Review of: "Biosensors are very small electrodes with nanometer size and cellular dimensions that can detect chemical species through the stabilization of certain enzymes on their surface"

Maria Hofmman

1 University of Verona

Potential competing interests: No potential competing interests to declare.

Biological nano sensors (Nano bio sensor) The human sense of smell and taste, which detects different smells and tastes, or the body's immune system, which detects millions of different types of molecules, are examples of natural biosensors.

Biosensors are most widely used in medical diagnostics and laboratory sciences, currently glucose biosensors are among the most successful biosensors available in the market, which are used to measure the blood glucose concentration of diabetic patients. The pancreas of diabetic patients does not produce enough insulin. In such cases, it is used for adjustment. Insulin is essential for continuous monitoring of blood glucose levels. Sensors help diabetic patients to measure their blood glucose levels throughout the day and inject insulin when needed. Using these nano sensors (nano bio sensors) it is possible to identify very small amounts of chemical pollution or virus and bacteria in the agricultural and food system. Research in the field of nano-tools is one of the most up-to-date scientific researches in the world. With the introduction of science and nanotechnology and the possibility of making electrodes on a very small scale, it became possible to make nanometer sensors.

These sensors were named nanobiosensors (biological nanosensors) due to their nanometer size and application in biological environments. Biosensors are very small electrodes with nanometer size and cellular dimensions that can detect chemical species through the stabilization of certain enzymes on their surface. or the desired biological have become sensitive in cells.

References

1. Lei Choe. (2024). Review of: "The field-effect tunneling transistor nMOS, as an alternative to conventional CMOS by enabling the voltage supply (VDD) with ultra-low power consumption." Qeios. doi:10.32388/z3oxov.
2. Afshin Rashid. (2024). Review of: "transistor nMOS (with ultra-low power consumption, energy-efficient computing, during the sub-threshold range)". Qeios. doi:10.32388/1a4j4b.


8. Chad Allen. (2024). Review of: "FinFET nanotransistor, the reduction of scale causes more short channel effects, less gate control, an exponential increase in leakage currents, severe process changes, and power densities". Qeios. doi:10.32388/h3qk7b.


28. Prienna Radochevich. (2024). Review of: “Block nanolithography Oriented copolymer is a combination of top-down lithography and the bottom-up self-organization of two polymers to produce high-resolution nanopatterns over large areas”. Qeios. doi:10.32388/a0nexa.

29. Prienna Radochevich. (2024). Review of: “Block nanolithography Oriented copolymer is a combination of top-down lithography and the bottom-up self-organization of two polymers to produce high-resolution nanopatterns over large areas”. Qeios. doi:10.32388/a0nexa.