



Fig. 5. Bacterial growth kinetics. *S. aureus* (a) and *E. coli* (b), were exposed to 3 different concentrations of $\text{Zn}_{0.99}(\text{Ce}_{0.01-x}\text{M}_x)\text{O}$ (Nd, Sm, Er and $x = 0, 0.005$) nanoparticles. Gompertz model was adjusted to each curve.