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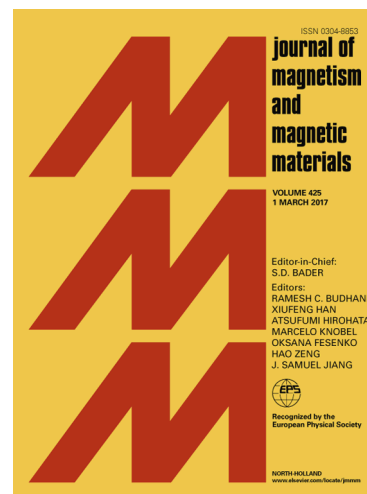
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Biomedical nanoparticle carriers with combined thermal and magnetic response: current preclinical investigations

Marli Luiza Tebaldi¹, Caroline M. R. Oda¹, Liziane O. F. Monteiro¹, André L.B. de Barros², Carla Junia Santos¹ and Daniel Cristian Ferreira Soares^{1*}

¹*Universidade Federal de Itajubá, Campus Itabira, Itabira, Minas Gerais, Brazil.*

²*Department of Pharmaceutical Products, Faculty of Pharmacy, Universidade Federal de Minas Gerais, Belo Horizonte, Minas Gerais, Brazil.*

³*Department of Clinical and Toxicological Analyses, Faculty of Pharmacy, Universidade Federal de Minas Gerais, Belo Horizonte, Minas Gerais, Brazil.*

* Corresponding author:

soares@unifei.edu.br; +55-31-3840-0925

Abstract

Nanocarriers combining two or more different approaches in the same particle has been a new trend in research worldwide. Among the strategies studied, magnetic nanoparticles with dual properties related to drug delivery and diagnostic imaging represent a significant improvement in the response of chemotherapy and in a real-time monitoring of drug distribution. Nanocarriers combining dual properties such as thermal and magnetic, enable controlling the release and modulate a treatment giving more specificity of action. This is possible since a magnetic external field can allow the adequate movement of nanoparticles and provide a means to remotely heating the target tissue safely. The temperature increase can trigger changes in the structure of nanocarriers leading to the release of drugs. This field of

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