

**Supporting Information of  
Bacteria and fungus cells imaging using fluorescent carbon dots prepared from *Punica granatum*  
juice**

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***Experimental***

***Determination of the minimum inhibitory concentration (MIC):***

MICs can be determined on plates of solid growth medium, or broth dilution methods. Broth dilution is a technique in which containers holding in dental volumes of broth with antimicrobial solution in incrementally (usually geometrically) increasing concentration, are inoculated with a certain number of bacteria. MIC of the synthesized C-dots determined by conventional agar dilution method. Briefly, two milliliters of *B. subtilis* culture was placed in a water bath overnight at 37°C. The cultures were diluted with sterile Muller–Hinton broth. The compounds were resuspended in a 10-well micro-plate. A similar twofold serial dilution of ciprofloxacin (as control drug) was used as positive control against bacterium. 100 µL of bacterial culture was added to each well. The plates were covered and incubated overnight at 35-37°C.

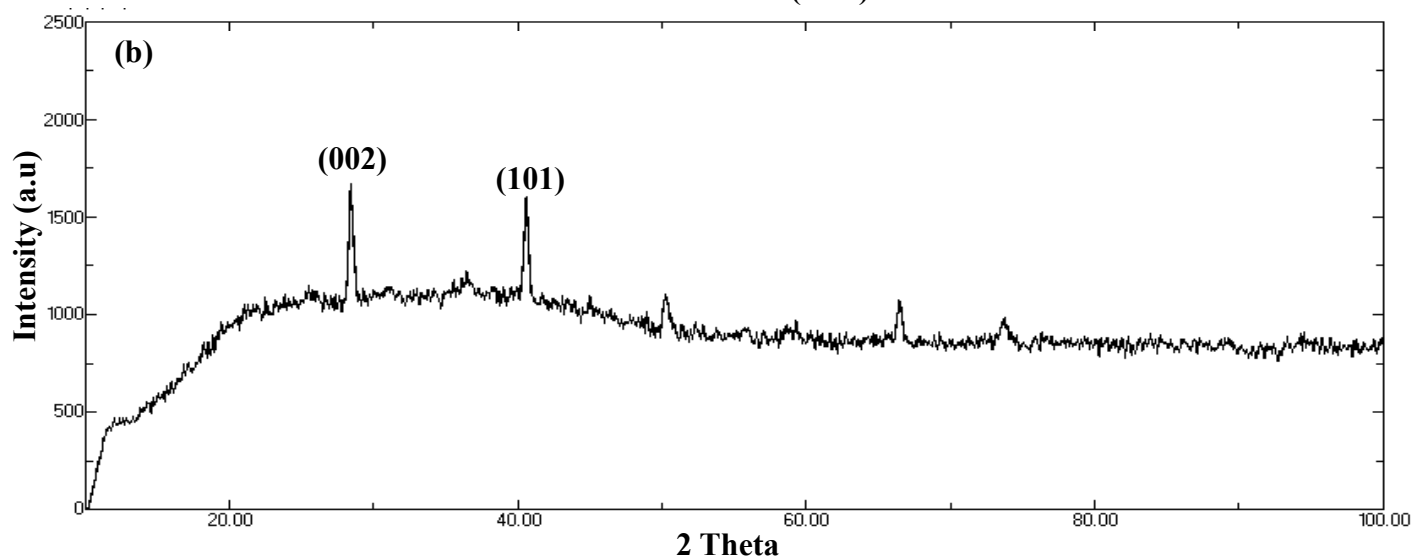
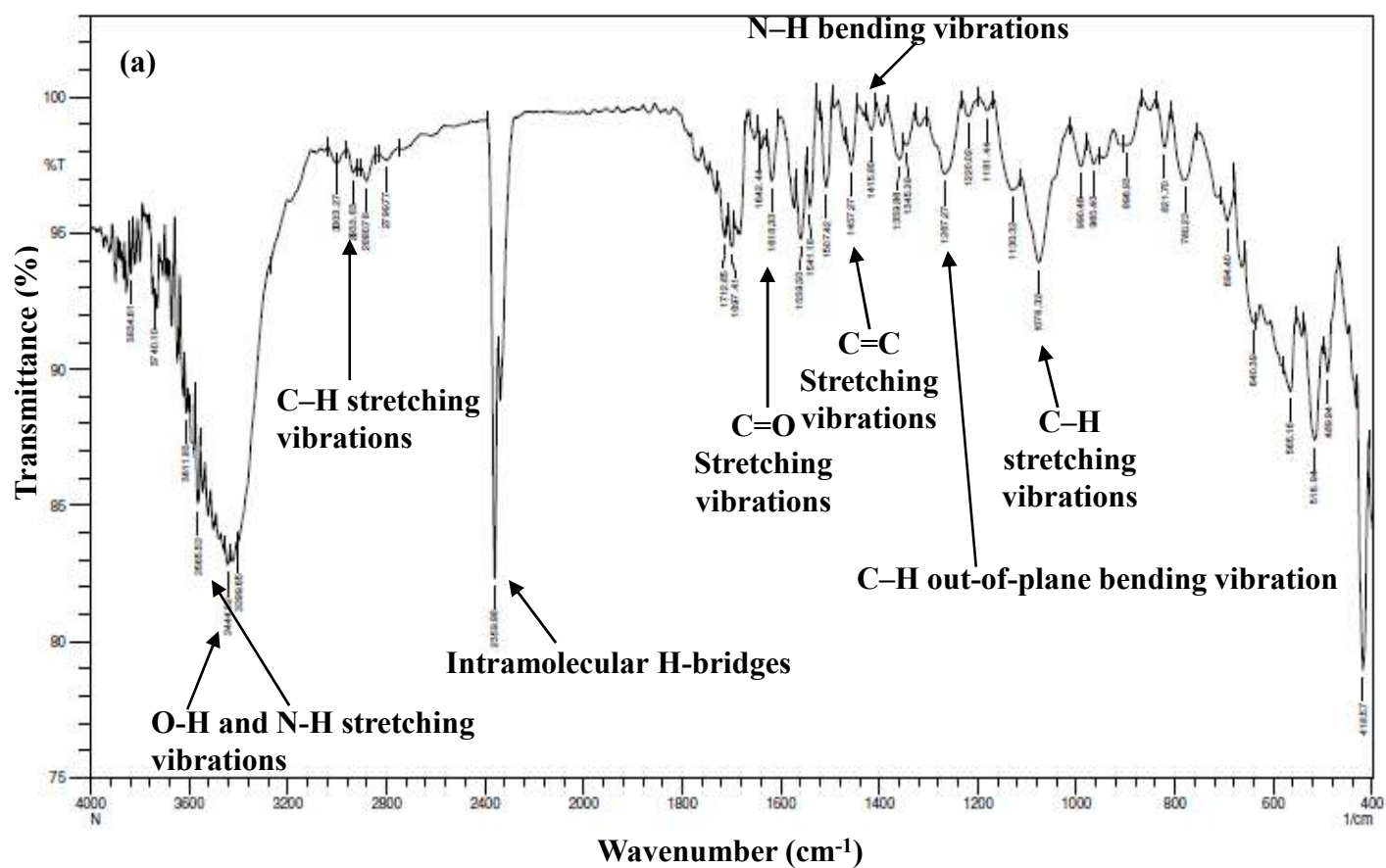
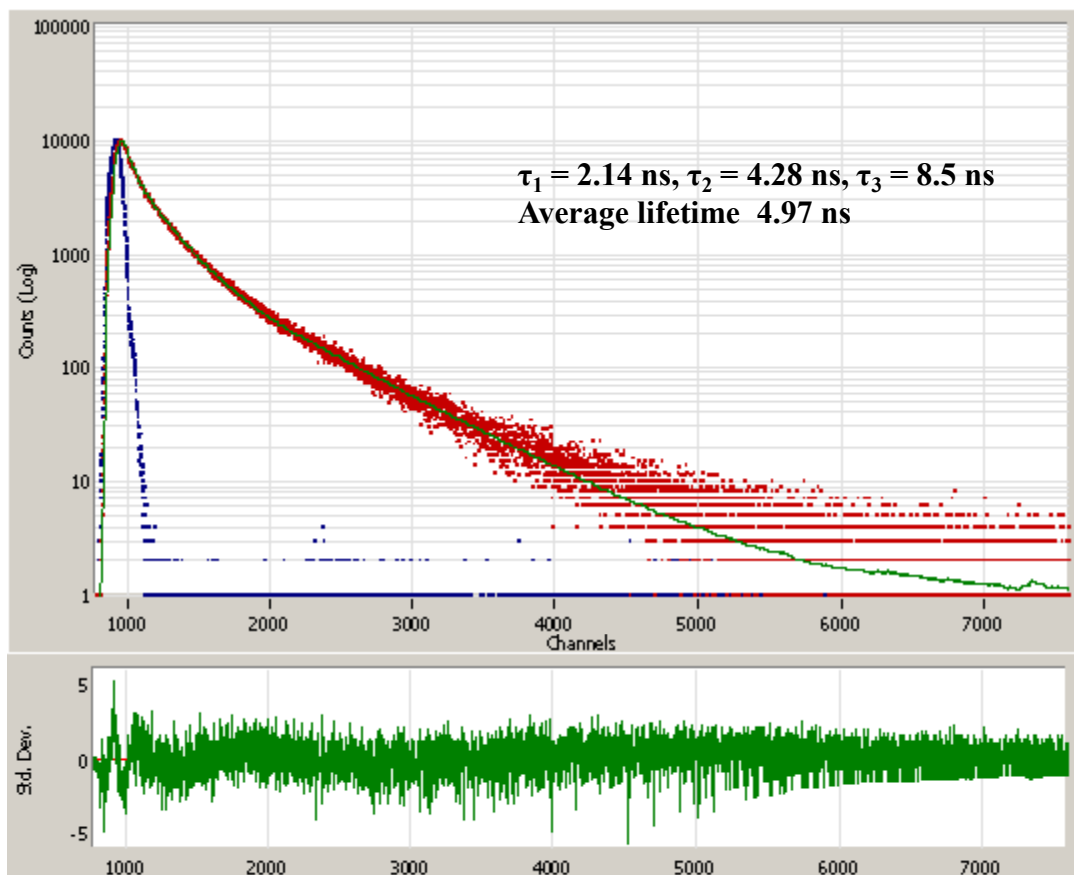


Figure S1. (a) FT-IR spectrum and (b) XRD pattern of synthesized C-dots.



**Figure S2.** The decay curves of C-dots in water collected at 453 nm when excited at 383 nm.



**Figure S3.** Photograph image of the inhibition zone of C-dots against *B. subtilis*