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ACCEPTED MANUSCRIPT

HYBRID BIOCOMPOSITE WITH A TUNABLE ANTIBACTERIAL ACTIVITY AND BIOACTIVITY BASED ON RF MAGNETRON SPUTTER DEPOSITED COATING AND SILVER NANOPARTICLES

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Abstract

In this work, we describe fabrication techniques used to prepare a multifunctional biocomposite based on a hydroxyapatite (HA) coating and silver nanoparticles (AgNPs). AgNPs synthesized by a wet chemical reduction method were deposited on Ti substrates using a dripping/drying method followed by deposition of calcium phosphate (CaP) coating via radio-frequency (RF) magnetron sputter-deposition. The negatively charged silver

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