

## Supporting Information

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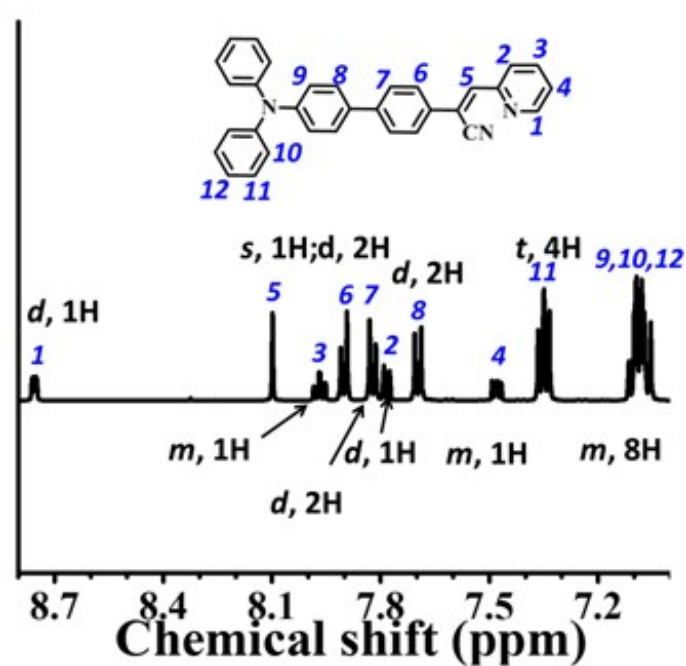
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## S-I Tables and figures

**Table S1** Detailed absorption ( $\lambda_a$ ) and emission peak ( $\lambda_f$ ) positions of *o*N-TPA in the different solvents

solvents	$\Delta f(\epsilon, n)$	<i>o</i> N-TPA		
		$\lambda_a$ (nm)	$\lambda_f$ (nm)	$\nu_a-\nu_f(\text{cm}^{-1})$
Hexane	0.0012	370	474	$6.0 \times 10^3$
Toluene	0.014	381	503	$6.3 \times 10^3$
Butyl ether	0.096	370	499	$7.0 \times 10^3$
Isopropyl ether	0.145	373	513	$7.3 \times 10^3$
Ethyl ether	0.167	368	524	$8.09 \times 10^3$
Ethyl acetate	0.200	375	561	$8.9 \times 10^3$
Tetrahydrofuran	0.210	376	569	$9.0 \times 10^3$
Dichloromethane	0.217	379	605	$9.9 \times 10^3$
Dimethyl formamide	0.276	381	638	$10.5 \times 10^3$
Acetonitrile	0.305	376	650	$11.2 \times 10^3$



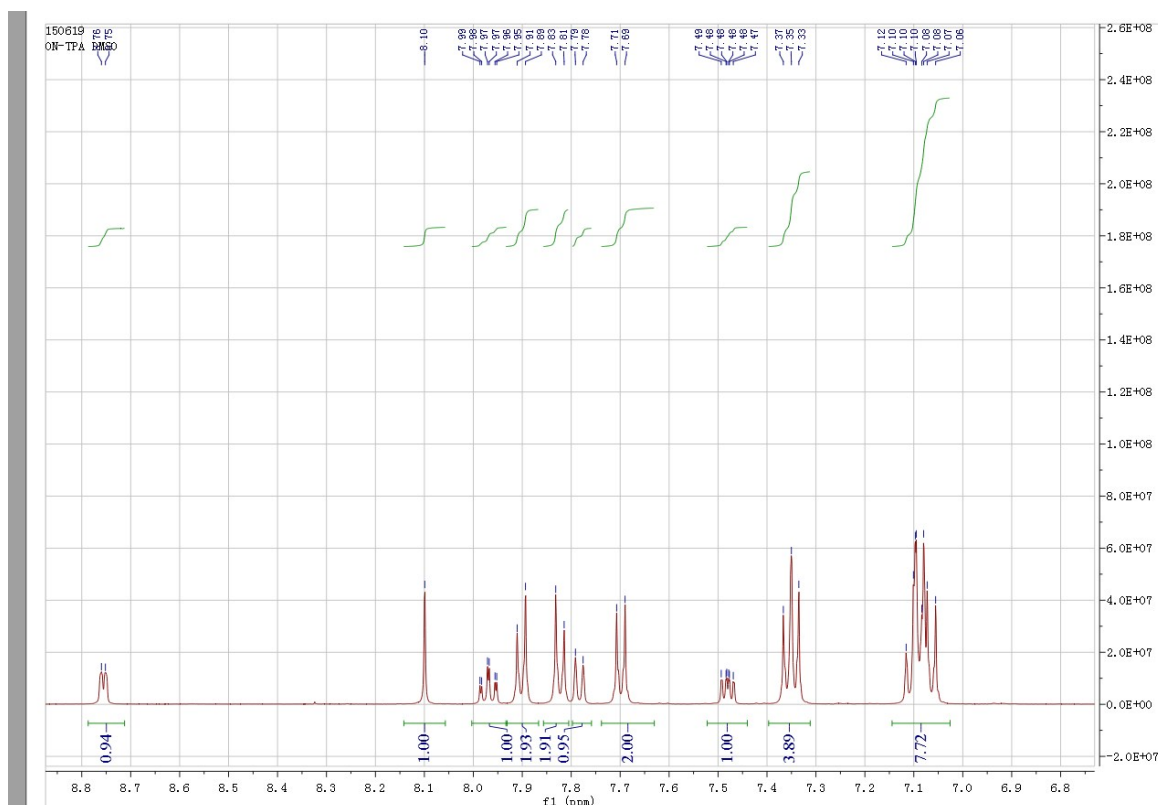


Figure S1  $^1\text{H}$  NMR of *o*N-TPA in DMSO

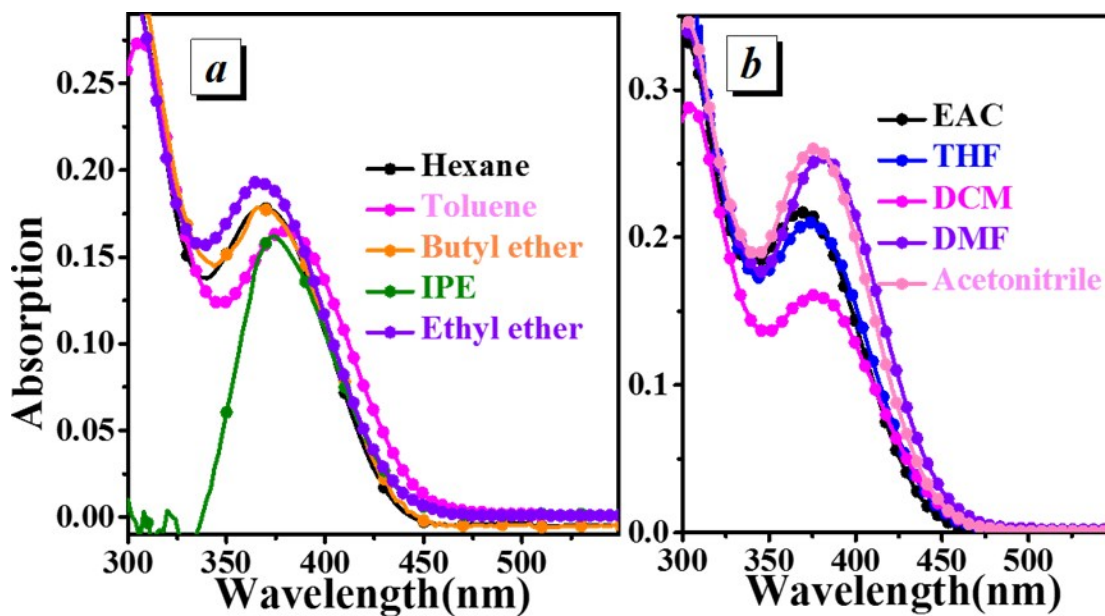
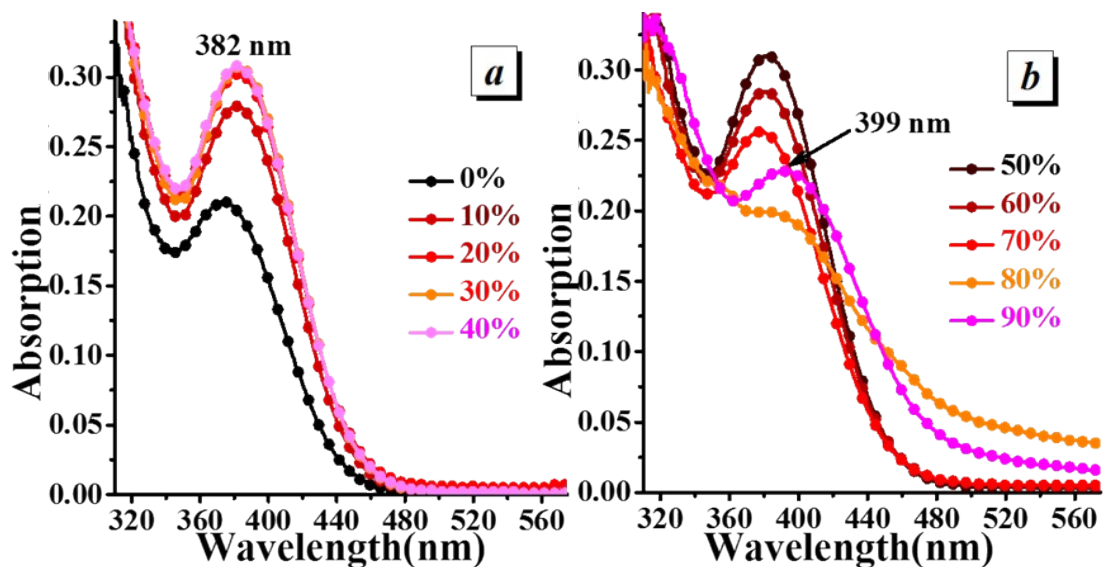
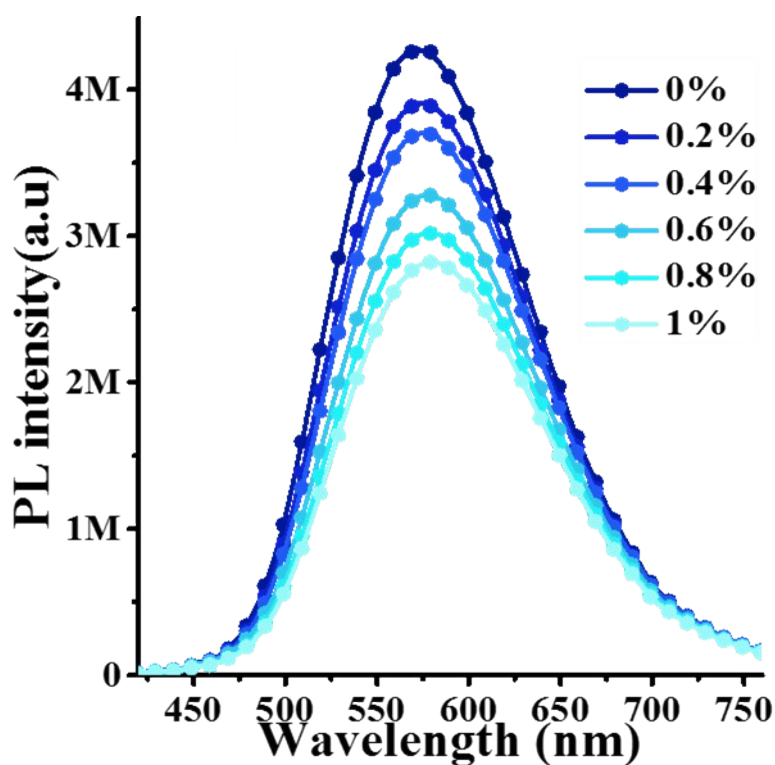


Figure S2 UV-vis absorption spectra of *o*N-TPA measured in the different solvents with the increasing orientational polarizability ( $\Delta f$ ). *n*-Hexane: 0.0012; toluene: 0.014; butyl ether: 0.096; isopropyl ether (IPE): 0.145; ethyl ether: 0.167; ethyl acetate (EA): 0.200; tetrahydrofuran (THF): 0.210; dimethyl formamide (DMF); and acetonitrile: 0.305.



**Figure S3** UV-vis absorption spectra of 10  $\mu\text{M}$  *o*N-TPA in THF alone (0 %) and THF-water mixture with water fractions from 10 % to 90 % (v/v).



**Figure S4** PL spectra change of 10  $\mu\text{M}$  *o*N-TPA with the increasing water fraction from 0 to 1.0% (v/v) in THF (excitation at 410 nm, slit width 3).

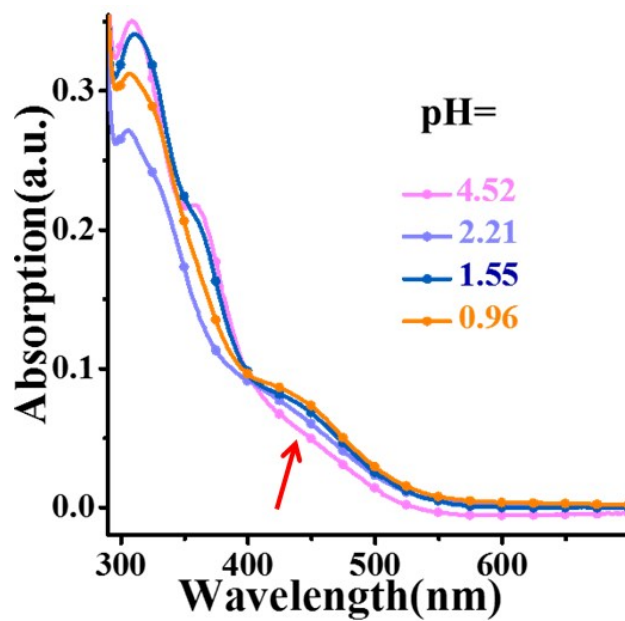


Fig.S5 Absorption spectra of 10  $\mu$ M *o*N-TPA after adding the different concentration of TFA to tune the pH values of solution in THF-water mixtures with  $f_w=90\%$ .

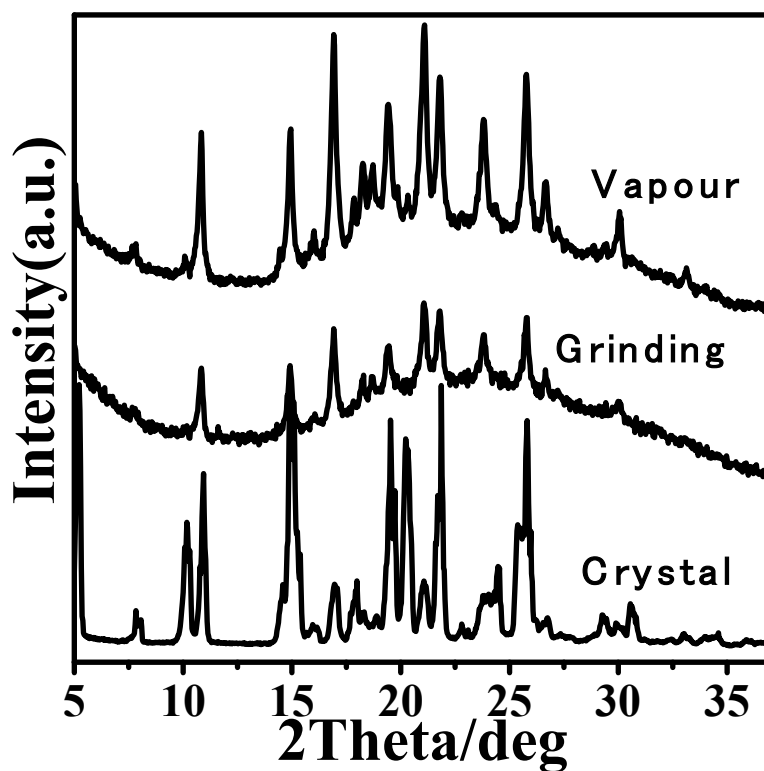
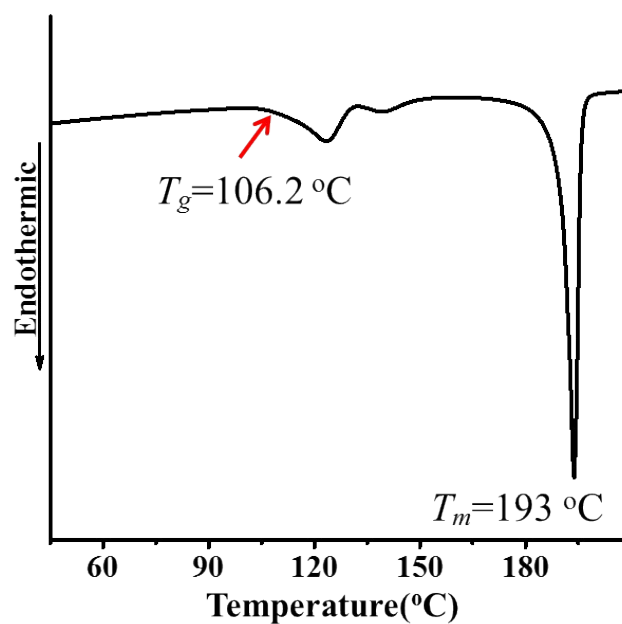
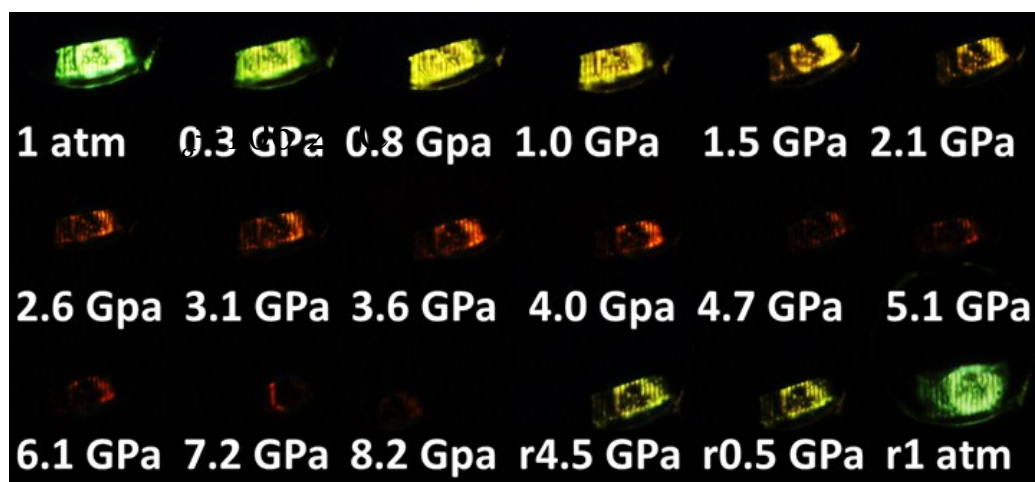


Fig. S6 Powder X-ray diffraction patterns of samples *o*N-TPA in the different states;



**Fig. S7** the DSC curves (heating and cooling) of *o*N-TPA ground powders under a nitrogen atmosphere with heating and cooling rate of  $10\text{ °C min}^{-1}$



**Fig. S8** fluorescence photographs of the Dye (*o*N-TPA, 5% wt/wt)-doped polymers (PMMA) film under different hydrostatic pressure (from compression to decompression).