**Supplementary Materials**

**Photocatalytic degradation, anticancer, and antibacterial studies of *Lysinibacillus sphaericus* biosynthesized semiconductor and hybrid metal/semiconductor nanoparticles**

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**Supplementary Figure 1**. (a, b) Dynamic light scattering (DLS) and (c, d) zeta (ζ) potentials of biosynthesized ZnO and Ag/ZnO NPs.

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**Supplementary Figure 2.** FE-SEM-EDX analysis of ZnO. (a) FE-SEM micrograph and elemental maps of (b) Zn-L (c) O-K and (d) EDX spectrum.