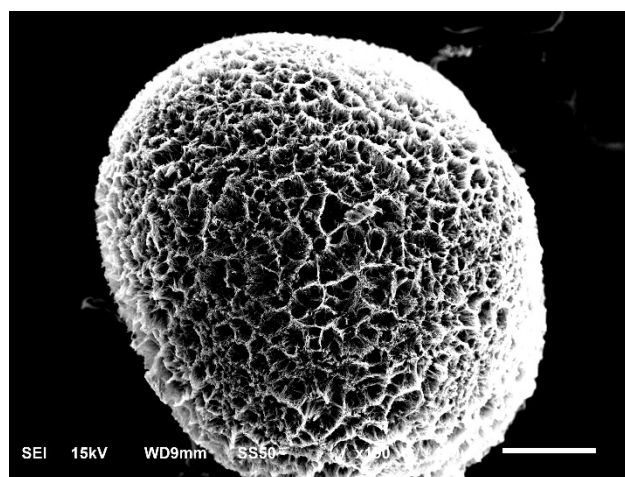


Figure S11. SEM image of SY1-ball after adsorbing  $Fe^{3+}$  or  $Hg^{2+}$ .