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Electrochemical biosensors based on nucleic acids and their use in bioaffinity assays for determining DNA and its effectors

Babkina S., Budnikov G.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

The analytical capabilities of electrochemical biosensors based on nucleic acids are systematized. Immobilization methods that retain the biological activity of nucleic acids and provide an opportunity to use them as multipurpose analytical reagents are described. The use of the above sensors in bioaffinity assays for determining DNA and its effectors in biochemical analysis and environmental monitoring and for determining the nucleotide composition of DNA is demonstrated in many examples. © Pleiades Publishing, Inc., 2006.

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