1. Record Nr. UNINA9910484588203321 Proceedings of the 2020 USCToMM Symposium on Mechanical Systems **Titolo** and Robotics: Rapid City, SD, USA, May 14-16, 2020 / / editors, Pierre Larochelle, J. Michael McCarthy Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa **ISBN** 3-030-43929-1 Edizione [1st edition 2020.] 1 online resource (ix, 312 pages) Descrizione fisica Mechanisms and Machine Science, , 2211-0984; ; 83 Collana Disciplina 629.892 Soggetti Robotics Biomedical engineering Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Sommario/riassunto This volume gathers the latest fundamental research contributions, innovations, and applications in the field of design and analysis of complex robotic mechanical systems, machines, and mechanisms, as presented by leading international researchers at the 1st USCToMM Symposium on Mechanical Systems and Robotics (USCToMM MSR 2020), held in Rapid City, South Dakota, USA on May 14-16, 2020. It covers highly diverse topics, including soft, wearable and origami robotic systems; applications to walking, flying, climbing, underground, swimming and space systems; human rehabilitation and performance augmentation; design and analysis of mechanisms and machines; human-robot collaborative systems; service robotics; mechanical systems and robotics education; and the commercialization of mechanical systems and robotics. The contributions, which were selected by means of a rigorous international peer-review process, highlight numerous exciting and impactful research results that will inspire novel research directions and foster multidisciplinary research

collaborations among researchers from around the globe.