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#### Medical nanorobotics for diabetes control

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**Abstract:** This work presents an innovative nanorobot architecture based on nanobioelectronics for diabetes. The progressive development toward the therapeutic use of nanorobots should be observed as the natural result from some ongoing and future achievements in biomedical instrumentation, wireless communication, remote power transmission, nanoelectronics, new materials engineering, chemistry, proteomics, and photonics. To illustrate the nanorobot integrated circuit architecture and layout described here, a computational approach with the application of medical nanorobotics for diabetes is simulated using clinical data. Integrated simulation can provide interactive tools for addressing nanorobot choices on sensing, hardware design specification, manufacturing analysis, and methodology for control investigation. In the proposed 3D prototyping, a physician can help the patient to avoid hyperglycemia by means of a handheld device, like a cell phone enclosed with cloth, that is used as a smart portable device to communicate with nanorobots. Therefore, this architecture provides a suitable choice to establish a practical medical nanorobotics platform for in vivo health monitoring.

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