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Modeling of a carbon nanotube sensing device (Article)

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Abstract

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A sensing device is modeled and discussed in this paper. The modeling is done by using carbon nanotubes. This carbon nanotube based sensing device makes it possible produce huge amount of nano chips as a disposable cartridge for diagnostic purposes. Modeling of nano-electrode, characterization and electrochemical detection of DNA hybridization is discussed here. The results shows that the importance of diagnostics with demonstrated characteristics of high sensitivity, reliability and inexpensive micro-fabrication for cost effectiveness. © IDOSI Publications, 2014.

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