PAPER ID:66

DEVELOPMENT OF HYDROXYAPATITE (HA) BASED COMPOSITE COATING ON TITANIUM AND ITS ALLOY BY ELECTROPHORETIC DEPOSITION: AN OVERVIEW

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ABSTRACT

Hydroxyapatite (HA)coating has been widely applied on Ti and its alloy due to its good corrosion resistance, biocompatibility and osteo-inductivity. However, its poor mechanical properties andpoor adhesion strength limits its use. To achieve high adhesion strength and mechanical strength, HA-bio-inert ceramics composite coating has been applied on Ti and its alloy. Electrophoretic deposition (EPD) is an efficient and cost effective techniques to develop ceramic coating from powder suspensions and it is an easier process. This review explores recent development of HA based composite coating on Ti and its alloy by EPDmethod.

Keywords: HA, Electrophoretic deposition, Ti alloy, Bioactivity, adhesion strength

 ISBN: 978-81-947843-2-6; DOI: 10.21467/abstracts.108