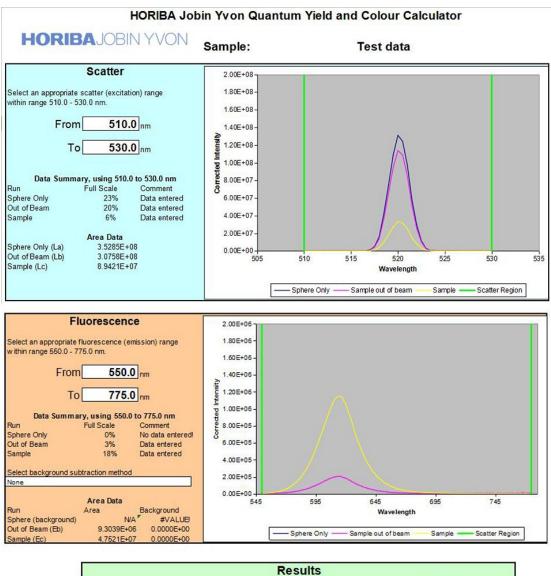
## Supplementary Material

## Bright "solvatochromism" carbon dots with tunable long-wavelength emission from

## green to red and their solid materials for warm WLEDs

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	Results				
			Colo	r	
Absorption	64.8%	x	0.6465	u'	0.4350
Quantum Yield	52.4%	У	0.3531	v'	0.5346

Fig.S1 The raw data of QY of P-CDs

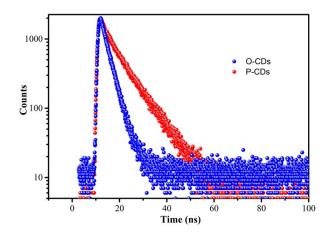


Fig.S2 The PL lifetime of the two samples

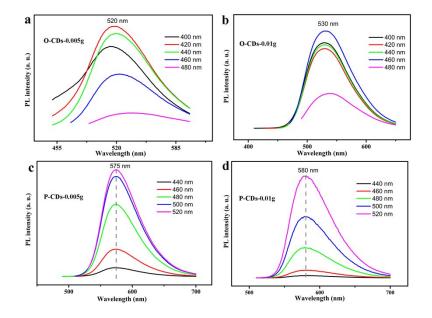


Fig.S3 The PL spectra of different concentration of o-phenylenediamine and p-phenylenediamine



Fig. S4 The picture of CDs under UV light. The left one is CDs derived from 0.1 g p-phenylenediamine,

while the right one is CDs come from 0.1 g o-phenylenediamine.

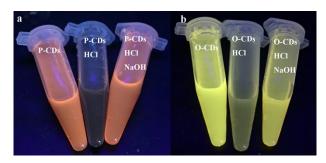


Fig.S5 (a) (b) Photograph of P-CD, P-CDs/HCl and P-CDs/HCl/NaOH, O-CDs. O-CDs/HCl, O-

CDs/HCl/NaOH respectively (from left to right).

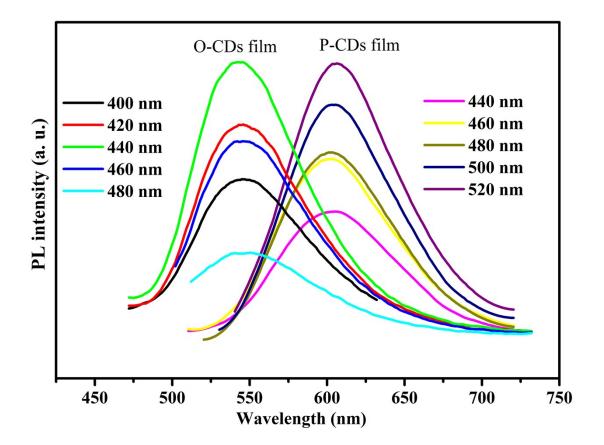


Fig.S6 The PL images of O-CDs film and P-CDs film

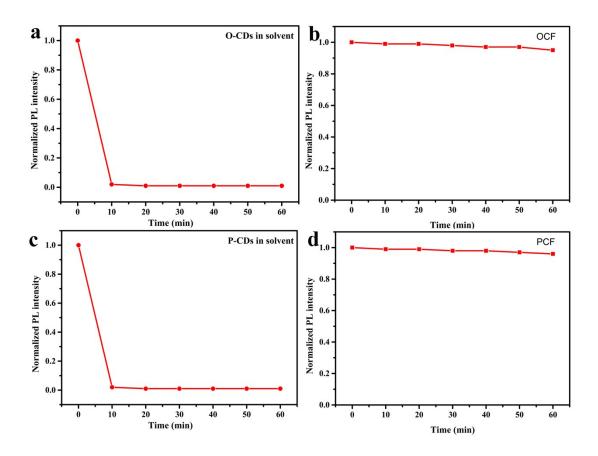


Fig.S7 Photostability data for P-CDs, O-CDs solution (DMF), and PCF, OCF in acid solution under

continuous irradiation with UV light for 1 hour.

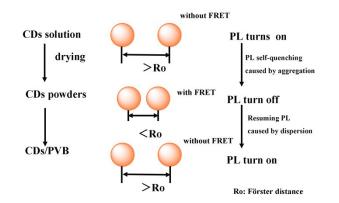


Fig. S8 Schematic of the self-quenching in solid-state CDs and the resistance against solid-state selfquenching of CD embedded into PVB.

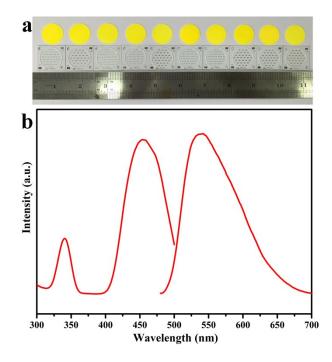


Fig.S9 (a) the photograph of Ce:PiG; (b) the PLE and PL spectra of Ce: PiG.

Table.S1 The QY of CDs dissolved in DMF and water.

Sample	DMF (QY)	Water (QY)
P-CDs	52.4%	34.7%
O-CDs	58.8%	55.3%