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Altri autori (Persone)	VincenziniP. <1939-> SkaarupSteen
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Nota di contenuto	Electroactive Polymers: Advances in Materials and Devices; Preface and Committees; Table of Contents; Chapter 1: EAP Materials and Analysis of Physical Mechanisms; Characteristic Electrical Actuation of Plasticized Poly(vinyl chloride): Various Electrical Functions in Relation with the Dielectric Plasticizers; Synthesis of Stable Polypyrrole and Polyaniline Nanospheres; One Actuator and Several Sensors in One Device with only Two Connecting Wires: Mimicking Muscle/Brain Feedback; Effect of Crack Formation on Stretchable Silver Electrode for Dielectric Elastomer Actuators Chitosan/IPMC Artificial Muscles Properties of a Dielectric Elastomer Actuator Modified by Dispersion of Functionalised Carbon Nanotubes; Adhesion between Polydimethylsiloxane Layers by Crosslinking; PEDOT Based Conducting IPN Actuators: Effects of Electrolyte on Actuation; Parametric Control of IPMC Actuator Modeled as Fractional Order System; Chapter 2: Device Development and Applications; Actuation of Model Phalanges by Ion Polymer Metal Compound; EAP-Actuators with Improved Actuation Capabilities for Construction Elements with Controllable Stiffness

Functional Characterisations of Hybrid Nanocomposite Films Based on Polyaniline and Carbon Nanotubes
Organic Robotics Based on Conducting Polymers; PVDF Sensors - Research on Foot Pressure Distribution in Dynamic Conditions; Keywords Index; Authors Index

Sommario/riassunto

The 14 peer-reviewed papers collected here together offer a plenitude of up-to-date information on "Electroactive Polymers: Advances in Materials and Devices". The papers are conveniently arranged into: Chapter 1: EAP Materials and Analysis of Physical Mechanisms, Chapter 2: Device Development and Applications. Review from Book News Inc.: Vincenzini (World Academy of Ceramics, Italy) and Skaarup (Technical U. of Denmark) collect 14 papers from Symposium C, "Electroactive Polymers: Advances in Materials and Devices," of CIMTEC 2012, the Fourth International Conference on "Smart Materials, S
