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| Nota di contenuto | Part 1.3D-Printed Custom-Made Prostheses:From Design to Production -- Chapter 1.Design of 3D-Printed Custom-Made Prostheses -- Chapter 2.Porous Structure of 3D-Printed Custom-Made Prostheses -- Chapter 3.Production and Quality Control of 3D-Printed Custom-Made Prostheses -- Part 2.Clinical Applications of 3D-Printed Custom-Made Prostheses -- Chapter 4.Different Types of 3D-Printed Custom-Made Prostheses -- Chapter 5.Evaluation of 3D-Printed Custom-Made Prostheses Applications -- Chapter 6.Clinical Problems and Countermeasures of 3D-Printed Custom-Made Prostheses -- Part 3.Rules and Regulations for 3D-Printed Custom-Made Prostheses -- Chapter7.Rules and Regulations in China.-Chapter 8.Rules and Regulations in Europe.-Chapter 9.Rules and Regulations in the US -- Part 4.Future Development of 3D-Printed Custom-Made Prostheses -- Chapter 10.3D-Printed Custom-Made Prostheses using Nonmetallic Materials -- Chapter 11.3D-Printed Custom-Made Prostheses using Complex Materials -- Chapter 12.Surface Modification of 3D-Printed Custom-Made Prostheses. |
| Sommario/riassunto | Different from traditional medical devices, customized prostheses made with 3D printing realizes a transition from one size fits all to tailor-made precision. The book systematically introduces the basic issues, design preparation, clinical applications, potential risks, precautions, and regulatory supervision of 3D printing personalized prostheses in the field of orthopedics. It will be a theoretical and |

technical reference for clinical doctors, engineering technicians, regulatory and research personnel engaged in the application of 3D printing personalized prostheses. Unlike traditional medical devices, customized prostheses produced through 3D printing mark a shift from standardized, one-size-fits-all solutions to personalized, precision-tailored designs. This book provides a comprehensive overview of key topics including foundational concepts, design preparation, clinical applications, potential risks, safety considerations, and regulatory oversight related to 3D-printed personalized prostheses in orthopedics. It serves as both a theoretical and technical reference for clinicians, biomedical engineers, regulatory professionals, and researchers involved in the development and application of personalized orthopedic prostheses using 3D printing technology.
