

1. Record Nr.	UNINA9910827586203321
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Titolo	DNA engineered noble metal nanoparticles : fundamentals and state-of-the-art-of nanobiotechnology // Ignac Capek
Pubbl/distr/stampa	Hoboken, New Jersey : , : John Wiley and Sons, Inc. Salem, Massachusetts : , : Scrivener Publishing LLC, , 2015
ISBN	1-119-12094-2
Descrizione fisica	1 online resource (675 p.)
Collana	Advanced materials series
Disciplina	579.2/4
Soggetti	Nanobiotechnology Nanotechnology Biotechnology Metal clusters Nanoparticles
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Nucleic acids -- Noble metal nanoparticles -- DNA-based conjugates -- DNA-noble metal nanoparticle conjugates -- DNA-gold nanoparticle conjugates -- PNA-noble metal nanoparticles conjugates -- DNA-silver nanoparticles conjugates -- The structure of DNA-noble metal nanoparticles conjugates -- Photochemical and photophysical events -- Nanoparticle therapeutics.
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