Record Nr. UNINA9910437925603321 Cable-Driven Parallel Robots [[electronic resource] /] / edited by Tobias **Titolo** Bruckmann, Andreas Pott Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 2013 **ISBN** 1-283-63163-6 9786613944085 3-642-31988-2 Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (442 p.) Mechanisms and Machine Science, , 2211-0984;; 12 Collana Disciplina 629.892 Soggetti Robotics Automation Engineering design Robotics and Automation **Engineering Design** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Welcome -- Motion Planning -- Force Distribution -- Application and Protoypes -- Design and Components -- Kinematics and Interval Methods -- Calibration und Identification -- Control -- Dynamics Modelling. Sommario/riassunto This publication presents the outcome of the "First International Conference on Cable-Driven Parallel Robots" in 2012. This is the first conference to bring together the cable robot community and dedicate a forum for the international experts of this field. It contains the Knowhow, ideas and experiences of active researchers developing cabledriven robots. The book presents the state of the art, including summarizing contributions and latest research results and, where relevant, the future outlook. The book covers the essential topics for cable-driven robots: classification and definition, kinematics, workspace analysis, cable modeling, control and calibration, design methodology, hardware/prototype development, experimental evaluation, application reports and new application concepts.