

## Electronic Supplementary Information (ESI)

### Nanoscale Assembly of Mesoporous ZnO: A Potential Drug Carrier

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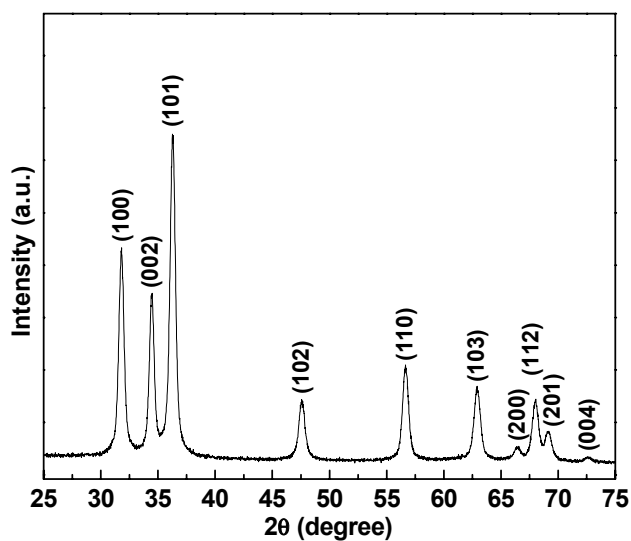


Fig. S1. XRD pattern of ZnO nanoassemblies.

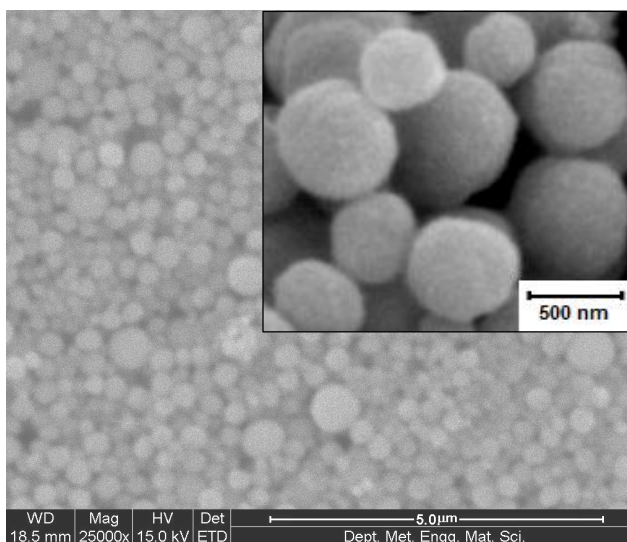


Fig. S2. Large scale SEM micrograph of ZnO nanoassemblies (inset clearly shows that nanoassemblies are comprised of numerous fine nanocrystals).

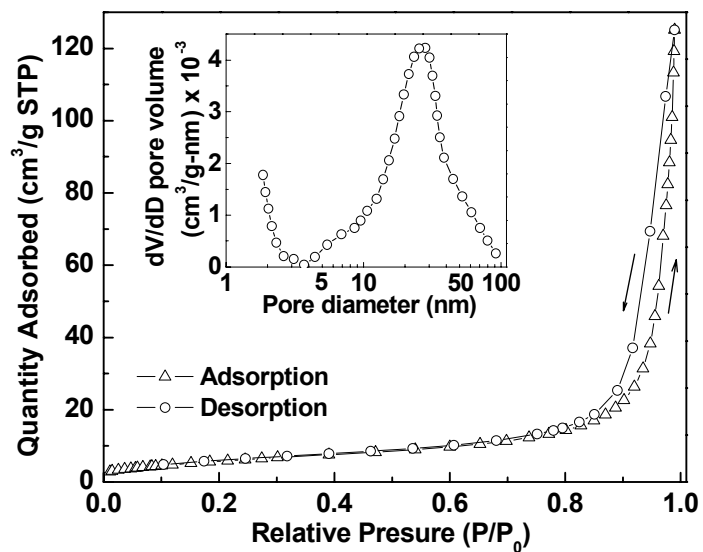


Fig. S3. N<sub>2</sub> adsorption-desorption isotherm of ZnO nanoassemblies (inset shows its BJH desorption dV/dD pore volume vs. pore diameter curve).

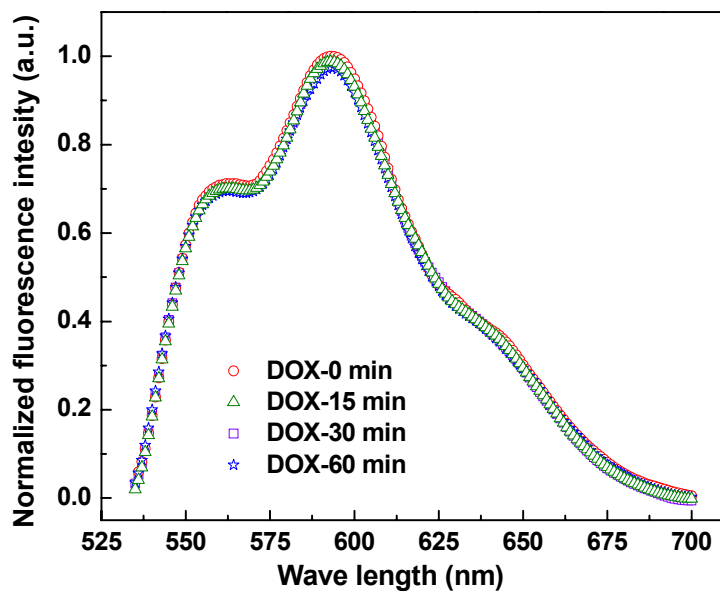


Fig. S4. Fluorescence spectra of pure DOX (10 µg/ml) at different interval of time (self-quenching of DOX is not observed during experiment, i.e. loading of DOX into ZnO nanoassemblies).



Fig. S5. Percentage viability of HeLa cells after 24 h incubation of ZnO nanoassemblies (control: viability of HeLa cells without ZnO nanoassemblies). The results are shown as mean  $\pm$  standard deviation ( $n = 4$ ).

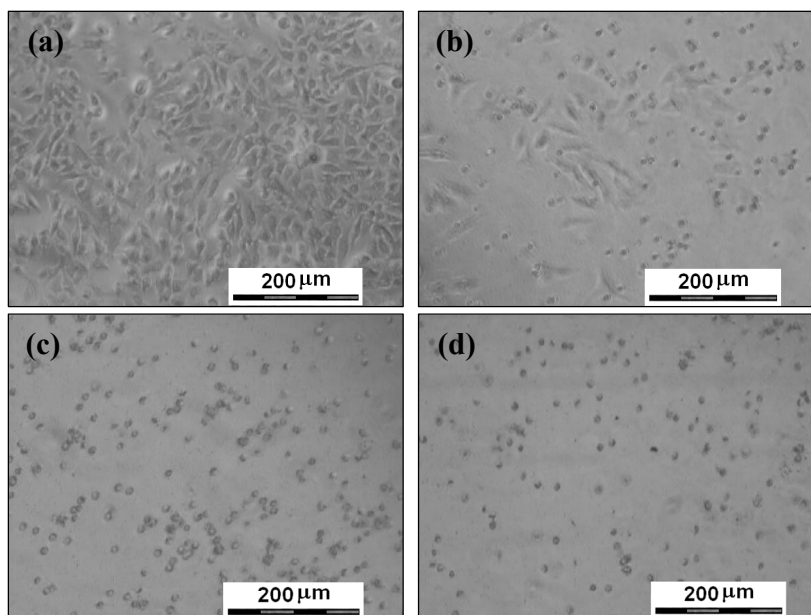


Fig. S6. Representative photographs of HeLa cells for (a) 0.0  $\mu\text{M}$  DOX (control), (b) 0.125  $\mu\text{M}$  of DOX, (c) 1.0  $\mu\text{M}$  of DOX and (d) 2.0  $\mu\text{M}$  of DOX in DOX loaded ZnO.

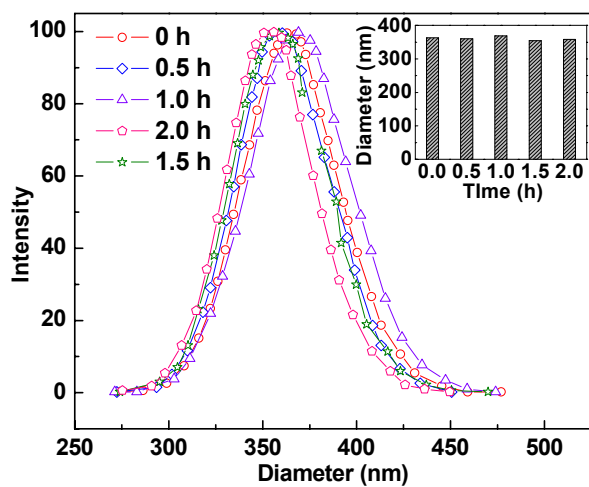


Fig. S7. DLS measurements showing the hydrodynamic diameter of ZnO colloids. Inset shows the corresponding column plot.