

Supporting Information

Red, Green, and Blue Light-Emitting Carbon Dots Prepared from *o*-phenylenediamine

Yulong An^a, Xu Lin^{a*}, Yuxi Zhou^a, Yan Li^a, Yunwu Zheng^b, Chunhua Wu^b, Kaimeng Xu^b,
Xijuan Chai^b, Can Liu^{a,b*}

^aKey Laboratory for Forest Resources Conservation and Utilization in the Southwest Mountains of China; Southwest Forestry University, Kunming, China

^bKey Laboratory of State Forestry Administration for Highly-Efficient Utilization of Forestry Biomass Resources in Southwest China; Southwest Forestry University, Kunming, China

E-mail: liucanswfu@163.com

Supporting Figures

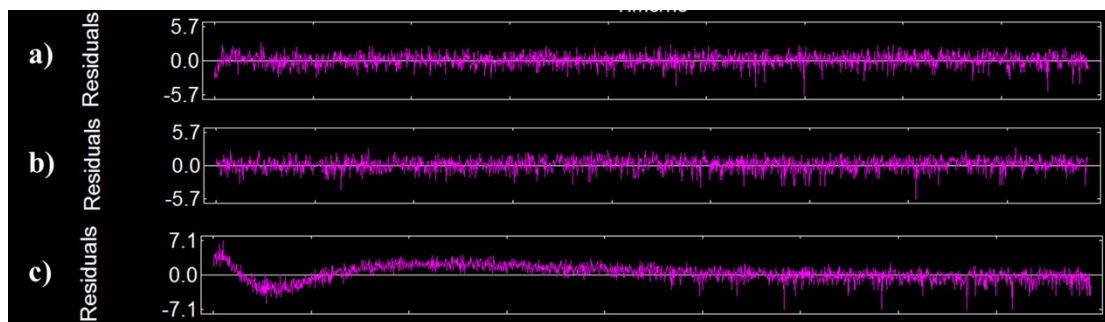


Fig. S1 a-c) Error bar in the photoluminescence lifetime decay of a) R-CDs, b) G-CDs, and c) B-CDs in ethanol ($c = 0.1 \text{ mg / mL}$; $\lambda_{\text{ex}} = 500 \text{ nm}$ for R-CD; $\lambda_{\text{ex}} = 400 \text{ nm}$ for G-CD; $\lambda_{\text{ex}} = 340 \text{ nm}$ for B-CD).

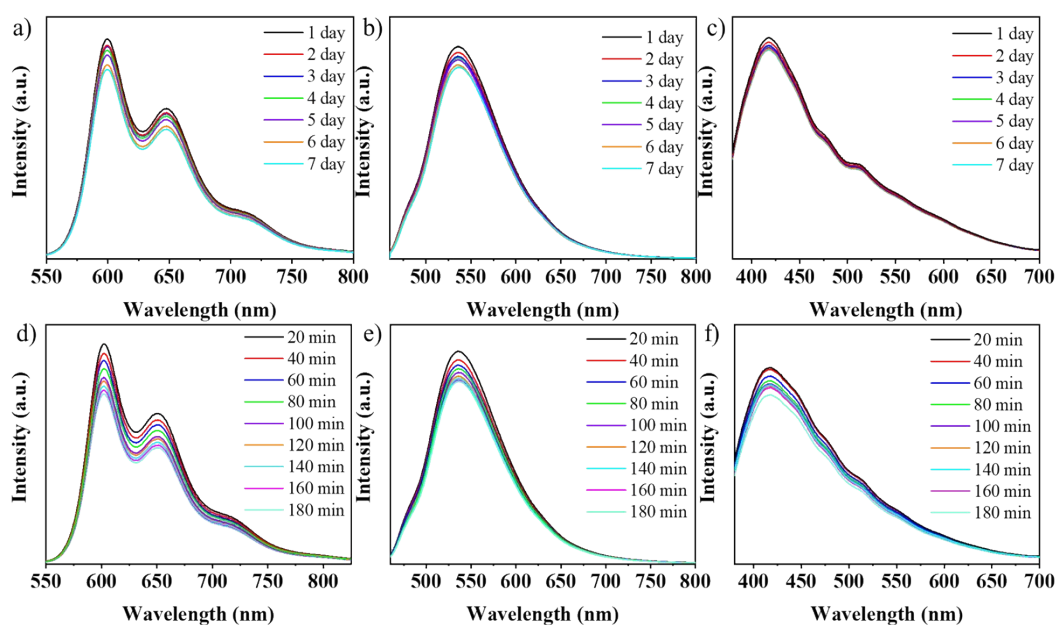


Fig. S2 a-c) The PL spectra of the a) R-CDs, b) G-CDs, c) B-CDs under visible light for 7 days; d-f). The PL spectra of the d) R-CDs, e) G-CDs, f) B-CDs under a UV lamp for 180 min.

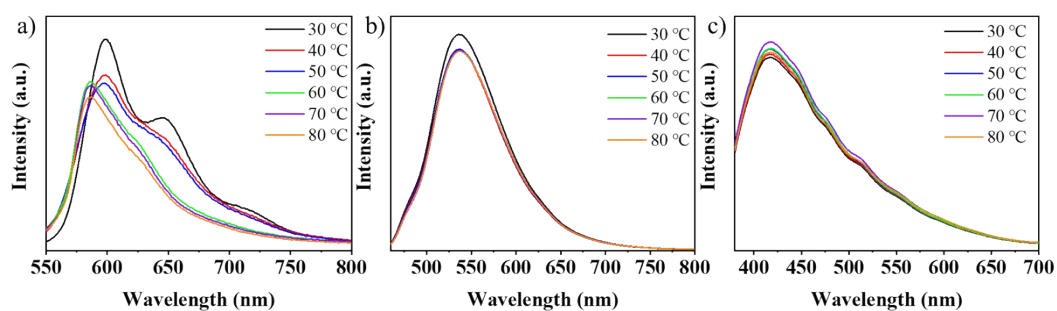


Fig. S3 The PL spectra of the a) R-CDs, b) G-CDs, c) B-CDs at different temperatures.

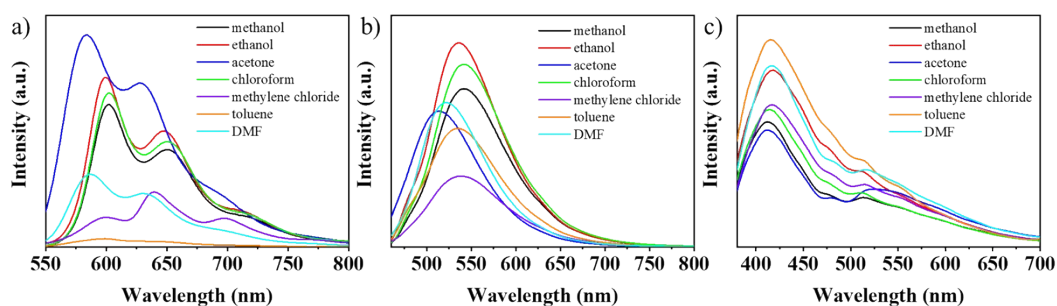


Fig. S4 The PL spectra of the a) R-CDs, b) G-CDs, c) B-CDs at different polar solvents.

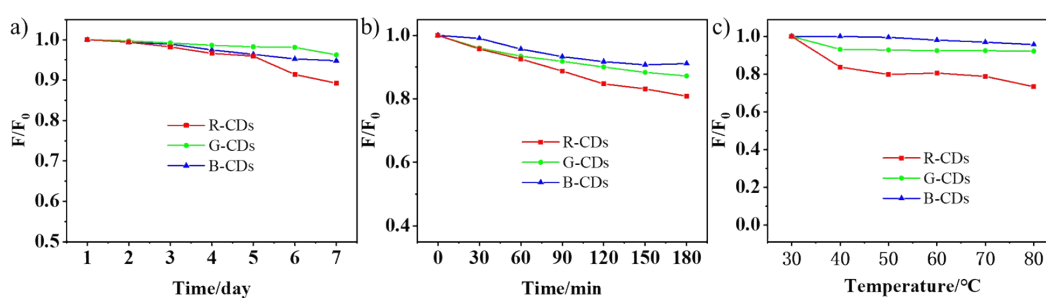


Fig. S5 a-b) Decay curve of FL intensity of R-CDs, G-CDs and B-CDs with increasing a) visible and b) UV irradiation time. c) Decay curve of FL intensity of R-CDs, G-CDs and B-CDs with increasing temperature (initial temperature 30 °C).

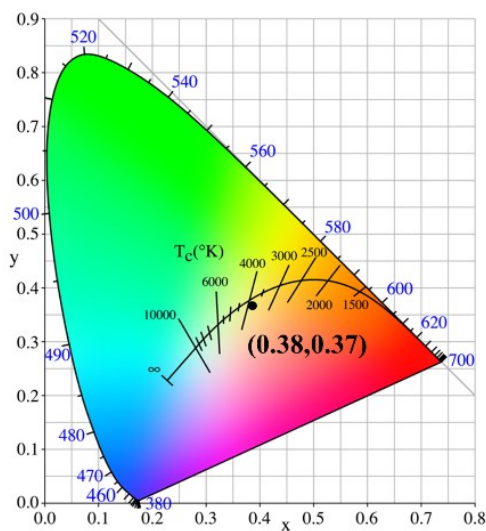


Fig. S6 CIE chromaticity coordinates of white fluorescent carbon dots excited at 365 nm.