

1. Record Nr.	UNINA9910558484003321
Titolo	Proceedings of the 2022 USCToMM Symposium on Mechanical Systems and Robotics // edited by Pierre Larochelle, J. Michael McCarthy
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2022] ©2022
ISBN	3-030-99826-6
Descrizione fisica	1 online resource (300 pages) : illustrations (color)
Collana	Mechanisms and machine science ; v.118
Disciplina	629.892
Soggetti	Robotics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Chapter 1: Design Synthesis and Implementation of a Dynamic Loading Mechanism for Morphing Winglets Chapter 2: Towards Modeling Finger Joint Coordination for Natural Motion Chapter 3: A K-Means Clustering Approach to Segmentation of Maps for Task Allocation in Multi-Robot Systems Exploration of Unknown Environments
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 2nd USCToMM Symposium on Mechanical Systems and Robotics (USCToMM MSR), held in Rapid City, South Dakota, USA on May 19-21, 2022. 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.

