

Journal of Analytical Chemistry 2015 vol.70 N5, pages 517-534

Electrochemical biosensors based on dendrimers

Evtyugin G., Stoikova E.

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

Abstract

© 2015, Pleiades Publishing, Ltd. The main features of work of electrochemical biosensors including dendrimers of various structures in the biosensing layer are considered. The role and importance of dendrimers as matrixes for the immobilization of biological components of biosensors and an increase in the density of receptors and mediators of electron transfer are revealed. Examples of application of various types of biosensors based on enzymes, immunochemical reagents, and nucleic acids are presented.

<http://dx.doi.org/10.1134/S1061934815050044>

Keywords

biosensors, chemically modified electrodes, dendrimer, DNA sensors, immunosensors