

Supporting Information (SI)

**Synthesis and Properties of Aggregation-Induced Emission
Compounds Containing Triphenylethene and
Tetraphenylethene Moieties**

Bingjia Xu, Zhenguo Chi, Haiyin Li, Xiqi Zhang, Xiaofang Li, Siwei Liu, Yi Zhang,
and Jiarui Xu**

PFCM Lab, DSAPM Lab and KLGHEI of Environment and Energy Chemistry, FCM
Institute, State Key Laboratory of Optoelectronic Materials and Technologies, School
of Chemistry and Chemical Engineering, Sun Yat-sen University, Guangzhou 510275,
China. chizhg@mail.sysu.edu.cn; xjr@mail.sysu.edu.cn

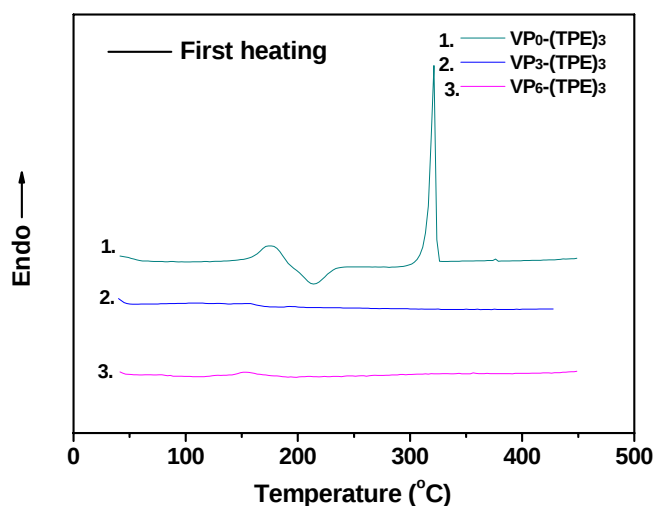


Figure S1. DSC curves for the compounds at a scan rate of 10 °C/min (first heating scan).

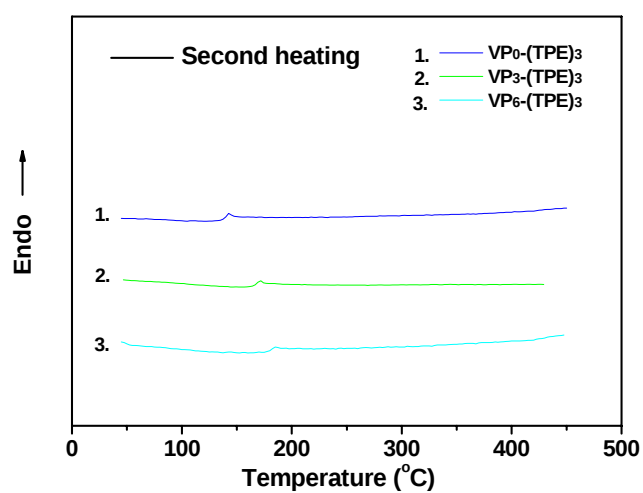


Figure S2. DSC curves for the compounds at a scan rate of 10 °C/min (second heating scan).

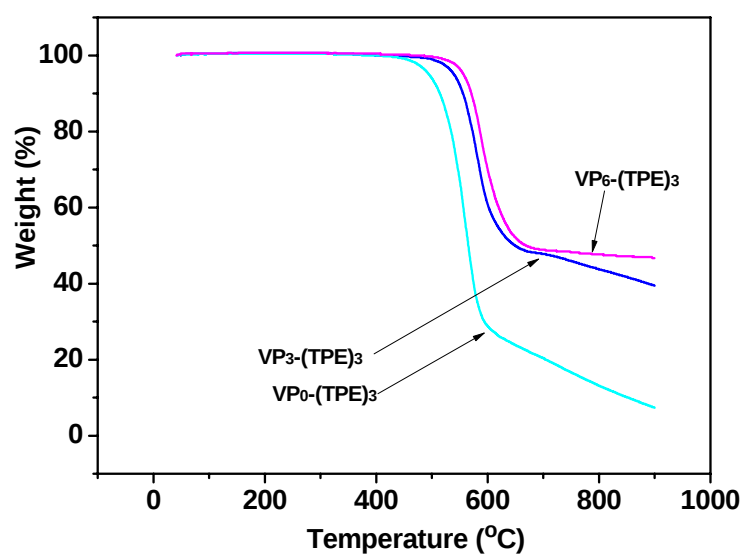
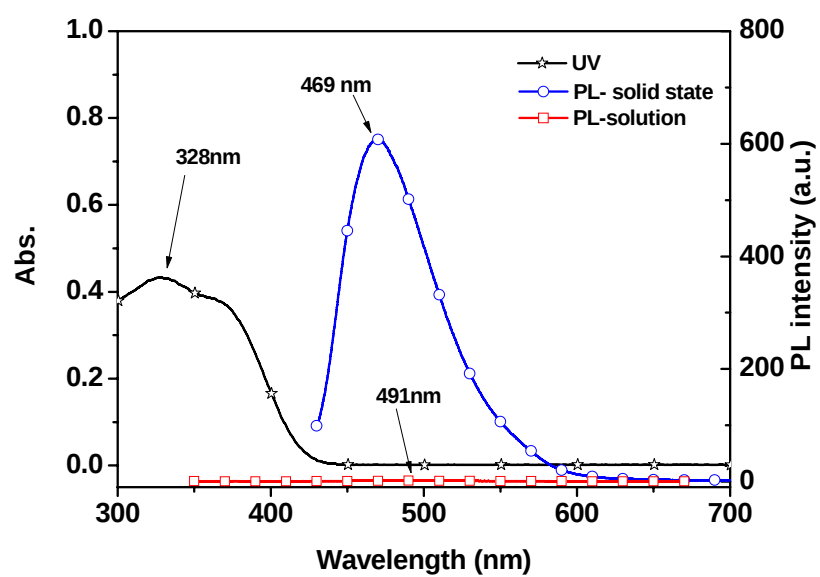
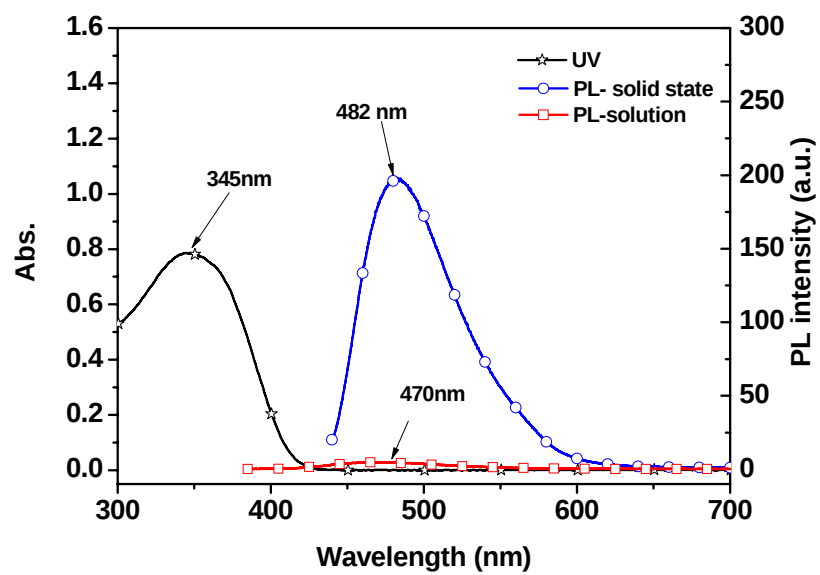


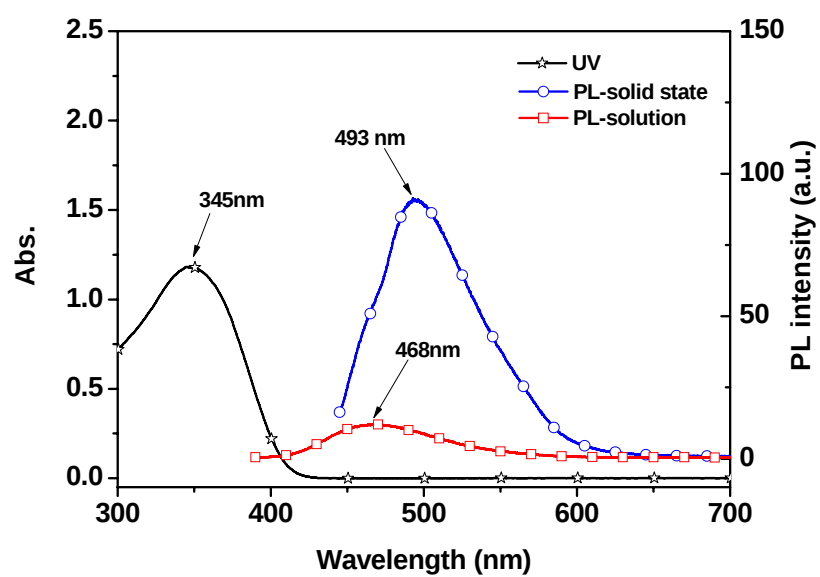
Figure S3 TGA curves of the compounds.



(a)

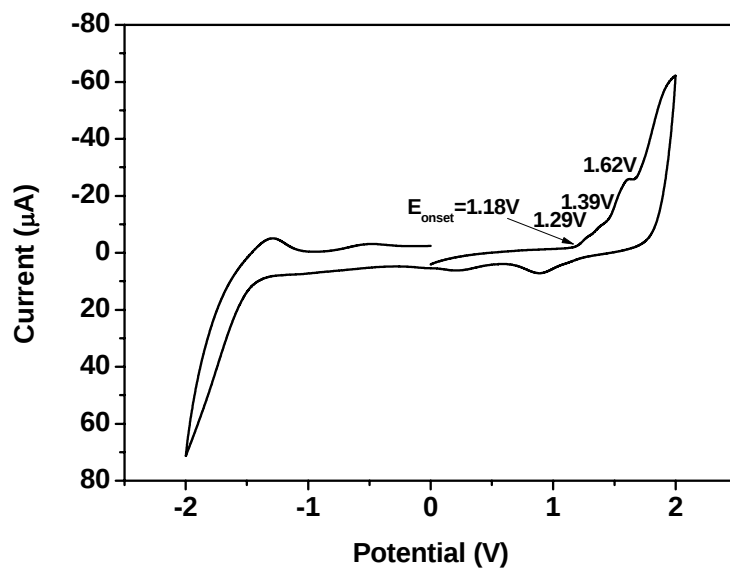


(b)

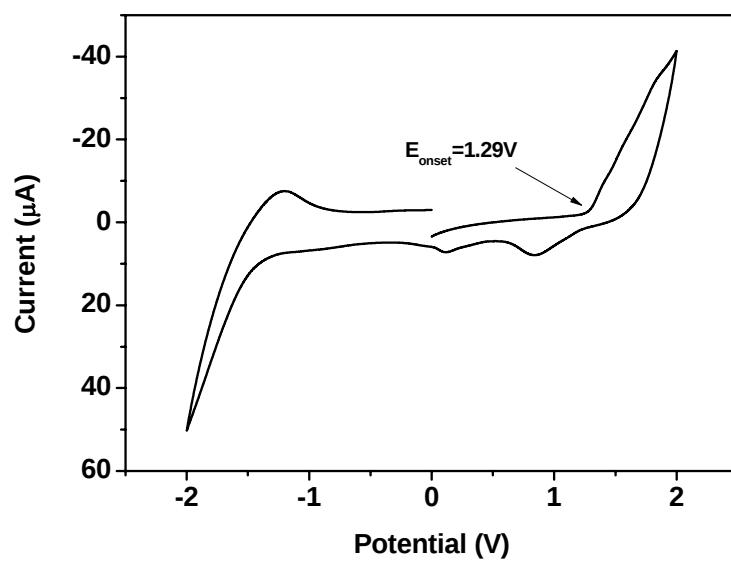


(c)

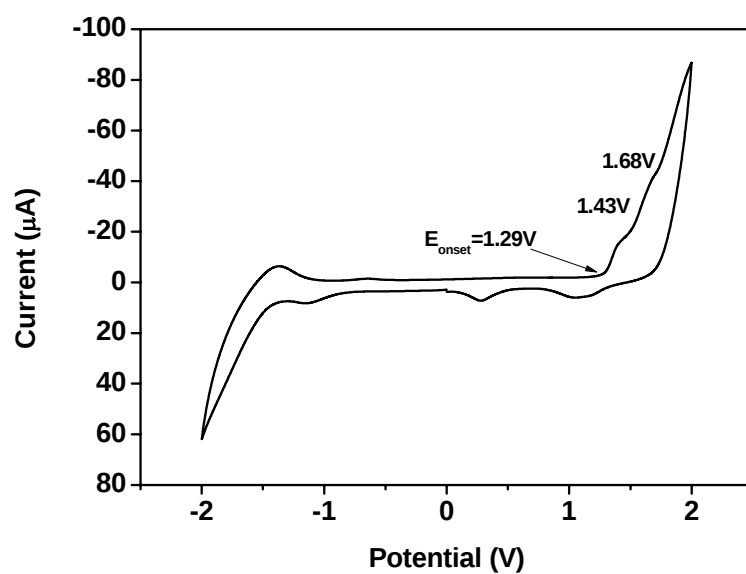
Figure S4. UV and PL spectra of the compounds in THF and in the solid state: (a) $\text{VP}_0\text{-(TPE)}_3$, (b) $\text{VP}_3\text{-(TPE)}_3$, (c), $\text{VP}_6\text{-(TPE)}_3$. (solution concentration: $10\ \mu\text{M}$).



(a)

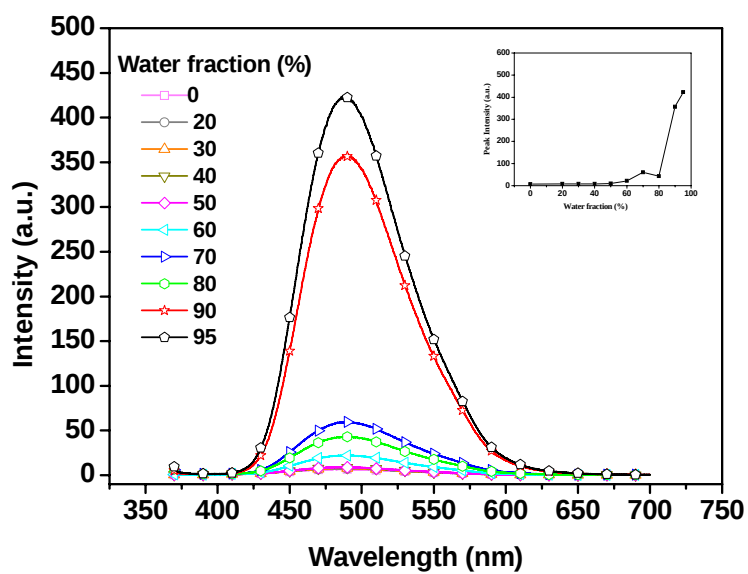


(b)

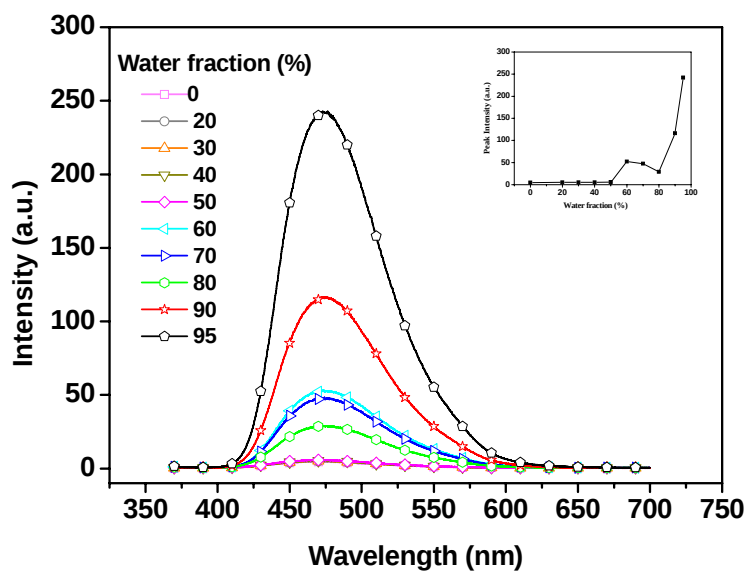


(c)

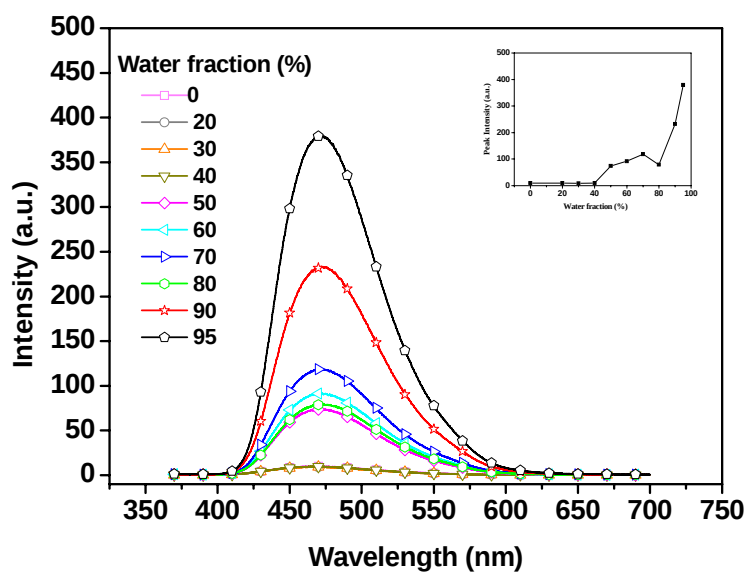
Figure S5. CV curves of the compounds in DCM: (a) $\text{VP}_0\text{-(TPE)}_3$, (b) $\text{VP}_3\text{-(TPE)}_3$, (c), $\text{VP}_6\text{-(TPE)}_3$. (solution concentration: 50 μM).



(a)

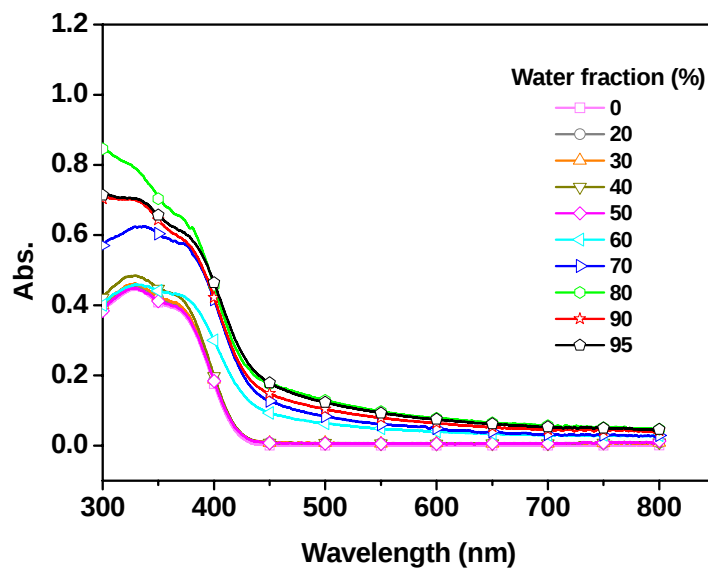


(b)

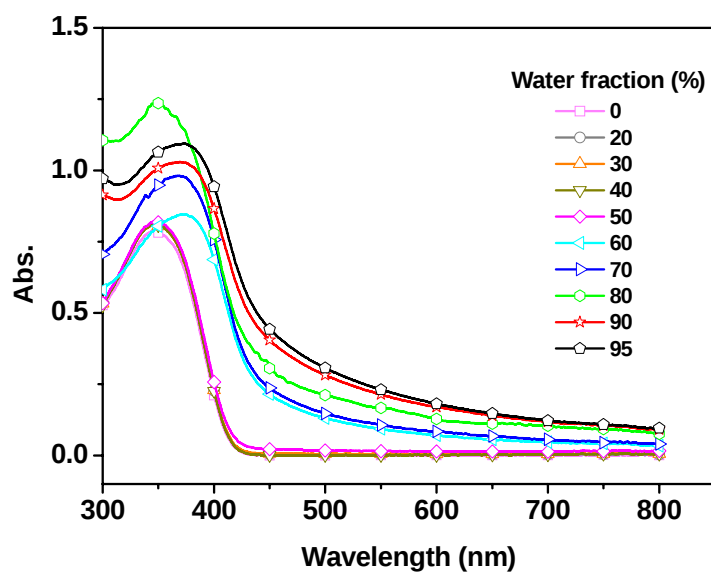


(c)

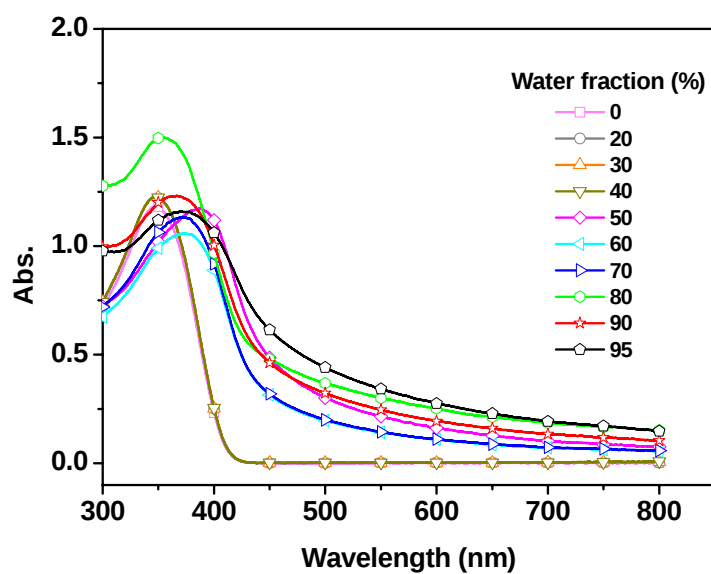
Figure S6. PL spectra of the compounds in water/THF mixtures. The inset depicts the changes in PL peak intensity: (a) $VP_0-(TPE)_3$, (b) $VP_3-(TPE)_3$, (c), $VP_6-(TPE)_3$. (solution concentration: 10 μ M).



(a)



(b)



(c)

Figure S7. UV absorption spectra of the compounds in water/THF mixtures with different volume fractions of water: (a) $\text{VP}_0\text{-(TPE)}_3$, (b) $\text{VP}_3\text{-(TPE)}_3$, (c), $\text{VP}_6\text{-(TPE)}_3$. (solution concentration: $10\ \mu\text{M}$).