



Optica Applicata 2009(Vol.39), No.4, pp. 915-921

## Impedance spectroscopy of suspension plasma sprayed hydroxyapatite coatings

*Tomasz Piasecki, Karol Nitsch, Lech Pawlowski, Roman Jaworski*

SEARCH

[Advanced search](#)

Keywords

impedance spectroscopy, hydroxyapatite, suspension, plasma spraying, porosity

Abstract

Impedance spectroscopy was used to investigate the properties of hydroxyapatite (HA) coatings and their dependence on fabrication parameters. The HA layers were deposited on the titanium substrates using suspension plasma spraying. The analysis of the results was performed using equivalent circuit modelling. The HA layers contained crystalline and amorphous phases. The amount of amorphous phase raised with an increase of plasma torch power. The porosity of coatings was investigated by observation of water evaporation process. The conclusion was that samples fabricated with lower torch power had smaller and more complex pores structure.



2.1 MB

[Back to list](#)

© Copyright 2007 T.Przerwa-Tetmajer All Rights Reserved 2007

**stat4u**

About Optica Applicata

Current issue

Browse archives

Search

Editorial Board

Instructions for Authors

Ordering

Contact us

