

Potential and applications of multifunctional nanoparticles with enzyme-like activities

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Hybrid (multi-component) nanoparticles enable the combination of multiple desirable properties and functionalities within a single structure [1]. Such nanoparticles can be used in bioanalytics and combined anticancer therapies (including photothermal and chemodynamic ones). This presentation will show research into the development of modern multifunctional nanoplatforms (characterized with interesting optical properties, catalytic activity, and ease of further functionalization) utilizing superparamagnetic cores, and present the characterization of such particles and their potential applications, also in microfluidic bioanalytical cartridges developed using polyester films technology. The advantages of proposed approaches will be discussed and the most promising nanoparticles pointed out.

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References

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