Electronic Supplementary Material (ESI) for Journal of Materials Chemistry C

Supporting Information for

Practical access to bandgap-like N-doped carbon dots with dual emission unzipped from PAN@PMMA core-shell nanoparticles

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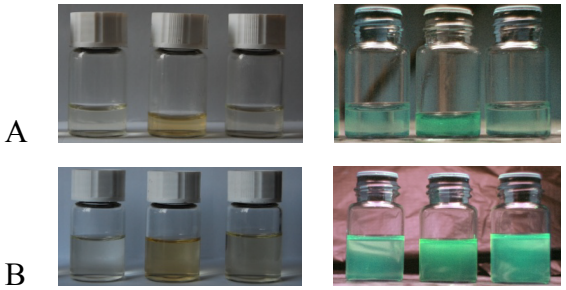

Figure S1 Optical images of C-dots under natural light (left) and UV (365nm) (right). (A) as-synthesized C-dots. (B) PEG modified C-dots. All the samples were arranged from left to right with increasing pyrolysis temperature, 350ºC, 400ºC and 450ºC, respectively.

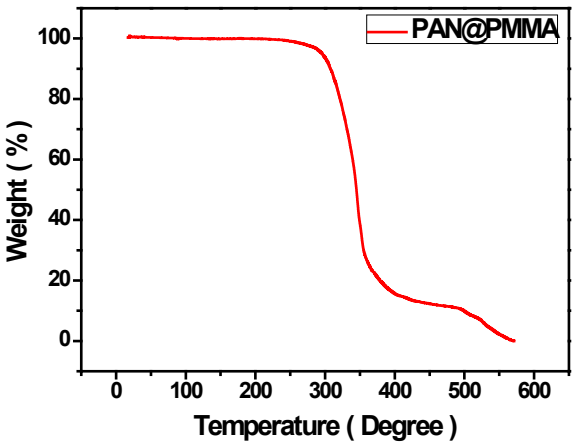

Figure S2 TGA of PAN@PMMA core-shell nanoparticles. (5°C /min in air)

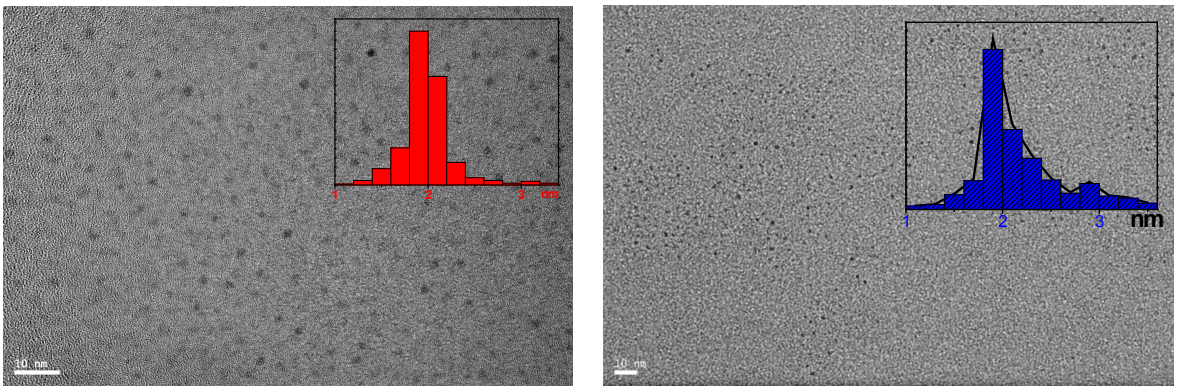

Figure S3 HRTEM images of CD-350 and CD-400 and their size distribution. Both of the scale bars are 10 nm.

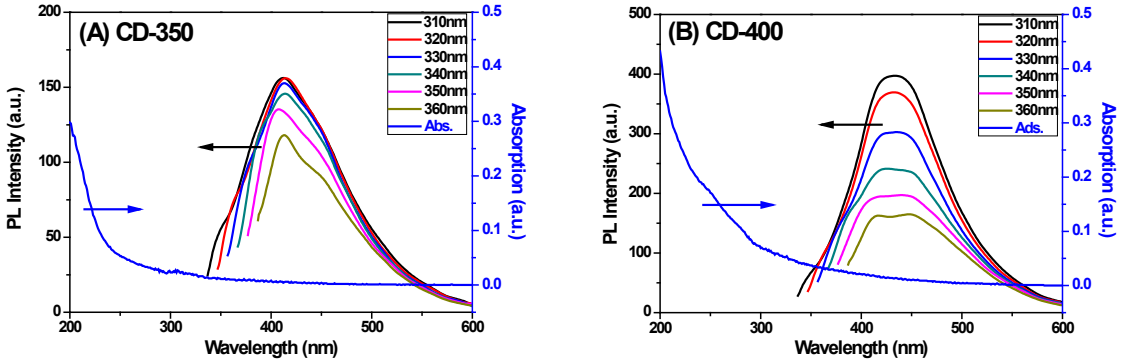

Figure S4 PL & UV-vis spectra of (A) CD-350 and (B) CD-400.

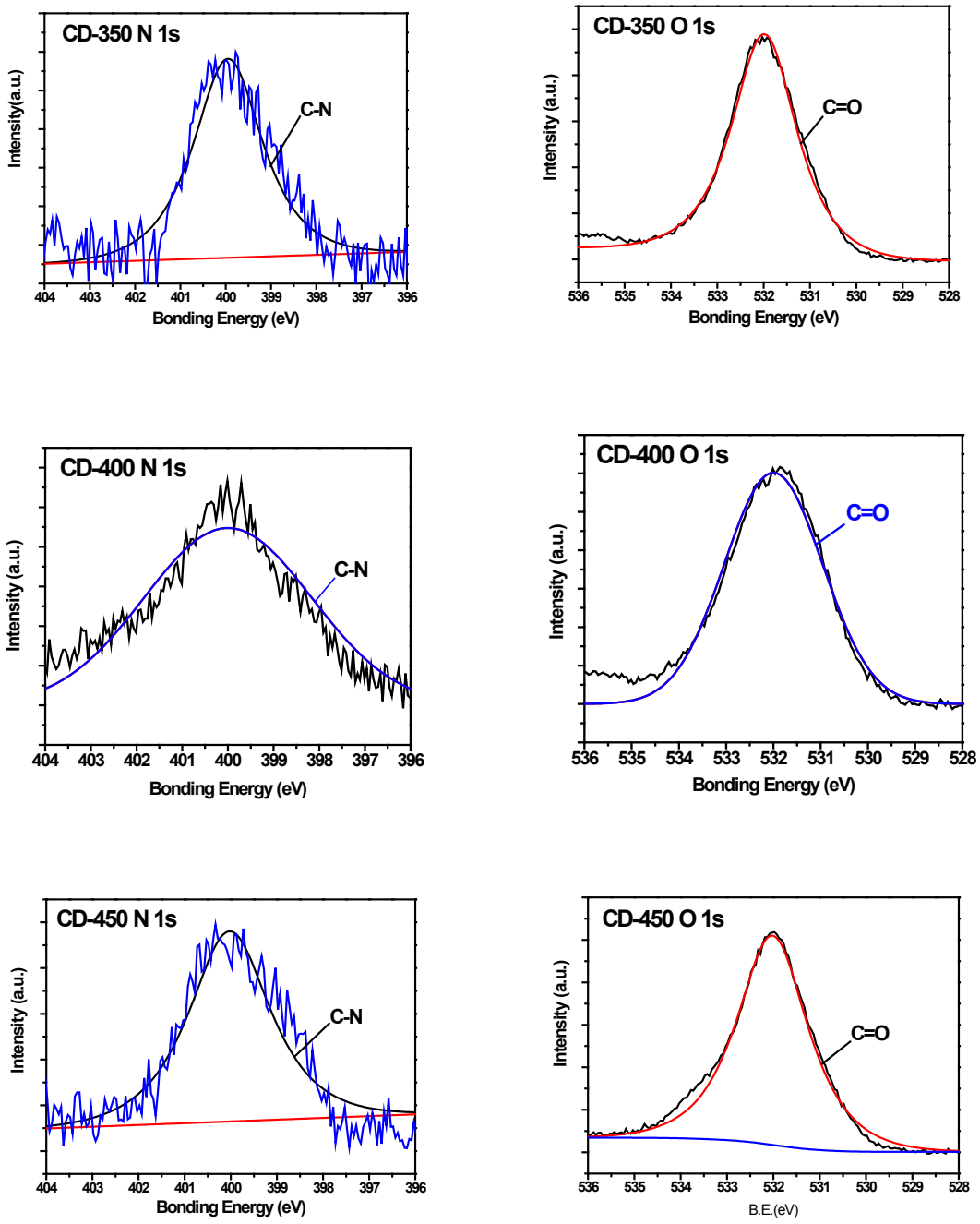

Figure S5 The N 1s and O 1s peaks in the XPS spectra CD-350, CD-400, and CD-450.

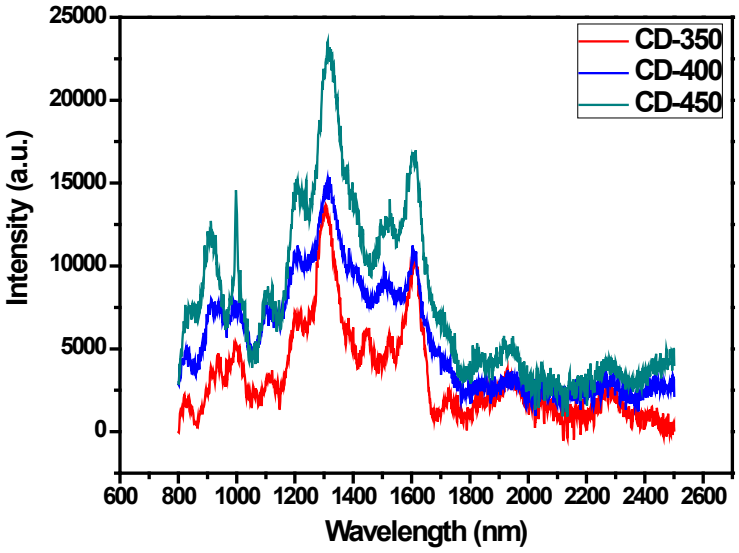

Figure S6 Raman spectra of CDs.

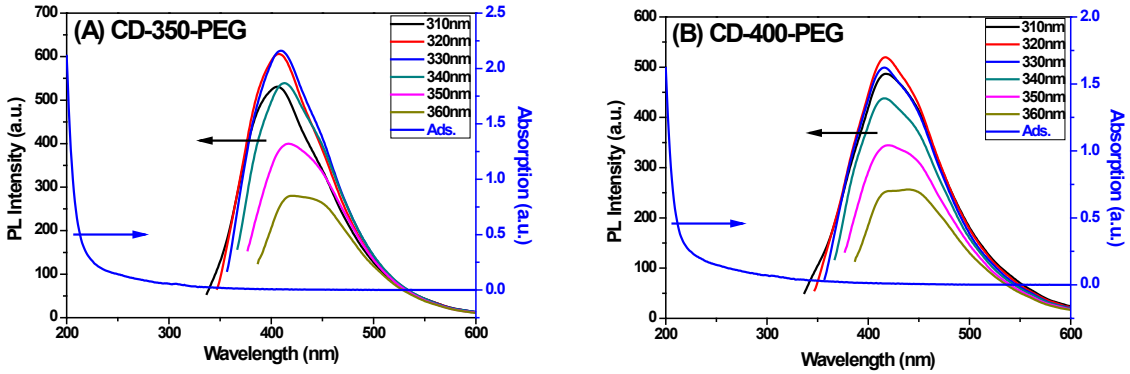

Figure S7 PL & UV-vis spectra of (A) CD-350-PEG, (B) CD-400-PEG.