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| 1. Record Nr. | UNINA9911035046803321 |
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| Titolo | Biomechanics of Dental Implants : 3-Dimensional Bone Assessment Using CBCT from Laboratory to Clinics // by Maya Genisa, Solehuddin Shuib, Zainul Ahmad Rajion |
| Pubbl/distr/stampa | Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2025 |
| ISBN | 9789819660230 9789819660223 |
| Edizione | [1st ed. 2025.] |
| Descrizione fisica | 1 online resource (142 pages) |
| Collana | SpringerBriefs in Applied Sciences and Technology, , 2191-5318 |
| Altri autori (Persone) | ShuibSolehuddin RajionZainul Ahmad |
| Disciplina | 610.153 |
| Soggetti | Medical physics Biomedical engineering Imaging systems in biology Mathematical physics Computer simulation Image processing - Digital techniques Computer vision Medical Physics Biomedical Engineering and Bioengineering Biological Imaging Computational Physics and Simulations Computer Imaging, Vision, Pattern Recognition and Graphics |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Nota di contenuto | Biomechanics of dental implant 3 dimensional bone assessment using cbct from laboratory to clinic -- Biomechanics of dental implant 3dimensional bone assessment -- Digital imaging and implant stability and finiteelement analysis of study preparation -- Biomechanical assessment based on clinical measurement. |
| Sommario/riassunto | This book is a guide for both clinicians and researchers based on the intricate relationship between biomechanics and dental implant success. The book begins by exploring the fundamental principles of |

biomechanics, including stress, strain, and bone adaptation. This knowledge is essential for understanding the forces acting on dental implants and the subsequent response of the surrounding bone tissue. The intricacies of CBCT technology, from image acquisition to analysis techniques, and its advantages and limitations in comparison to other imaging modalities are discussed to provide practical guidelines for selecting appropriate imaging protocols. The book helps bridges the gap between laboratory research and clinical practice, by presenting case studies demonstrating the clinical applications of CBCT-guided implant planning, and discusses the impact of 3D bone assessment on treatment outcomes. Furthermore, it explores emerging trends in CBCT technology and future directions in the field of dental implant biomechanics.
