

## عنوان مقاله:

Experimental Investigation of the Process Parameters Effect on Morphological Properties of Electrospun Chitosan Coating on AZ31 Magesium Alloy

## محل انتشار:

هشتمین کنفرانس و نمایشگاه بین المللی 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:

Electrospinning is a novel surface treatment method that fabricates porous and interconnected nanostructure surface and have high dependency on the process parameters. This paper focuses on working and solution parameters affecting the surface morphology of chitosan nanofiber coating on magnesium AZ31 alloy. For this purpose, in cooperation of Dichloromethane (DCM) Co-solvent, applied voltage, and feed rate at constant tip to magnesium AZ31 alloy substrate at surface morphology of nanofibrous chitosan coating were investigated. The results showed that, DCM Cosolvent, stabilize the electrospinning jet and fabricated the more uniform fibers. Also, in order to produce a chitosan coating with beadles and uniform nanofiber, the applied voltage and feed rate need to be investigated

## کلمات کلیدی:

Electrospinning, Chitosan, Nanofiber coating, Process parameter, AZ31 magnesium alloy

## لینک ثابت مقاله در پایگاه سیویلیکا:

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