Electronic Supplementary Material (ESI) for Journal of Materials Chemistry B.

Supporting information

A hydrothermal reaction of an aqueous solution of BSA yields highly fluorescent N doped C-dots used for imaging of live mammalian cells.

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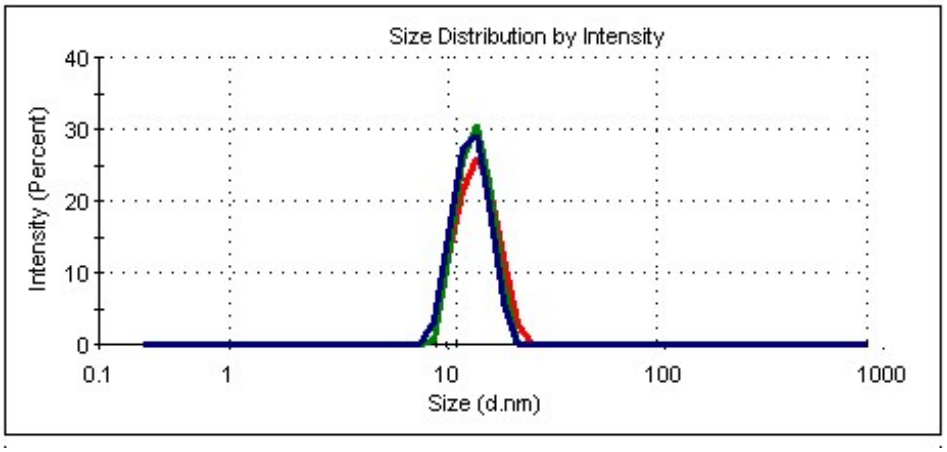

Figure S1: Plots of three consecutive measurements of DLS of N@C-dots sample after hydrothermal reaction.

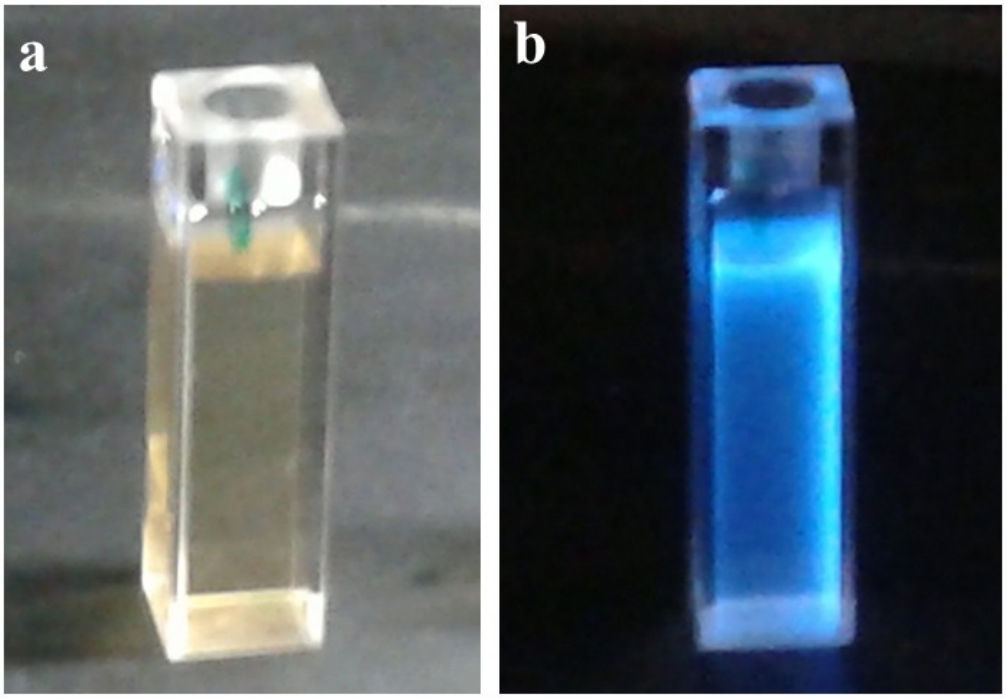

Figure S2: Photographs of a suspension of the C-dots illuminated by (A) UV light (365 nm) and (B) daylight.

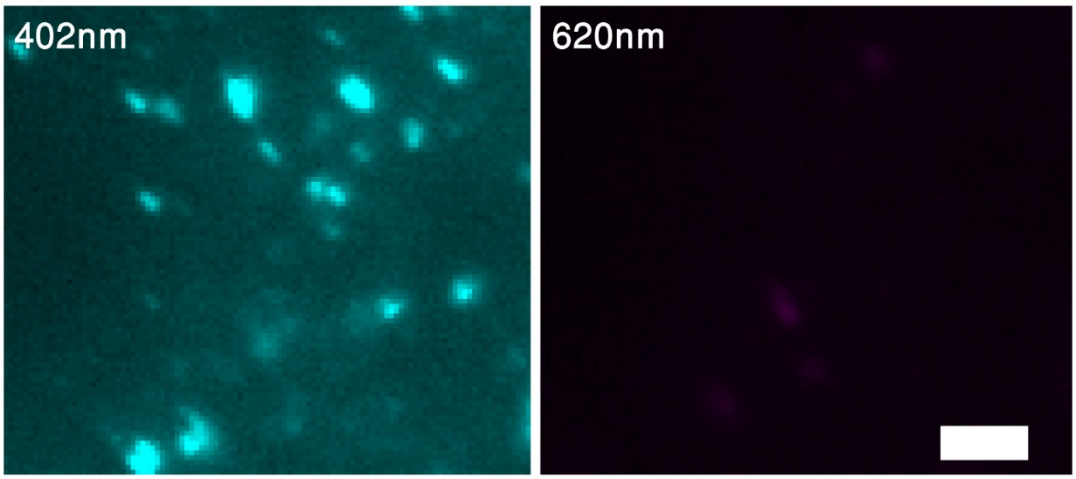

Figure: S3. Optical fluorescence images of C-dots on glass slide. Scale bar= 3 μm.

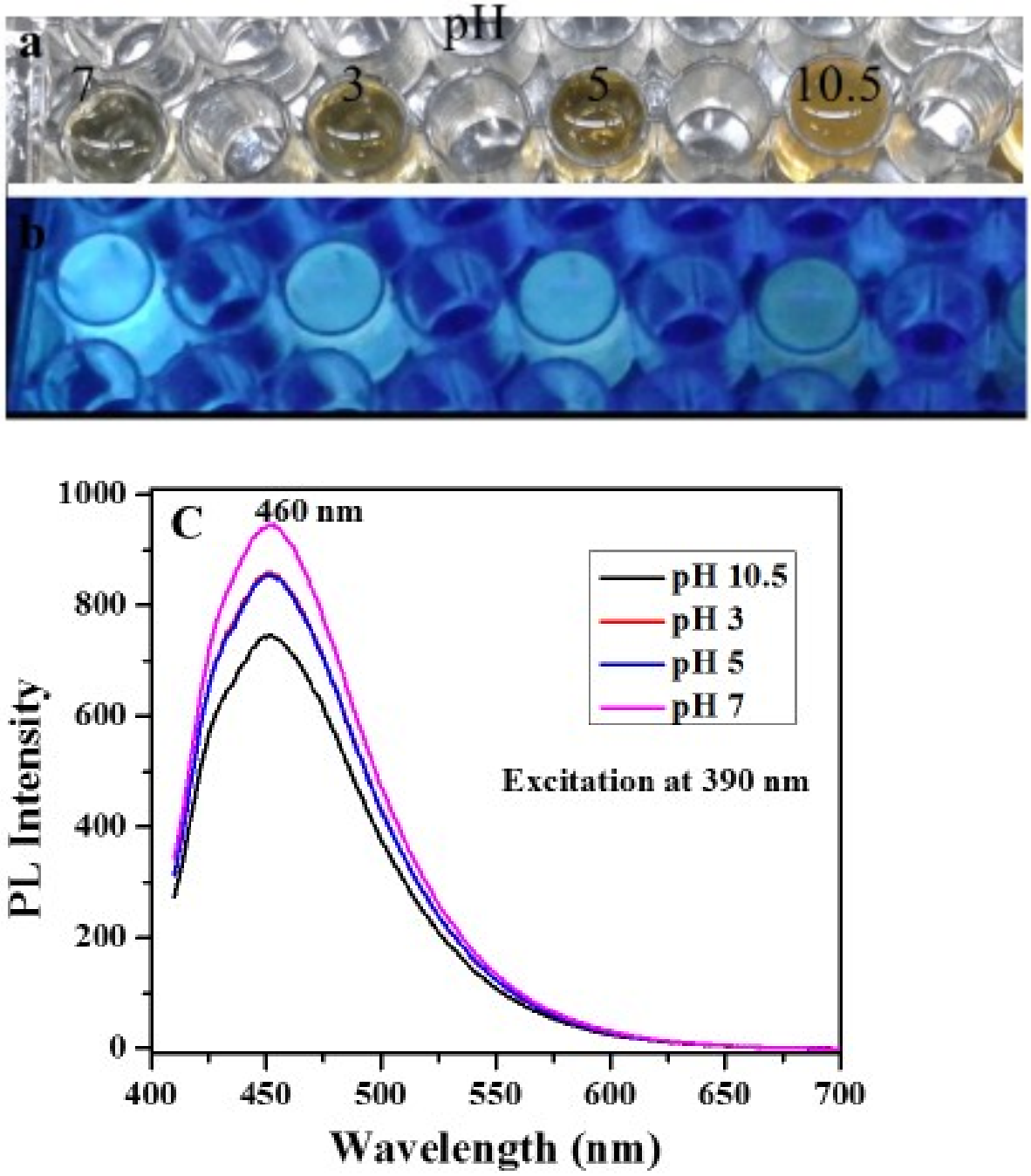

Figure: S4. Fluorescent images of N@C-dots at different pH: A) daylight, (B) UV light (365 nm), and (c) PL spectra.

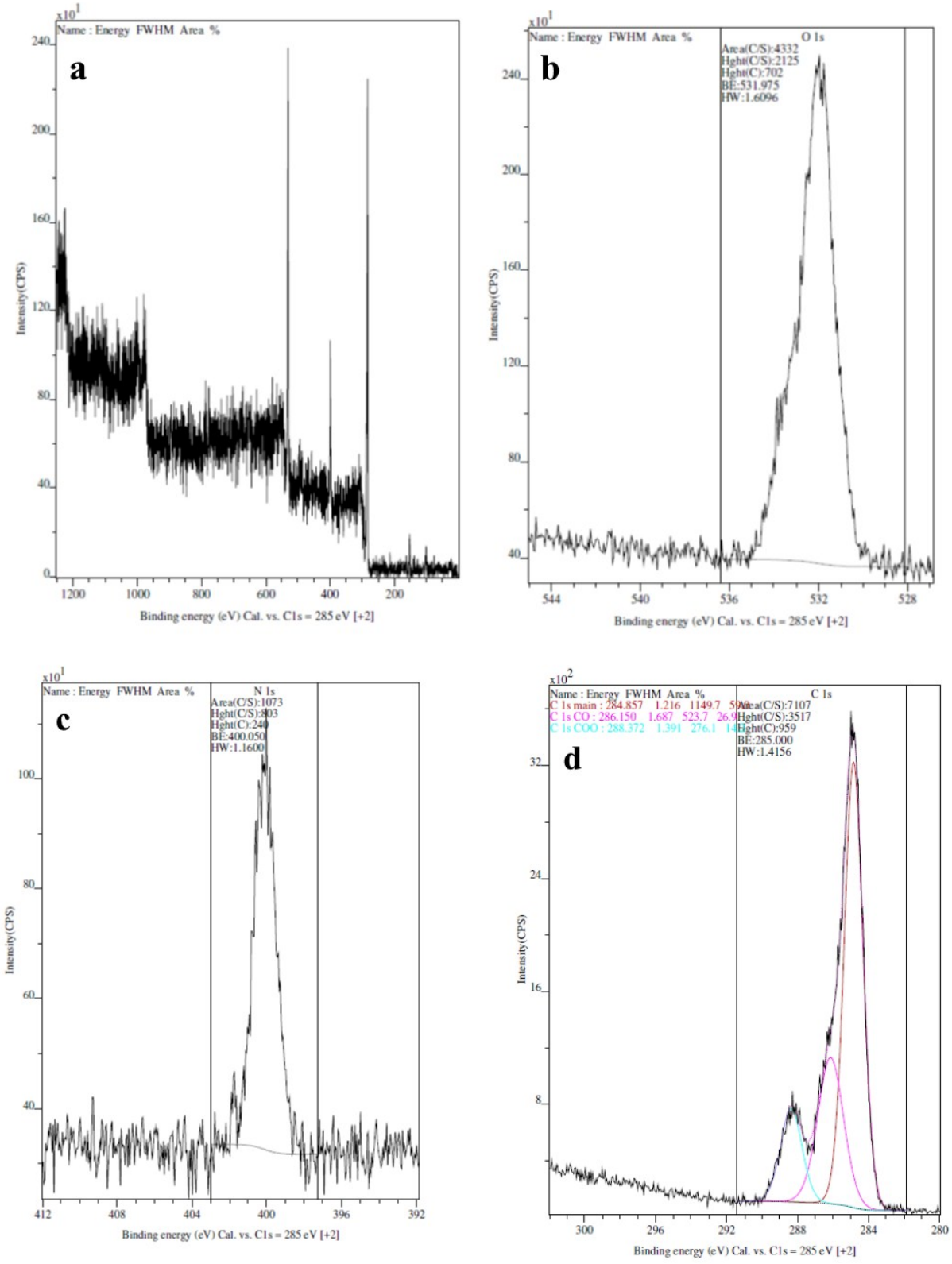

Figure: S5. XPS spectra of N@C-dots (a) full scan, (b) XPS of O, (c) N, and (d) C.

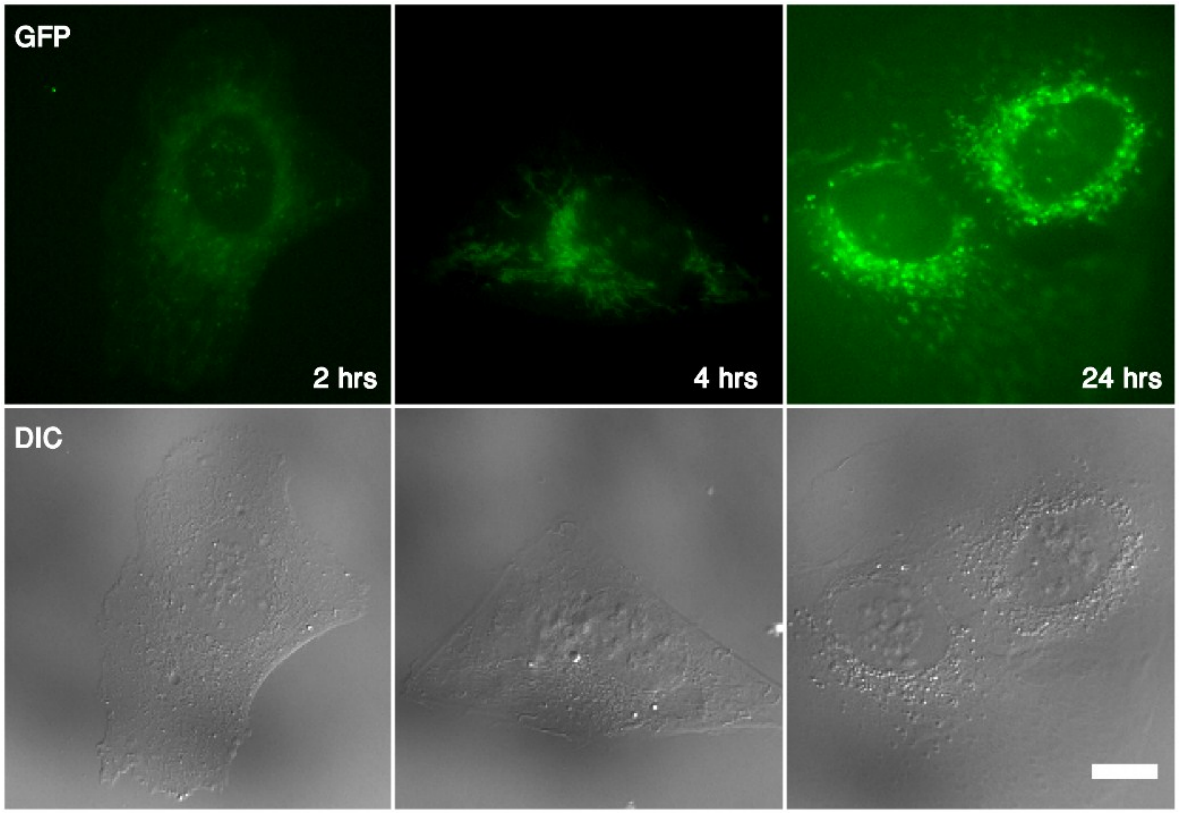

Figure: S6. Following BSA QD (N@C-dots) for a period of 24 hours in U2OS cells. All the GFP images were captured under identical conditions. The highest florescent signal is observed after 24 hours of treatment. Scale bar=15µm.

Table S1: Results of the elemental analysis by different spectroscopy techniques.

Method	Carbon (wt.%)	Oxygen (wt.%)	Nitrogen (wt.%)	Hydrogen (wt.%)
XPS	56.8	22	15.3	---
EDS	54	22	17	---
CHNSO chromatogram	50.5	24.5	15.63	7.1