

عنوان مقاله:

Investigations on TiON Sputter Coated Wool Fabric with regard to their Microstructure and Antibacterial Properties

محل انتشار:

دهمین همایش مشترک و پنجمین کنفرانس بین المللی انجمن مهندسی مواد و متالورژی و انجمن علمی ریخته گری ایران (سال: 1395)

تعداد صفحات اصل مقاله: 7

نویسندگان:

sara khamseh - Assistant professor, Organic colorants Department of Nanomaterial and Nanocoatings, Institute for color science and technology, Tehran, Iran

m sadeghi -kiakhani - Master, Nanomaterials and nanocoatings Department of Nanomaterial and Nanocoatings, Institute for color science and technology, Tehran, Iran

a rafiee - Department of Nanomaterial and Nanocoatings, Institute for color science and technology, Tehran, Iran

خلاصه مقاله:

TiON coatings were RF-sputtered on the wool surface under mixed atmosphere of Ar/O₂/N₂. An anatase TiO₂ structure formed at lower O₂/N₂ ratio. Anatase TiO₂ peaks disappeared with increasing O₂/N₂ ratio when an amorphous-like structure formed at O₂/N₂ ratio of 2.5. TiON coated wool fabrics showed bacterial reduction about .60%. The bacterial reduction of TiON coated wool fabrics increased to 90% with increasing O₂/N₂ ratio

کلمات کلیدی:

TiON coating, Sputtering, Wool fabric, O₂/N₂ ratio, Bacterial reduction

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/574452>

