Record Nr. UNINA9910688471803321 Frontiers in toxicity and functionalization of nanomaterials / / edited by **Titolo** Dong-Wook Han, Wojciech Chrzanowski Pubbl/distr/stampa Basel, Switzerland:,: MDPI,, [2018] ©2018 **ISBN** 3-03842-735-7 Descrizione fisica 1 online resource (viii, 169 pages): illustrations Disciplina 620.115 Soggetti Nanostructured material Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. Sommario/riassunto Over the last decade, various nanomaterials (NMs) have attracted tremendous attention with the incredible development in nanoscience and nanotechnology. Some NMs are explored increasingly for biomedical applications, including drug delivery carriers, imaging probes, antimicrobial agents, biosensors, and tissue engineering scaffolds. However, the in vitro and in vivo toxicities of NMs related to oxidative stress are the main obstacles to use them in biomedical fields. One of the most promising strategies to address these obstacles is functionalizing NMs with biocompatible molecules or materials. In this Special Issue, we are especially interested in manuscripts that advance the understanding of the interaction of NMs with cells, such as cellular responses to NMs, intracellular behaviors of NMs, therapeutic and imaging potentials of NMs, as well as the functionalization of NMs through coating, patterning and hybridization with other biomolecules

for multifaceted biomedical applications.