1. Record Nr. UNINA9910300225103321

Titolo	Nanotechnology in Endodontics : Current and Potential Clinical Applications / / edited by Anil Kishen
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2015
ISBN	3-319-13575-9
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (206 p.)
Disciplina	617.6 620.5
Soggetti	Dentistry Nanoscale science Nanoscience Nanostructures Nanoscale Science and Technology
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 at the end of each chapters and index.
Nota di contenuto	1. Introduction -- 2. Advanced Nanomaterials: Promises for Improved Dental Tissue Regeneration -- 3. Characterization of Nanomaterials/Nanoparticles -- 4. Nanomaterial Properties: Implications for Safe Medical Applications of Nanotechnology -- 5. Nanomedicine: Size-Related Drug Delivery Applications, Including Periodontics and Endodontics. -- 6. Nanoparticles for Endodontic Disinfection -- 7. Nanoparticles for Dentin Tissue Stabilization -- 8. Nanoparticles in Restorative Materials -- 9. Remineralizing Nanomaterials for Minimally Invasive Dentistry.
Sommario/riassunto	This book provides detailed information on the emerging applications of nanomaterials and nanoparticles within endodontics, highlighting the exciting potential clinical impact of nanotechnology in the field. The range of applications covered is diverse, encompassing drug and gene delivery, tissue engineering, antibacterial strategies, dentin tissue stabilization, dentin pulp regeneration, and use in restorative and endodontic materials. Important scientific background information

relating to each application is provided, with clear coverage of basic principles. In addition, potential pitfalls are identified and explained. The cytotoxicity of nanomaterials and nanoparticles is also addressed in a separate chapter. The book will be of value both for endodontic practitioners and for all scientists and graduate students who are interested in the application of nanotechnology in endodontics.