Record Nr. UNINA9910299907003321 **Titolo** Cable-Driven Parallel Robots: Proceedings of the Third International Conference on Cable-Driven Parallel Robots / / edited by Clément Gosselin, Philippe Cardou, Tobias Bruckmann, Andreas Pott Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2018 **ISBN** 3-319-61431-2 Edizione [1st ed. 2018.] Descrizione fisica 1 online resource (422 pages) Mechanisms and Machine Science, , 2211-0984; ; 53 Collana Disciplina 620 Soggetti Robotics Automation Artificial intelligence Machinery Vibration Dynamical systems **Dynamics** Control engineering **Robotics and Automation** Artificial Intelligence Machinery and Machine Elements Vibration, Dynamical Systems, Control Control and Systems Theory Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references at the end of each chapters and index. Modelling of Flexible Cable-Driven Parallel Robots using a Rayleigh-Nota di contenuto Ritz Approach -- Assumed-mode-based Dynamic Model for Cable Robots with Non-straight Cables -- Manipulator Deflection for Optimum Tension of Cable-Driven Robots with Parameter Variations --Sensitivity Analysis of the Elasto-Geometrical Model of Cable-Driven Parallel Robots -- CASPR-ROS: A Generalised Cable Robot Software in

ROS for Hardware -- A Polymer Cable Creep Modeling for a Cable-

## Sommario/riassunto

Driven Parallel Robot in a Heavy Payload Application -- Bending Fatigue Strength and Lifetime of Fiber Ropes.

This book presents proceedings of the third international conference in this field, continuing the success of the previous events. The peer-reviewed and the selected papers are arranged to make the proposed book the most recent and complete overview on the State-of-the-Art in Cable-Driven Parallel Robots! The conference took place 2017 in Quebec, QC, Canada,.