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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.[All rights reserved Elsevier].

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