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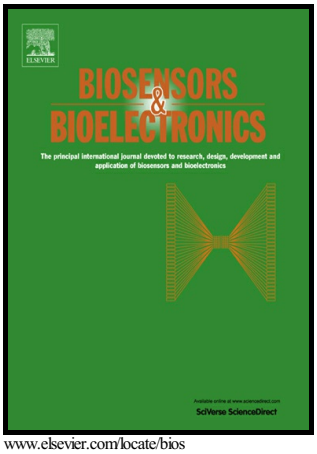

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Nanostructured molecularly imprinted polymers for protein chemosensing

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Abstract

Molecularly imprinted polymers (MIPs) are tailor made recognition materials that can mimic biological receptors. If used as recognition units for chemosensors fabrication, they outperform natural receptors with their durability, chemical stability, and low production costs. Novel techniques of MIP deposition as thin films, surface development, and introduction of additional properties are very much demanded in terms of selective and sensitive chemosensors fabrication. Therefore, in recent years a particular attention has been paid to syntheses of nanostructured MIP films and MIP nanoparticles. The present brief review surveys novel achievements in the field of MIP nanostructures and their application for determination of protein analytes.

Keywords

Molecularly imprinted polymer (MIP), Nanostructuring, Core/shell nanoparticle, Protein recognition, Chemosensing

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