1. Record Nr. UNINA9910822400203321 Advanced ceramics for dentistry / / [edited by] James Zhijian Shen and Titolo Tomaz Kosmac Pubbl/distr/stampa Waltham, MA:,: Butterworth-Heinemann, an imprint of Elsevier,, 2014 **ISBN** 0-12-394836-3 Descrizione fisica 1 online resource (xiv, 402 pages): illustrations (some color) Gale eBooks Collana 617.695 Disciplina Soggetti **Dental ceramics** Ceramics **Dental Porcelain Biocompatible Materials** Surface Properties 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 Front Cover; Advanced Ceramics for Dentistry; Copyright Page; Contents; List of Contributors; Preface; 1 Introduction; 2 Teeth; 2.1 Introduction; 2.2 Microstructure of Teeth; 2.2.1 Enamel; 2.2.2 Dentin: 2.2.3 Cementum; 2.2.4 Pulp; 2.3 Optical Properties of Teeth; 2.3.1 Color; 2.3.2 Opacity and Translucency; 2.3.3 Fluorescence; 2.3.4 Opalescence; 2.3.5 Metamerism; 2.4 Mechanical Properties of Teeth; 2.5 Common Defects and Damage; Acknowledgments; References; 3 Dental Prostheses; 3.1 Introduction of Prosthodontics and Dental Prostheses; 3.2 Restoration of Tooth Defects; 3.2.1 Direct Fillings 3.2.2 Inlays and Onlays 3.2.3 Laminate Veneers; 3.2.4 Partial Crowns; 3.2.5 Full Crowns; 3.2.6 Post-and-core; 3.3 Restoration of Partial Edentulism; 3.3.1 Fixed Partial Dentures; 3.3.2 Bonded Bridges; 3.3.3 Removable Partial Dentures: 3.3.4 Precise Attachment Dentures: 3.4 Restoration of Complete Edentulism; 3.4.1 Complete Dentures; 3.4.2 Overdentures; Acknowledgments; References; 4 Dental Implants; 4.1 Principle Structure of Dental Implants; 4.1.1 Classification of Implantation and Loading Mode; 4.1.2 Classification by Time of

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Sommario/riassunto

The growth of implant and fixed prosthodontics practices in dentistry has created a rapidly increasing demand for advanced ceramics and ceramic processes. Innovations in ceramics and ceramic processes are vital to ensure reliable and affordable dental-restoration solutions with aesthetically pleasing outcomes. The work aims to engage the bioceramics and engineering communities to meet the challenges of modern dental restoration using advanced ceramics. Incorporating fundamental science, advanced engineering concepts, and clinical outcomes, the work is suitable for bioceramicists, cer