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	Autore	Carbone Giuseppe
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	Edizione	[1st ed. 2013.]
	Descrizione fisica	1 online resource (463 p.)
	Collana	Mechanisms and Machine Science, , 2211-0992 ; ; 10
	Disciplina	629.892
	Soggetti	Automatic control
		Robotics
		Automation
		Artificial intelligence
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		Control, Robotics, Automation
		Artificial Intelligence
		Control and Systems Theory
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	Nota di bibliografia	Includes bibliographical references and index.
	Nota di contenuto	Historical Background of Grasping -- A Survey on Different Control Techniques for Grasping -- Path Planning for Grasping Tasks -- Wrists for Enhancing Grasping Performance -- Industrial Grippers: State-of-Art and Main Design Characteristics -- Microgrippers: State-of-Art and Main Design Solutions -- A New Way of Grasping: ParaGrip – Robot and Gripper Rolled Into One -- Robotic Hands: State-of-Art and Low-Cost Design Solutions -- Hardware Control for Robotic Hands -- Finger Orientation for Robotic Hands -- Using Vision in Grasping Tasks -- Integrated Grasp and Motion Planning for Humanoid Robots -- Grasping in Agriculture -- A Multibody Dynamics Formulation.
	Sommario/riassunto	Grasping in Robotics contains original contributions in the field of grasping in robotics with a broad multidisciplinary approach. This gives the possibility of addressing all the major issues related to robotized grasping, including milestones in grasping through the centuries,

mechanical design issues, control issues, modelling achievements and issues, formulations and software for simulation purposes, sensors and vision integration, applications in industrial field and non-conventional applications (including service robotics and agriculture).   The contributors to this book are experts in their own diverse and wide ranging fields. This multidisciplinary approach can help make Grasping in Robotics of interest to a very wide audience. In particular, it can be a useful reference book for researchers, students and users in the wide field of grasping in robotics from many different disciplines including mechanical design, hardware design, control design, user interfaces, modelling, simulation, sensors and humanoid robotics. It could even be adopted as a reference textbook in specific PhD courses. .