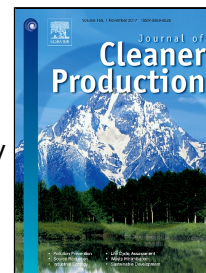


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Green synthesis of magnetic Fe₃O₄/SiO₂/HAp nanocomposite for atenolol delivery and in vivo toxicity study



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- $\text{Fe}_3\text{O}_4/\text{SiO}_2/\text{HAp}$ nanocomposites were synthesized via simple ultrasound-assisted precipitation method.
- Capping agent ratios and calcination temperature were changed to obtain the best size and morphology.
- The atenolol release behavior using $\text{Fe}_3\text{O}_4/\text{SiO}_2/\text{HAp}/\text{APTES}$ at gastrointestinal were investigated.
- In vitro cytotoxicity of atenolol-loaded $\text{Fe}_3\text{O}_4/\text{SiO}_2/\text{HAp}/\text{APTES}$ was investigated by XTT assay.
- In vivo toxicity was evaluated after intravenous injection and pathology study after 48 hours.

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