

عنوان مقاله:

Ciprofloxacin loaded mesoporous silica nanoparticles with sustained bactericidal activity

محل انتشار:

اولین همایش بین المللی علوم و فناوری نانو (سال: 1399)

تعداد صفحات اصل مقاله: 3

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خلاصه مقاله:

Over the past decades, the prevalence of nosocomial infections due to drug-resistant *Acinetobacter baumannii* has increased and this is a serious concern amongst hospitalised patients worldwide. A suitable approach to overcoming antibiotic resistance is combining antibiotics with nanoparticles. mesoporous silica nanoparticles have attracted a special attention due to their particular physicochemical properties such as controllable holes and size, High internal and external surface area, large drug loading capacity, great biocompatibility that causes very effective for carrier system. Increasing the efficiency of drug loading due to the large surface area and high pore volume of this nanoparticle. In this study, MSN-NH₂ formulated and loaded with ciprofloxacin (CIP). The results of this study showed .the CIP loaded MSNs-NH₂ potentiate antimicrobial action than free CIP

کلمات کلیدی:

Antibiotic resistance, *Acinetobacter baumannii*, mesoporous silica nanoparticles, ciprofloxacin

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