Mini review

Electrochemical, Photoelectrochemical and Electrochemiluminescent Biosensors for the Detection of Beta-amyloid Peptides and Their Aggregates

Ming La^{1,*}, Changdong Chen¹, Xichao Xia¹, Jihong Zhang³ and Binbin Zhou^{2,3,*}

¹ College of Chemistry and Chemical Engineering, Pingdingshan University, Pingdingshan, Henan 467000, People's Republic of China

² College of Chemistry and Chemical Engineering, Hunan Institute of Science and Technology, Yueyang, Hunan 414006, People's Republic of China

³ Hunan Institute of Food Quality Supervision Inspection and Research, Building B, No. 238, Ave. Timesun, District Yuhua, Changsha, Hunan 410111, People's Republic of China

*E-mail: mingla2011@163.com (M.L.); bbzhou1985@163.com (B.Z.)

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Beta-amyloid (A β) peptides are the specific biomarkers of Alzheimer's disease (AD). Many clinical studies have suggested that abnormal levels of A β peptides in blood, cerebrospinal fluid and brain tissue are closely related to the progression of AD. Analysis of A β peptides is of great significance to the early detection, prevention and treatment of AD. This paper focuses on the progress in development of electrochemical, photoelectrochemical and electrochemiluminescent biosensors for the detection of A β peptides and their aggregates.

Keywords: Beta-amyloid; electrochemical biosensors; photoelectrochemical biosensors; electrochemiluminescent biosensors; Alzheimer's disease

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