

เอกสารอ้างอิง

1. Palecek, E., Oscillographic Polarography of Highly Polymerized deoxyribnucleic acid. *Nature* **1960**, *188*, 656-657.
2. Palecek, E., From Polarography of DNA to Microanalysis with Nucleic Acid-Modified Electrodes. *Electroanalysis* **1996**, *8*, 7-14.
3. Kelley, S. O.; Barton, J. K.; Jackson, N. M.; Hill, M. G., Electrochemistry of methylene blue bond to a DNA-modified electrode. *Bioconj. Chem.* **1997**, *8*, 31-37.
4. Boon, E. M.; Barton, J. K., Charge Transport in DNA. *Curr. Opin. Struct. Biol.* **2002**, *12*, 320-329.
5. Armistead, P. M.; Throp, H. H., *J. Am. Chem. Soc.* **2000**, *117*, 8933.
6. Kelley, S. O.; Jackson, N. M.; Hill, M. G.; Barton, J. K., Long-range electron transfer through DNA films. *Angew. Chem. Int. Edn.* **1999**, *38*, 941-945.
7. Patolsky, F.; Lichtenstein, A.; Willner, I., Higly Sensitive Amplified Electronic Detection of DNA by Biocatalyzed Precipitation of an insoluble Product onto electrodes. *Chem. Eur. J.* **2003**, *9*, 1137-1145.
8. Cai, H.; Xu, Y.; Zhu, N.; He, P.; Fang, Y., An electrochemical DNA hybridization detection assay based on a silver nanoparticle label. *The Analyst* **2002**, *127*, 803-808.
9. Cai, H.; Wang, Y.; He, P.; Fang, Y., Electrochemical detection of DNA hybridization based on silver-enhanced gold nanoparticle label *Analytica Chimica Acta* **2002**, *469* (2,3), 165-172.
10. Rochelet-Dequaire, M.; Limoges, B.; Brossier, P., *Analyst* **2006**, *131*, 923-929.
11. Liu, S. F.; Li, Y.-F.; Li, J.-R.; Jiang, L., *Biosensors & Bioelectronics* **2005**, *21*, 789-795.
12. Kawde, A.-N.; Wang, J., Amplified Electrical Tranduction of DNA Hybridization Based on Polymeric Beads Loaded with Multiple Gold Nanoparticle Tags. *Electroanalysis* **2004**, *16*, 101-107.
13. Ozsoz, M.; Erdem, A.; Kerman, K.; Ozkan, D.; Tugrul, B.; Topcuoglu, N.; Ekren, H.; Taylan, M., Electrochemical Genosensor Based on Colloidal Gold Nanoparticles for the Detection of Factor V Leiden Mutation Using Disposable Pencil Graphite Electrodes. *Anal. Chem.* **2003**, *75*, 2181-2187.
14. Authier, L.; Grossiord, C.; Brossier, P.; Limoges, B., Gold Nanoparticle-Based Quantitative Electrochemical Detection of Amplified Human Cytomegalovirus DNA Using Disposable Microband Electrodes *Anal. Chem.* **2001**, *73* (18), 4450-4456.
15. Costa-Fernandez, J. M.; Pereiro, R.; Sanz-Medel, A., The Use of Luminescent Quantum Dots for Optical Sensing. *Trends in Analytical Chemistry* **2006**, *25*, 207-218.
16. Mikkelsen, S. R., Electrochemical Biosensors for DNA Sequence Detection. *Electroanalysis* **1996**, *8*, 15-24.
17. Shim, S. Y.; Lim, D. K.; Nam, J. M., Ultrasensitive optical biodiagnostic methods using metallic nanoparticles. *Nanomedicine* **2008**, *3* (2), 215-232.
18. Willner, I.; Patolsky, F.; Weizmann, Y.; Willner, B., Amplified detection of single-base mismatches in DNA using microgravimetric quartz-crystal-microbalance transduction. *Talanta* **2002**, *56*, 847-856.

19. Pinijsuwan, S.; Rijiravanich, P.; Somasundrum, M.; Surareungchai, W., Sub-femtomolar electrochemical detection of DNA hybridization based on latex/gold nanoparticle-assisted signal amplification. *Analytical Chemistry* **2008**, *80* (17), 6779-6784.
20. Rijiravanich, P.; Somasundrum, M.; Surareungchai, W., Femtomolar electrochemical detection of DNA hybridization using hollow polyelectrolyte shells bearing silver nanoparticles. *Analytical Chemistry* **2008**, *80* (10), 3904-3909.
21. Ding, C.; Zhang, Q.; Lin, J. M.; Zhang, S. S., Electrochemical Detection of DNA Hybridization Based on Biobarcode Method. *Biosensors and Bioelectronics* **2009**, *24* (10), 3140-3143.
22. Ding, C.; Zhang, Q.; Zhang, Z., An Electrochemical Immunoassay for Protein Based on Bio Barcode Method. *Biosensors and Bioelectronics* **2009**, *24*, 2434-2440.
23. Gehring, A. G.; Crawford, C. G.; Mzenko, R. S.; Van Houten, L. J.; Brewster, J. D., Enzyme-linked Immunomagnetic Electrochemical Detection of *Salmonella* typhimurium. *Journal of Immunology Methods* **1996**, *195*, 15-25.
24. K'Owino, I. O.; Agarwal, R.; Sadik, O. A., Novel Electrochemical Detection Scheme for DNA Binding Interactions Using Monodispersed Reactivity of Silver Ions. *Langmuir* **2003**, *19* (10), 4344-4350.
25. Liébanaa, S.; Lermoa, A.; Campoyb, S.; Cortésb, M.; Alegreta, S.; Pividori, M., Rapid Detection of *Salmonella* in Milk by Electrochemical Magneto-Immunosensing. *Biosensors and Bioelectronics* **2009**, *25*, 510-513.
26. Pinijsuwan, S.; Rijiravanich, P.; Somasundrum, M.; Surareungchai, W., Attomolar Electrochemical Detection of DNA Hybridization Based on Enhanced Latex / Gold Nanoparticles. *Advanced Biomaterials* **2010**, *12*, B649-B653.
27. Salam, F.; Tothill, I. E., Detection of *Salmonella* typhimurium Using an Electrochemical Immunosensor. *Biosensors and Bioelectronics* **2009**, *24*, 2630-2636.
28. Wang, J.; Polsky, R.; Xu, D., Silver-Enhanced Colloidal Gold Electrochemical Stripping Detection of DNA Hybridization. *Langmuir* **2001**, *17*, 5739-5741.
29. Wang, J.; Rinc, O.; Polsky, R.; Dominguez, E., Electrochemical Detection of DNA Hybridization Based on DNA-Templated Assembly of Silver Cluster. *Electrochemistry Communications* **2003**, *5*, 83-86.
30. Yang, G.-J.; Huang, J.-L.; Meng, W.-J.; Shen, M.; Jiao, X.-A., A Reusable Capacitive Immunosensor for Detection of *Salmonella* spp. based on Grafted Ethylene Diamine and Self-Assembled Gold Nanoparticle Monolayers. *Analytica Chimica Acta* **2009**, *647* (2), 159-166.
31. Zhu, N.; Zang, A.; He, P.; Fang, Y., DNA Hybridization at Magnetic Nanoparticle with Electrochemical Stripping Detection. *Electroanalysis* **2004**, *13*, 1925-1930.
32. Hu, K.; Lan, D.; Li, X.; Zhang, S., Electrochemical DNA Biosensor Based on Nanoporous Gold Electrode and Multifunctional Encoded DNA Au Bio Barcodes. *Analytical Chemistry* **2008**, *23*, 9124-9130.
33. Zhang, X.; Su, H.; Bi, S.; Li, S.; Zhang, S., DNA-based amplified electrical bio-barcode assay for one-pot detection of two target DNAs. *Biosensors and Bioelectronics* **2009**, *24* (8), 2730-2734.

34. Nam, J. M.; Thaxton, C. S.; Mirkin, C. A., Nanoparticle-Based Bio-Bar Codes for the Ultrasensitive Detection of Proteins. *Science* **2003**, *301*, 1884-1886.
35. Nam, J. M.; Stoeva, S.; Mirkin, C. A., Bio-Bar-Code-Based DNA Detection with PCR-like Sensitivity. *Journal of Americal Chemical Society* **2004**, *126*, 5932-5933.
36. Du, P.; Li, H.; Cao, W., Construction of DNA sandwich electrochemical biosensor with nanoPbS and nanoAu tags on magnetic microbeads. *Biosensors and Bioelectronics* **2009**, *24*, 3223-3228.
37. Kim, J.; Seo, K.; Wang, J. In *Multiplexed electrochemical protein coding based on Quantum Dot (QD)-bioconjugates for a clinical barcode system*, Annual International Conference of the IEEE Engineering in Medicine and Biology - Proceedings, 2004; pp 137-140.
38. Uhlmann, E.; Peyman, A.; Breipohl, G.; Will, D. W., PNA: Synthesis Polyamide Nucleic acids with Unusual Binding Properties. *Angewandte Chemie International Edition* **1998**, *37*, 2796-2823.
39. Polpanich, D.; Tangboriboonrat, P.; Elaissari, A., The Effect of Acrylic Acid Amount on the Colloidal Properties of Polystyrene Latex. *Colloid and Polymer Science* **2005**, *284* (2), 183-191.
40. Zhang, D.; Carr, D. J.; Alocilja, E. C., Fluorescent Bio-Barcode DNA Assay for the Detection of *Salmonella enterica* serovar Enteritidis. *Biosensors and Bioelectronics* **2009**, *24* (5), 1377-1381.
41. Thaxton, C. S.; Rosi, N. L.; Mirkin, C. A., Optically and chemically encoded nanoparticle materials for DNA and protein detection. *MRS Bulletin* **2005**, *30* (5), 376-380.
42. He, M.; Li, K.; Xiao, J.; Zhou, Y., Rapid bio-barcode assay for multiplex DNA detection based on capillary DNA Analyzer. *Journal of Virological Methods* **2008**, *151* (1), 126-131.
43. Trevisan, M.; Schawaller, M.; Quapil, G.; Souteyrand, E.; Merieux, Y.; Cloarec, J.-P., Evanescent Wave Fluorescence Biosensor Combined with DNA Bio-barcode Assay for Platelet Genotyping. *Biosensors and Bioelectronics* **2010**, *Article in Press*.
44. Xiansong, W.; Yi, S.; Shan, J.; Xuemet, M.; Yi, Z. In *Combining gold nanoparticles with real-time immuno-PCR for analysis of HIV p24 antigens*, 2007 1st International Conference on Bioinformatics and Biomedical Engineering, ICBBE, 2007; pp 1198-1201.
45. Brakmann, S., DNA-based Barcodes, Nanoparticle and Nanostructure for the Ultraamplification Detection and Quantification of Protein. *Angew. Chem.* **2004**, *116*, 5851-5855.
46. Chang, T. L.; Tsai, C. Y.; Sun, C. C.; Chen, C. C.; Kuo, L. S.; Chen, P. H., Ultrasensitive electrical detection of protein using nanogap electrodes and nanoparticle-based DNA amplification. *Biosensors and Bioelectronics* **2007**, *22* (12), 3139-3145.
47. Goluch, E. D.; Georganopoulou, D. G.; Stoeva, S.; Nam, J. M.; Shaikh, K. A.; Ryu, K. S.; Chiesl, T. N.; Barron, A. E.; Mirkin, C. A.; Liu, C. In *Development and optimization of a lab-on-a-chip device for multiplexed ultra-sensitive detection of proteins*, AIChE Annual Meeting, Conference Proceedings, 2005; p 5327.
48. Goluch, E. D.; Nam, J. M.; Georganopoulou, D. G.; Chiesl, T. N.; Shaikh, K. A.; Ryu, K. S.; Barron, A. E.; Mirkin, C. A.; Liu, C., A bio-barcode assay for on-chip attomolar-sensitivity protein detection. *Lab on a Chip - Miniaturisation for Chemistry and Biology* **2006**, *6* (10), 1293-1299.
49. Hill, H. D.; Mirkin, C. A., The bio-barcode assay for the detection of protein and nucleic acid targets using DTT-induced ligand exchange. *Nature Protocols* **2006**, *1* (1), 324-336.

50. Vlassiok, I.; Kransnoslobodtsev, A.; Smirnov, S.; Germann, M., "Direct" Detection and Separation of DNA Using Nanoporous Alumina Filters. *Langmuir* **2004**, *20*, 9913-9915.
51. Nie, L. B.; Wang, X. L.; Li, S.; Chen, H., Amplification of Fluorescence Detection of DNA Based on Magnetic Separation. *Analytical Chemistry* **2009**, *25* (11), 1327-1331.
52. Thaxton, C. S.; Hill, H. D.; Georganopoulou, D. G.; Stoeva, S. I.; Mirkin, C. A., A Bio-Bar-Code Assay Based Upon Dithiothreitol-Induced Oligonucleotide Release. *Analytical Chemistry* **2005**, *77* (24), 8174-8178.
53. Hill, H. D.; Vega, R. A.; Mirkin, C. A., Nonenzymatic Detection of Bacterial Genomic DNA Using the Bio Bar code Assay. *Analytical Chemistry* **2007**, *79*, 9218-9223.
54. Stoeva, S. I.; Lee, J.-S.; Thaxton, C. S.; Mirkin, C. A., Multiplexed DNA Detection with Biobarcode Nanoparticle probes. *Angew. Chem. Int. Ed.* **2006**, *45*, 3303-3306.
55. Zhu, D.; Tang, Y.; Xing, D.; Chen, W. R., PCR-Free Quantitative Detection of Genetically Modified Organism from Raw Materials. An Electrochemiluminescence-Based Bio Bar Code Method. *Analytical Chemistry* **2008**, *80*, 3566-3571.
56. Zhang, D.; Huarng, M. C.; Alocilja, E. C., A multiplex nanoparticle-based bio-barcode DNA sensor for the simultaneous detection of multiple pathogens. *Biosensors and Bioelectronics* **2010**, *26*, 1736-1742.



