## عنوان مقاله:

The influence of PLGA coating on the structure and compressive strength of bredigite scaffolds

## محل انتشار:

هشتمین کنفرانس و نمایشگاه بین‌المللی مهندسی مواد و متالورژی و سیزدهمین همایش ملی مشترک انجمن مهندسی متالورژی و مواد ایران و انجمن ریخته گری ایران (سال: 1398)

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## خلاصه مقاله:

One of the important parameters for bone regeneration scaffolds is their mechanical properties, which is the subject of this study in terms of a calcium magnesium silicate, namely bredigite. In this regard, bredigite powders were synthesized by a sol-gel process and then porous bredigite scaffolds were prepared using a polymer sponge method. Sintered bredigite scaffolds were afterwards coated with poly(lactic-co-glycolic acid) (PLGA), and the influence of the PLGA coating on the morphology, porosity and mechanical properties of the bredigite scaffold was investigated. The results showed that the PLGA-coated bredigite scaffolds maintained their porosity size and level required for bone tissue engineering. Typically, the compressive strength of the bredigite/PLGA scaffold was significantly improved .compared to the pure bredigite scaffold due to the alteration of porosity

## کلمات کلیدی:

Tissue Engineering Scaffolds, Compressive strength

## لینک ثابت مقاله در پایگاه سیویلیکا: