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Sommario/riassunto	There is a growing interest in the use of nanoparticles modified with DNAs, viruses, peptides and proteins for the rational design of nanostructured functional materials and their use in biosensor applications. The challenge is to control the organization of biomolecules on nanoparticles while retaining their biological activity as potential chemical and gene therapeutics. These noble metal nanoparticles/biomolecules conjugates have specific properties and therefore they are attractive materials for nanotechnology in biochemistry and medicine. In this book, the author review work per