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6: Energy Harvesting for Biosensors Using Biofriendly Materials

Sommario/riassunto

Focusing on the materials suitable for biosensor applications, such as nanoparticles, quantum dots, meso- and nanoporous materials and nanotubes, this text enables the reader to prepare the respective nanomaterials for use in actual devices by appropriate functionalization, surface processing or directed self-assembly. The main detection methods used are electrochemical, optical, and mechanical, providing solutions to challenging tasks.The result is a reference for researchers and developers, disseminating first-hand information on which nanomaterial is best suited to a particular applicat