

## Nitrogen doped carbon quantum dots demonstrate no toxicity under *in vitro* conditions in cervical cell line and *in vivo* in Swiss albino mouse

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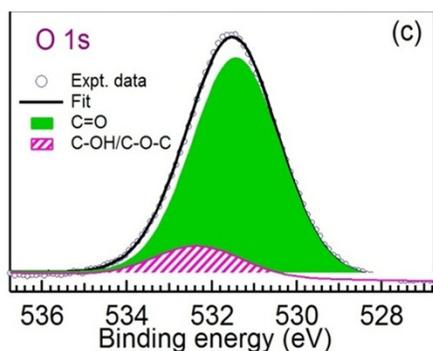
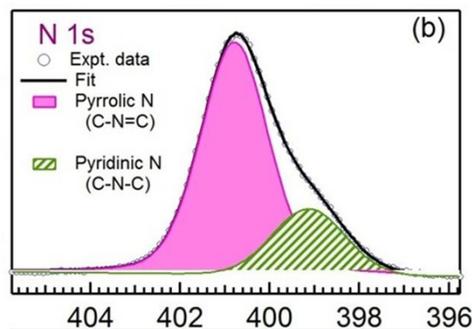
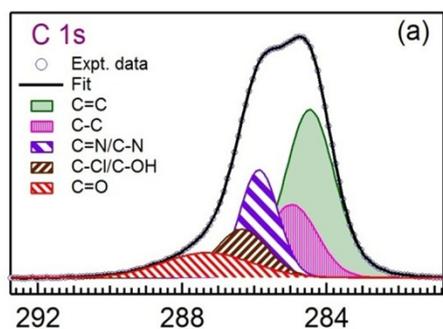
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#Equal contribution



### XPS core level spectra:

(a) C 1s

(b) N 1s

(c) O 1s

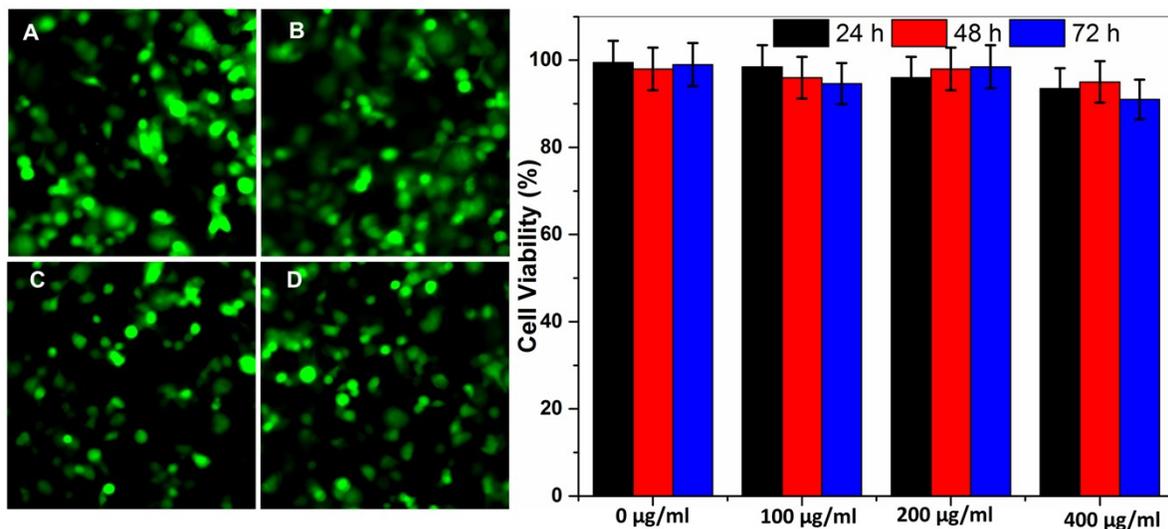
### Atomic percentage

C- 46.9

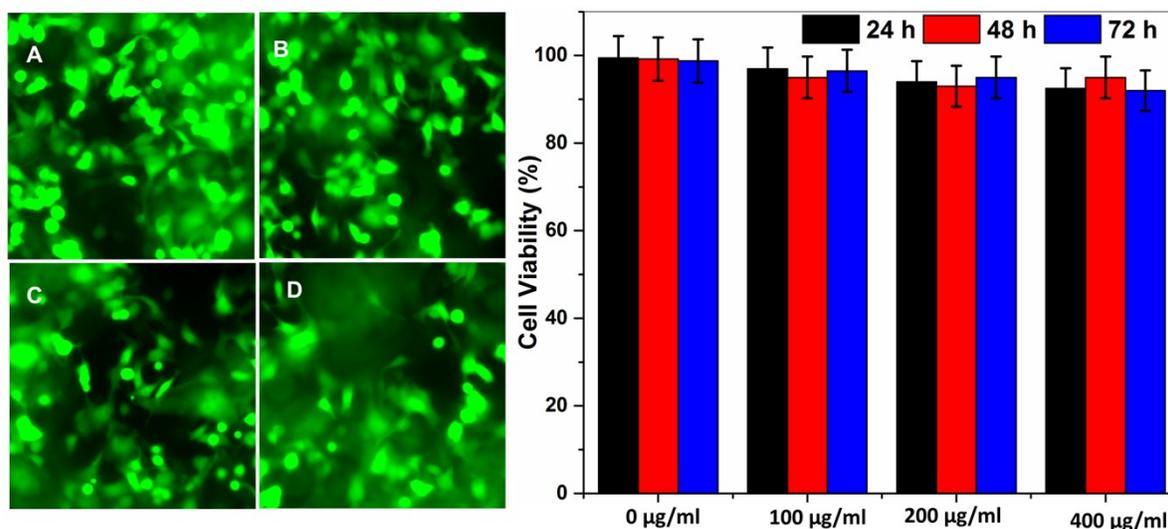
N-38.2

O-114.9

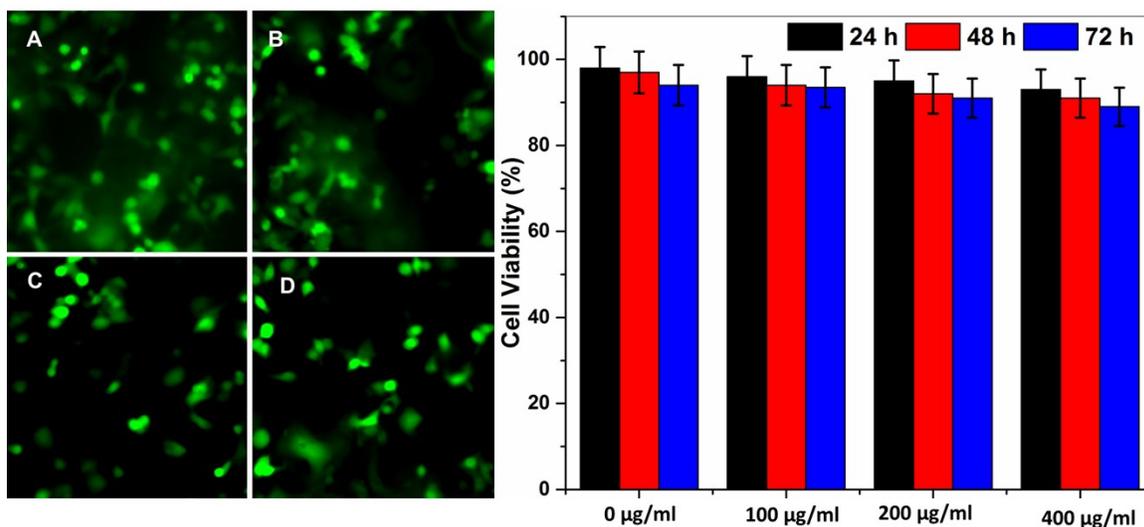
**Fig. S1.** XPS survey scan of the as-prepared NCQDs. (a) Survey, high resolution C1s (b), N1s (c), and O1s (Published in ISSS Journal of micro and smart systems, DOI: 10.1007/s41683-017-0011-1)<sup>1</sup>



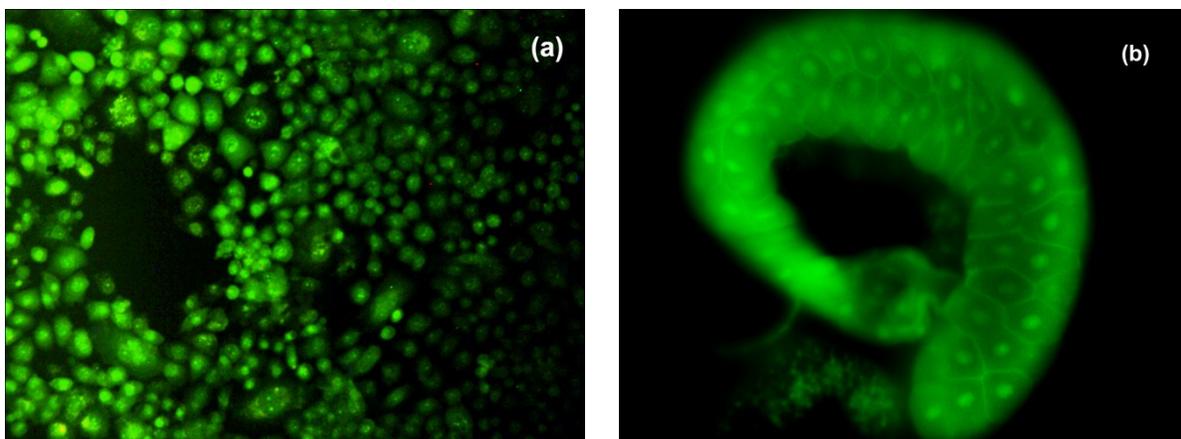
**Fig. S2.** Live/dead cell viability/cytotoxicity assay using AO/EtBr staining depicting the cytotoxic effects of NCQDs in Lungs alveolar A549 cell line. (A-D) Fluorescence microscope images of viable cells stained with AO (green) and nonviable cells stained with EtBr (red). Percentage of viable cells treated with 0,100, 200 and 400 µg/ml NCQDs respectively.



**Fig. S3.** Live/dead cell viability/cytotoxicity assay using AO/EtBr staining depicting the cytotoxic effects of NCQDs in Lungs alveolar A549 cell line. (A-D) Fluorescence microscope images of viable cells stained with AO (green) and nonviable cells stained with EtBr (red). Percentage of viable cells treated with 0,100, 200 and 400  $\mu\text{g/ml}$  NCQDs respectively.



**Fig. S4.** Live/dead cell viability/cytotoxicity assay using AO/EtBr staining depicting the cytotoxic effects of NCQDs in human embryonic kidney HEK 293 cancer cell line. (A-D) Fluorescence microscope images of viable cells stained with AO (green) and nonviable cells stained with EtBr (red). Percentage of viable cells treated with 0,100, 200 and 400  $\mu\text{g/ml}$  NCQDs respectively.



**Fig. S5.** Fluorescence microscope image of (a) MCF-7 cells and (b) salivary gland of drosophila larva after 30 minutes of incubation with NCQDs.

#### Reference

- 1 V. Singh, V. Kumar, U. Yadav, R. K. Srivastava, V. N. Singh, A. Banerjee, S. Chakraborty, A. K. Shukla, D. K. Misra, R. Ahuja, A. Srivastava and P. S. Saxena, *ISSS J. Micro Smart Syst.*, 2017, **6**, 109–117.