

1. Synthesis and characterization of Carbon quantum dots

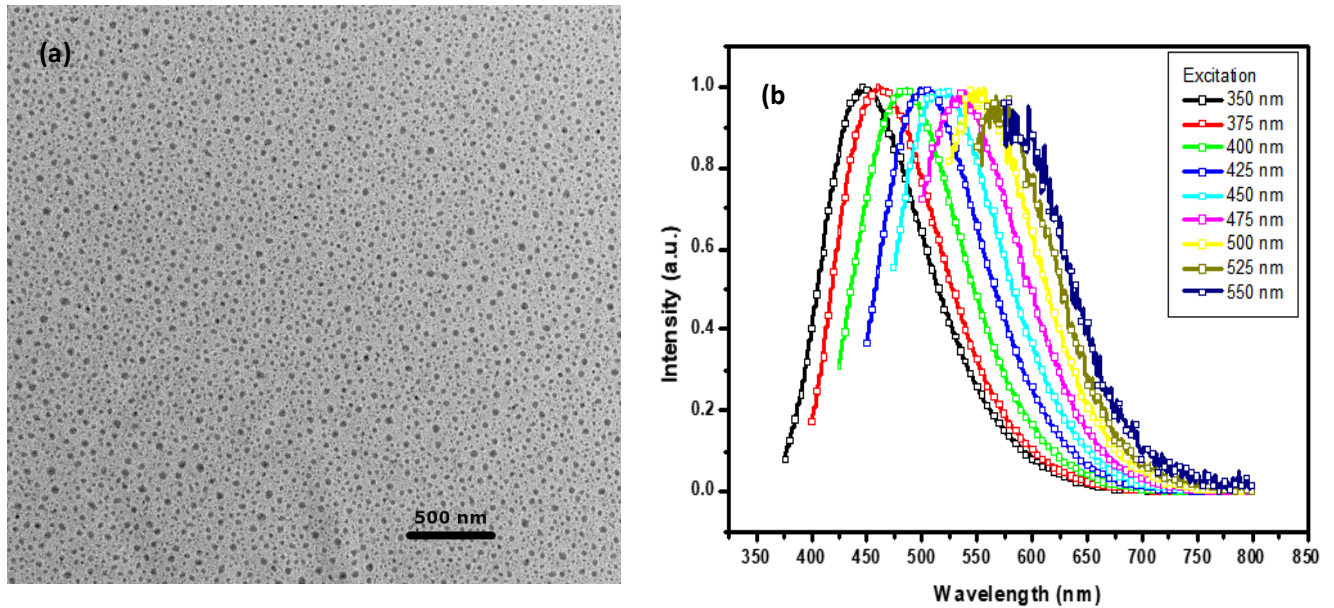


Figure 1. Characterization of Carbon quantum dots. (a) TEM micrograph of Carbon quantum dots. (b) photoluminescence of Carbon quantum dots with tunable emission.

2 Synthesis and characterization of Carbon quantum dots-based hybrid nanostructures

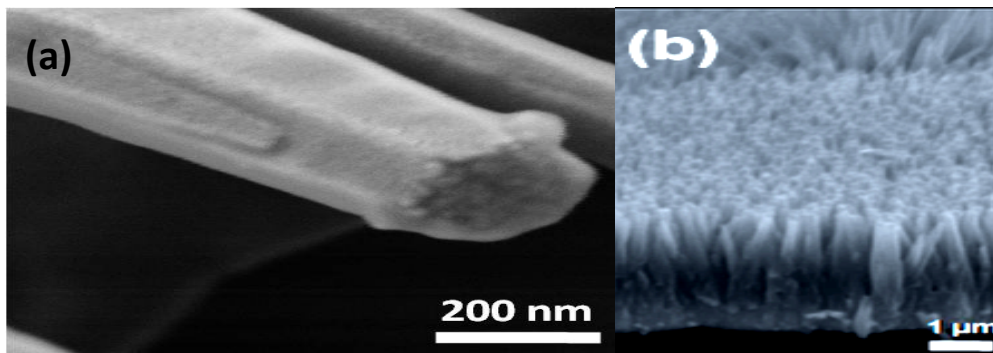


Figure 2. (a) SEM micrograph of semiconductor nanorod modified with carbon quantum dots. (b) Cross-sectional SEM micrograph of the hybrid system.