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## Obesity electrochemical nanobiosenor on nanowell array electrode

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In general, obesity is associated with significant disturbances in appetite and metabolic control system. Both neuropeptide hormones (leptin) and monoamine neurotransmitters have been recognized as obesity markers due to their essential roles in the regulation of food intake and energy expenditure. Here, we present the development of a leptin nanosensor as a multi-assay for obesity markers found in blood to create a personalized medical system. We have reported that nanowell array (NWA) can enhance electrochemical detection of molecular binding events by controlling the binding sites of the captured molecules. Using NWA biosensor based amperometric analysis; we have detected biological macromolecules such as DNA, protein or aptamers at low concentrations. These results suggested that wafer-scale NWA immunosensor will be useful for biosensing applications because their interface response is appropriate for detecting molecular binding events

### Biography

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