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Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Part I Biomechanical Engineering -- Design and Implementation of a Low-Cost Mechatronic System for Biomechanical Analysis of the Human Locomotion, by Paolo Boscarol, Alessandro Gasparetto, Nicola Giovanelli, Stefano Lazzer and Lorenzo Scalera -- A study of feasibility of a portable limb exercise device, by Giuseppe Carbone, Marco Ceccarelli and Candela Arostegui -- DARTAGNAN a self - balanced rehabilitation Robot able to work in active and passive modes on both sides of upper and lower limbs, by Guido Danieli, Paola Nudo, Michele Perrelli and Maurizio Iocco -- Dynamic Analysis of Handcycling:

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Pagano -- A Numerical-Analytical Model for the Study of the Elasto Kinematic Behavior of a Macpherson Suspension, by Francesco Timpone -- A smart system for shock and vibration isolation of sensitive electronic devices on-board a vehicle, by Stefano Pagano, Salvatore Strano, Giandomenico Di Massa, Marco De Michele, Giovanni Pisani, Giuseppe Frisella and Sergio Lippolis -- Wavelet analysis of Gear rattle induced by a multi-harmonic excitation, by Renato Brancati, Ernesto Rocca, Sergio Savino and Francesco Timpone -- Special Session in honor of prof. Aldo Rossi for his 70th birthday Chairman: prof. Carlo Ugo Galletti -- Analytical and Multibody Modelling of a Quick-Release Hook Mechanism, by Luca Bruzzone, Davide Bonatti, Giovanni Berselli and Pietro Fanghella -- Evolution of a Dynamic Model for Flexible Multibody Systems, by Paolo Boscariol, Paolo Gallina, Alessandro Gasparetto, Marco Giovagnoni, Lorenzo Scalera and Renato Vidoni -- Anti-Hedonistic Mechatronic Systems, by Lorenzo Scalera, Paolo Gallina, Alessandro Gasparetto and Marco Giovagnoni -- On the use of cable-driven robots in early inpatient stroke Rehabilitation, by Giulio Rosati, Stefano Masiero and Aldo Rossi. .

Sommario/riassunto

This volume contains the Proceedings of the First International Conference of IFToMM Italy (IFIT2016), held at the University of Padova, Vicenza, Italy, on December 1-2, 2016. The book contains contributions on the latest advances on Mechanism and Machine Science. The fifty-nine papers deal with such topics as biomechanical engineering, history of mechanism and machine science, linkages and mechanical controls, multi-body dynamics, reliability, robotics and mechatronics, transportation machinery, tribology, and vibrations.
