

## **Nanotoxicology: the dark side of the employment of nanoparticles in medicine**

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There is a widespread concern that some nanoparticles, within the human body may cause severe health effects. Alongside with nanotechnology therefore a new discipline has been founded, nanotoxicology. While the media sometimes report the idea that all nanosized particles are toxic just for their size, the scientific community agrees that not all nanoparticles are dangerous, but toxic effects stem from a variety of physico-chemical features including chemical composition, form, size and surface reactivity. Taking advantage from what is known on the toxicity of inhaled particles from dusty working places and environmental pollution we will discuss what is peculiar to nanosized particles and which might be the clues for the design of safe nano materials.