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	Descrizione fisica	1 online resource (IX, 309 p. 221 illus., 157 illus. in color.)
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	Nota di contenuto	From the content: The design of optical sensing needles for tactile sensing and tissue identification at needle tip -- Object Detection on Train Bogies Using Structured Light Scanning -- A Method for detecting breaking rate of ganoderma lucidum spore powder based on machine vision -- 6D Pose Estimation of Texture-less Object in RGB-D Images -- Improving Vision-based Detection of Fruits in a Camouflaged Environment with Deep Neural Networks -- Mechatronics for a LiDAR-based Mobile Robotic Platform for Pasture Biomass Measurement -- Vision guidance with a smart-phone -- A high-speed camel dung collection machine -- Discussion of Soft Tissue Manipulation for the Harvesting of Ovine Offal.
	Sommario/riassunto	The many intriguing examples on the application of mechatronics reinforce the excitement of this creative field of technology. As a collection they present a stimulating resource to developers of future mechatronics technology, and to educators searching for interesting examples. From structured-light measurement of the build-up of detritus on railway bogies and detection of uncracked spores of Chinese medicine to a practical tractor vision guidance system embedded in a smart-phone application, the practical applications of mechatronics and machine vision abound. Fruits are counted on the tree, pasture biomass is measured and a robot collects camel dung as a resource. 3D printing is in vogue, but papers here discuss the construction and strategy of the printer itself. The measurement and

analysis of myoelectric muscle signals enable a prosthesis to be controlled and a feeding robot is used for patient care. An exoskeleton has both soft and rigid links and an optical sensor analyses the tissue into which a surgical needle is being inserted. These are some of the papers in this collection from the 26th annual conference on Mechatronics and Machine Vision in Practice, carefully selected to exclude papers that are merely theoretical and to highlight those that show practical verification. Papers have been contributed from China, New Zealand, the Philippines, Emirates, Germany and of course Australia.