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Multifunctional biodegradable graphene-based materials for cancer therapy

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Graphene-based nanomaterials are considered unique systems for many applications in different fields including biomedicine [1]. They are offering the possibility of original chemical functionalization and design of complex multifunctional systems that allow further their exploitation in therapy, imaging and diagnosis [2]. In this lecture, I will present the chemical strategies to functionalize graphene-based nanomaterials with appropriate functional groups and therapeutic molecules in view of their biomedical applications. I will present few examples of their use in cancer therapy and imaging [3, 4]. I will also describe how it is possible to enhance the biodegradability and tune the toxic effects of these different materials [1].

References

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