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Authors: Jie Wu, Yaping Wang, Hao Yang, Xiangyu Liu, Zhong Lu



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# **Preparation and biological activity studies of resveratrol loaded ionically cross-linked chitosan-TPP nanoparticles**

Jie Wu, Yaping Wang, Hao Yang, Xiangyu Liu, Zhong Lu \*

*Key Laboratory for Green Chemical Process of Ministry of Education, School of Chemical Engineering and Pharmacy, Wuhan Institute of Technology, Xiongchu Avenue, Wuhan 430073, PR China*

\*Corresponding author: E-mail address: zhonglu@wit.edu.cn

## **Highlights**

- Res-loaded ionically cross-linked CS-TPP nanoparticles were successfully prepared.
- The size is in the range of 172-217 nm which can preferentially accumulate in tumors site by the EPR effect.
- Res loaded CS-TPP nanoparticles present long-term storage stability and UV light stability.
- Drug-loaded CS-TPP nanoparticles maintained the antioxidant and anticancer activities of Res.

## **Abstract**

Nanoparticles with size range of 10-500 nm can be efficiently delivered into cancer cells by the Enhanced Permeability and Retention (EPR) effect. Here, we prepared resveratrol (Res) loaded chitosan (CS) nanoparticles with the size of

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