

# Novel Titanium Nanospike Structure Using Low-Energy Helium Ion Bombardment for the Transgingival Part of a Dental Implant

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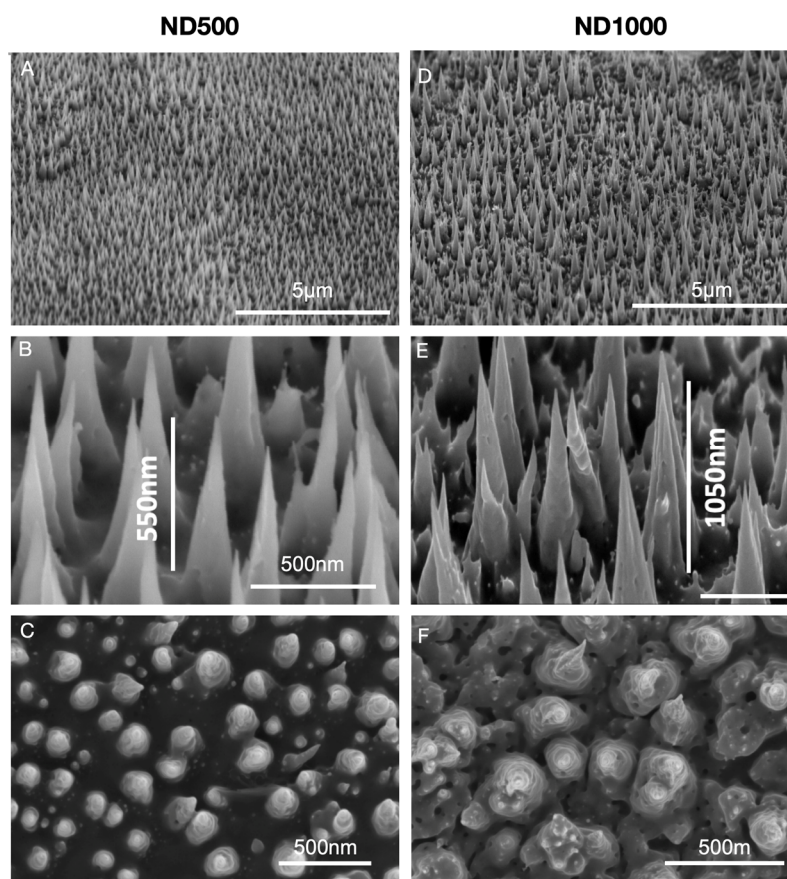
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**Figure S1.** Heated titanium samples were exposed to helium (He) plasma using an unbalanced magnetron sputtering source by controlling the temperature (350 °C), the negative voltage on the sample (−120 V) and the time of exposure, the surface developed a nanostructured pattern (data in

submission process). Top view images for 24h exposure (**A–C**) and for 48 h exposure (**D–F**). Images A, B, D and E are views at 52° tilt angle. The height of the spikes was directly proportional to the exposure time, though the base size (~200nm) was not influenced. As seen in Figure 1 (A and B and more precisely in images C and F), spikes density was not modified for both heights and is influenced by the exposure time. Roughly, twice the number of spikes is visible for the 500 nm height in comparison to 1000 nm spikes.