

+Supplementary Materials



## Influence of Preparation Procedure on Physicochemical and Antibacterial Properties of Titanate Nanotubes Modified with Silver

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**Figure S1.** HRTEM image of (a) Ag/TNT-100\_IN, (b) Ag/TNT-100\_EL(0.1) and (c)-(f) Ag/TNT-100\_NB (The circled regions in (e) and (f) represent the Ag NPs anchored to the inner surface of the TNTs. Moreover, in Figure S1(e) the Ag NP blocking the entrance to the TNT can be observed).



**Figure S2.** EDS elemental mapping of (a) Ag/TNT-2.5\_AM, (b) Ag/TNT-5\_SH, (c) Ag/TNT-2.5\_EL(1). Scanning transmission electron microscopy (STEM) images with red squares present the scanned area.



**Figure 3.** HRTEM image of Ag/TNT-100\_EL(1).



Figure 4. The dependence between Ag content measured by XPS and ICP methods.



**Figure 5.** XPS spectra of (i) Ag/TNT-5\_SH, (ii) Ag/TNT-100\_AM, (iii) Ag/TNT-100\_IN, (iv) Ag/TNT-100\_NB, (v) Ag/TNT-100\_EL(0.1) and (vi) Ag/TNT-100\_EL(1).



Figure 6. Antibacterial properties of Ag/TNTs with reference to Ag release from the hybrid nanomaterial.