

Supplementary Information

Lipid-coated zinc oxide nanoparticles as innovative ROS-generators for photodynamic therapy in cancer cells

Andrea Ancona¹, Nadia Garino^{1,3}, Bianca Dumontel¹, Benjamin Demarco², Dimitra Chatzitheodoridou², Walter Fazzini¹, Hanna Engelke² and Valentina Cauda^{1,3,*}

¹ Department of Applied Science and Technology, Politecnico di Torino, Corso Duca degli Abruzzi 24, 10129 Turin, Italy;

² Department of Chemistry, Ludwig-Maximilians-University of Munich, Butenandtstrasse 11E, 81377 Munich, Germany;

³ Center for Sustainable Future Technologies - CSFT@POLITO, Istituto Italiano di Tecnologia, Corso Trento 21, 10129 Turin, Italy;

* Correspondence: valentina.cauda@polito.it; Tel.: +39-011-090-7389

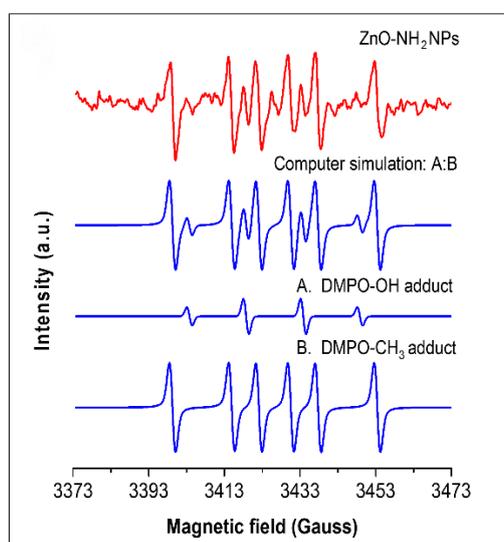


Figure S1. ROS formation in aqueous suspensions of amine-functionalized ZnO nanoparticles (500 $\mu\text{g/ml}$) irradiated with UV light). Computer simulation reveals that DMPO-OH and DMPO-CH₃ spin adducts are detected (blue curves).

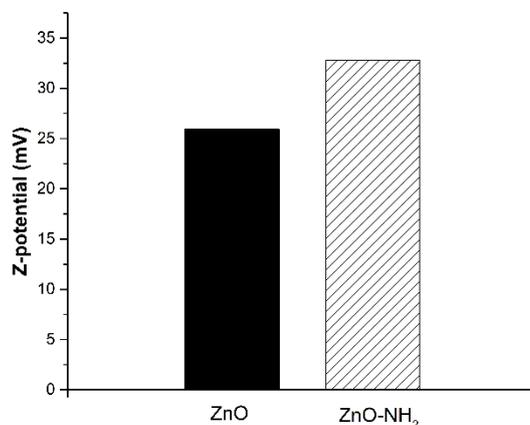


Figure S2. Z-potential measurement of pristine ZnO NPs and amine-functionalized NPs.