Review of: "Many types of nanosensors are designed using CP nanomaterials for nanobiological applications. (Conductive surface) The oxidation of conductive polymeric materials"

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Potential competing interests: No potential competing interests to declare.

Note: Many types of nanosensors are designed using CP nanomaterials for nanobiological applications. (Conductive surface) The oxidation of conductive polymeric materials is easily altered by redox mechanisms, and the charge transfer properties of these materials are affected by structural parameters, such as diameter and dimensions.

CP materials are able to provide sensitive and rapid responses to specific biological and chemical species. Techniques such as chemical polymerization are often used to make CP nanomaterials. Manufacturing strategies can be divided into three categories: hard mold synthesis, soft mold synthesis, and mold-free synthesis. The most widely used conductive polymers in nanosensors are nanomaterials made from CP due to their unique chemical and electrical properties resulting from the properties of their pie-electron nanosystem. Many modeling and functionalization technologies are being developed to control the location, distribution, amount, or structure and orientation of biological nanomolecules at the nanomaterial level. such as electron beam lithography, optical lithography, interference lithography (IL), etc., cannot meet all the practical demands of industrial applications in terms of high resolution, high power, low cost, large area, and patterns on non-flat and curved surfaces. Therefore, a new high-volume nano-manufacturing technology urgently needs to be exploited and developed to meet the extraordinary needs of growing markets. Lithography in nanoelectronics is currently considered as a promising low-cost, high-throughput, and high-resolution nanopatterning method, especially for the production of large-scale small/nanopatterns and complex 3D structures, as well as the aspect The above characteristics of the ratio regarding these outstanding advantages have also resulted. This field becomes Especially, nanoelectronic lithography has great potential to set new standards for making miniature, low-cost, and light-weight optics that can be used in many fields of applications.
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