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Nota di contenuto	Preface -- Organization -- Contents -- Medicine -- The Use of Finite Element Analysis to Study Stress Distribution on Temporo-Mandibular Joints and Teeth Using Mandibular Advancement Devices for Obstructive Sleep Apnea Treatment -- 1 Introduction -- 2 Materials and Methods -- 3 Results -- 4 Discussion -- 5 Conclusion -- References -- Overview of Mini-screws in Orthodontics -- 1 Introduction -- 2 History Background of Mini-Screws -- 3 The Design and Characteristics of Mini-screws -- 3.1 Biocompatibility and Corrosion -- 3.2 Microstructural Aspects -- 3.3 Mechanical Aspects -- 4 Future Advancements -- 5 Conclusion -- References -- Mechanical Tests of Biological Materials. The Case of Dentine -- 1 Introduction -- 2 Elasticity -- 2.1 Elastic Moduli E and G -- 2.2

Poisson’s Ratio -- 3 Plasticity -- 3.1 Yield Stress -- 3.2 Ultimate Stress -- 3.3 Hardness

Sommario/riassunto

This book presents the proceedings of the International Workshop on Engineering Methodologies for Medicine and Sports (EMMS), held in Rome, Italy on February 7-9, 2024. It includes peer-reviewed papers on emerging engineering methodologies applied to biomedicine and sports, discussing topics such as advanced biomaterials, biodegradable implants, additive manufacturing of prosthesis, surface design, fabrication of bioreactors, design of biomechanical devices, rehabilitation and prevention, AI applications to medicine, biosensors, medical signal analysis, medical sensors, detection and monitoring of substances dangerous for health, biomechanics, assessment of sport performance, sport activity as a diagnostic device. A valuable, up-to-date resource, it offers an essential overview of the subject for scientists and practitioners alike, and will inspire further investigations and research. .