Record Nr.	UNINA9910483573903321
Titolo	New Advances in Mechanisms, Mechanical Transmissions and Robotics : MTM & Robotics 2020 / / edited by Erwin-Christian Lovasz, Inocentiu Maniu, Ioan Doroftei, Mircea Ivanescu, Corina-Mihaela Gruescu
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2021
ISBN	3-030-60076-9
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (XIII, 569 p. 413 illus., 330 illus. in color.)
Collana	Mechanisms and Machine Science, , 2211-0992 ; ; 88
Disciplina	629.892
Soggetti	Robotics
	Machinery
	Mechatronics
	Robolic Engineering Machinery and Machine Elements
Lingua di pubblicazione	
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Singularity Loci of a Particular IRI 3-UPU Geometry Optimal task placement for energy minimization in a parallel manipulator A Numerical Procedure for Position Analysis of a Robotic Structure. Partl: General Methodology A Numerical Procedure for Position Analysis of a Robotic Structure. Partll: 3C Robotic Arm Illustration The Effect of Position and Orientation Characteristic on the Forward Position Solution of Parallel Mechanisms The Effect of the Type of Sub-Kinematic Chains on the Forward Position Solutions of Parallel Mechanisms Development of a Total Inspection System for Peaches Position Analysis of a Novel Translational 3-URU with Actuators on the Base Design and Development of a Robotic Hexapod Platform for Educational Purposes Dual Least Squares and the Characteristic Length: Applications to Kinematic Synthesis Origami-inspired design of a deployable wheel
Sommario/riassunto	This volume gathers the proceedings of the Joint International Conference of the XIII International Conference on Mechanisms and Mechanical Transmissions (MTM) and the XXIV International Conference

1.

on Robotics (Robotics), held in Timioara, Romania. It addresses the applications of mechanisms and transmissions in several modern technical fields such as mechatronics, biomechanics, machines, micromachines, robotics and apparatus. In doing so, it combines theoretical findings and experimental testing. The book presents peerreviewed papers written by researchers specialized in mechanism analysis and synthesis, dynamics of mechanisms and machines, mechanical transmissions, biomechanics, precision mechanics, mechatronics, micromechanisms and microactuators, computational and experimental methods, CAD in mechanism and machine design, mechanical design of robot architecture, parallel robots, mobile robots, micro and nano robots, sensors and actuators in robotics, intelligent control systems, biomedical engineering, teleoperation, haptics, and virtual reality.