ISTITUTO ITALIANO
DI TECNOLOGIA

TITLE

Heat-Sensitive Nanoparticle System

INVENTORS

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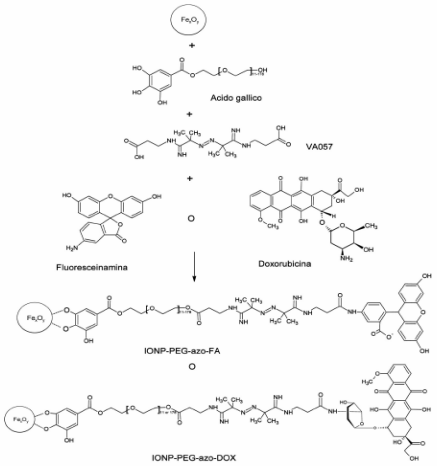
DESCRIPTION

Heat-sensitive system comprising at least one nanoparticle able to convert an electromagnetic radiation into thermal energy when said nanoparticle is exposed to an alternating magnetic field, said nanoparticle being bound covalently with at least one thermolabile molecule, said thermolabile molecule being covalently bound with at least one active molecule selected from a fluorophore molecule and a drug, characterised in that said thermolabile molecule comprises an azo -N=N- functional group.



APPLICATIONS

Medical applications, cancer treatment, drug delivery

KEYWORDS

Nanoparticles, iron oxide, ferrites, thermolabile molecule, heat-sensitive

BIBLIOGRAPHIC DATA

Sistema Nanoparticellare Sensibile Al Calore	
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Applicants	Fondazione Istituto Italiano di Tecnologia

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