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Nota di contenuto	An overview of 3D craniofacial imaging -- Computed Tomography Imaging for Craniofacial and dental applications -- Magnetic resonance imaging for cranio-facial applications -- Ultrasound Imaging and its craniofacial applications -- Non-invasive 3D Facial Scanning -- Non-ionizing, non-invasive surface imaging (desktop and intraoral scanning) for dento-alveolar applications -- CAD/CAM technology and their applications in craniofacial surgery -- Computational analysis of 3D craniofacial imaging -- Visualization Techniques for craniofacial anthropometry -- Segmentation of 3D craniofacial imaging and volumetric measurement -- Cephalometric analysis using three-

dimensional imaging system -- Three-dimensional Virtual Planning in Orthodontics -- 3-Dimensional superimposition of craniofacial structures -- Craniofacial imaging and diagnosis of temporomandibular disorders based on Vienna concept -- Challenges for 3D Imaging for Craniofacial Applications -- Safety and protection in 3D craniofacial imaging -- Application of 3-dimensional Scanning for In-office Digital Manufacturing of Direct Printed Aligners -- Protection over innovation in craniofacial imaging.An overview of 3D craniofacial imaging -- Computed Tomography Imaging for Craniofacial and dental applications -- Magnetic resonance imaging for cranio-facial applications -- Ultrasound Imaging and its craniofacial applications -- Non-invasive 3D Facial Scanning -- Non-ionizing, non-invasive surface imaging (desktop and intraoral scanning) for dento-alveolar applications -- CAD/CAM technology and their applications in craniofacial surgery -- Computational analysis of 3D craniofacial imaging -- Visualization Techniques for craniofacial anthropometry -- Segmentation of 3D craniofacial imaging and volumetric measurement -- Cephalometric analysis using three-dimensional imaging system -- Three-dimensional Virtual Planning in Orthodontics -- 3-Dimensional superimposition of craniofacial structures -- Craniofacial imaging and diagnosis of temporomandibular disorders based on Vienna concept -- Challenges for 3D Imaging for Craniofacial Applications -- Safety and protection in 3D craniofacial imaging -- Application of 3-dimensional Scanning for In-office Digital Manufacturing of Direct Printed Aligners -- Protection over innovation in craniofacial imaging.

Sommario/riassunto

The book provides sound knowledge of 3D imaging of dentofacial craniofacial region. It guides the students and faculty for understanding the dentofacial craniofacial region in depth. It incorporates the latest techniques, frameworks and technologies in the imaging area of oral health. The book emphasizes on the dentofacial and craniofacial region and thus fills the gap in the medical imaging literature. The development in this book is not only on the imaging techniques but also emphasis will be on the three-dimensional (3D) frameworks to deal the patients for their diagnosis and treatment planning. The chapters of this book are designed in such a way that the readers may get the complete package of the exploration of the imaging clinical applications of craniofacial areas. This book will be helpful not only for the students and faculty but also for the researchers working in the relevant areas. This book will provide easy, simple way but the most authentic material to learn the craniofacial region imaging. In this manual we will incorporates authentic, internationally accepted terms and definition. To make it interesting and simple, our approach is to incorporate the material in systematic manner in a simple and easy way by incorporating maximum illustrations and flowcharts. This book provides sound knowledge of various advanced technologies for dentist imaging. This book will highlights the importance and explore the current research in the dentofacial and craniofacial areas.