Record Nr. UNINA9910568272803321 **Titolo** Advances in Manufacturing III: Volume 5 - Biomedical Engineering: Research and Technology Innovations, Industry 4.0 / / edited by Filip Gorski, Micha Rychlik, Rzvan Pcurar Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2022 **ISBN** 3-030-99769-3 Edizione [1st ed. 2022.] Descrizione fisica 1 online resource (191 pages) Lecture Notes in Mechanical Engineering, , 2195-4364 Collana 670 Disciplina Soggetti Engineering design Biomedical engineering Mechanics, Applied **Engineering Design** Biomedical Devices and Instrumentation **Engineering Mechanics** Lingua di pubblicazione Inglese Materiale a stampa **Formato** Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Sommario/riassunto This book covers a variety of topics at the interface between biomedical engineering and manufacturing. Based on peer-review papers presented at the 7th International Scientific-Technical Conference MANUFACTURING 2022, held in Poznan, Poland on May 16-19, 2022, it focuses on cutting-edge issues relating to 3D printing of medical devices, including custom manufacturing of orthopedic aids, optimization of their manufacturing process, 3D and numerical models supporting prostheses development and surgical simulation, and discusses the applications of different quality control methods in the healthcare industry. This book offers a timely guide to engineers and other professionals dealing with production and testing of medical devices in the era of industry 4.0. .