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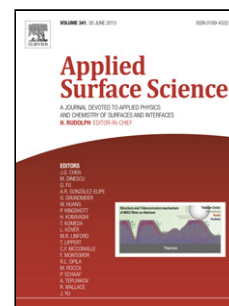
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# Mg-containing Hydroxyapatite Coatings on Ti-6Al-4V Alloy for Dental Materials

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## Highlights

- In this study, Mg-containing hydroxyapatite coatings on Ti-6Al-4V alloy for dental materials was investigated.
- The porous irregular surface, and pore size and number of pore decreased as Mg concentration increased.
- The number of particles was increased from the internal surface of pores, as Mg content increased.
- [Mg+Ca]/P molar ratio in PEO films decreased with Mg content and crystallite size of anatase increased with Mg concentration.

## Abstract

In this study, Mg-containing hydroxyapatite coatings on Ti-6Al-4V alloy for dental materials were researched using various experimental instruments. Plasma electrolytic oxidation (PEO) was performed in electrolytes containing Mg (symbols of specimens: CaP, 5M%, 10M%, and 20M%) at 280 V for 3 min. The electrolyte used for PEO was produced by

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