Record Nr. UNINA9910564700803321 Advances in Manufacturing III: Volume 1 - Mechanical Engineering: **Titolo** Research and Technology Innovations, Industry 4.0 / / edited by Bartosz Gapiski, Olaf Ciszak, Vitalii Ivanov Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2022 **ISBN** 3-031-00805-7 Edizione [1st ed. 2022.] 1 online resource (249 pages) Descrizione fisica Lecture Notes in Mechanical Engineering, , 2195-4364 Collana 670.42 Disciplina Soggetti Manufactures Computer-aided engineering Materials Engineering design Machines, Tools, Processes Computer-Aided Engineering (CAD, CAE) and Design Materials Engineering **Engineering Design** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Sommario/riassunto The book covers various topics in mechanical engineering, with a special attention to machine design, product assembly, technological aspects of production, mechatronics and production maintenance. Based on peer-reviewed papers presented at the 7th International Scientific-Technical Conference MANUFACTURING 2022, held in Poznan, Poland, on May 16-19, 2022, the different chapters describe cutting-edge research and methods fostering automation and optimization of industrial processes and machining, with an emphasis on energy-efficient and ecological solutions. All in all, this book offers a timely guide for researchers and professionals in mechanical engineering and manufacturing, yet it is also intended to foster communication and cooperation between universities and industrial partners.