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Albumin-mediated deposition of bone-like apatite onto nano-sized surfaces: effect of surface reactivity and interfacial hydration

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Abstract

The bioactivity of an implant is displayed on its ability to induce heterogeneous nucleation of biogenic apatite onto its surface upon immersion in body fluids; forming, through this layer, a stable bond with the host tissue. The present article evaluates the bioactivity of different nanostructured substrates based on synthetic hydroxyapatite (HA) and titania (TiO₂) nanoparticles, where we extend the debate regarding the selective roles played by

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