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Autore	Kottapalli Ajay Giri Prakash
Titolo	Self-Powered and Soft Polymer MEMS/NEMS Devices // by Ajay Giri Prakash Kottapalli, Kai Tao, Debarun Sengupta, Michael S. Triantafyllou
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Nota di contenuto	Biomimetic Self-Powered Sensors for Underwater Sensing -- Progress in MEMS/NEMS Electrostatic and Triboelectric Energy Harvesters -- Flexible and Wearable Nanogenerators and Self-Powered Sensors -- Polymer Sensors: Paving a Path for Soft Materials Approaches.
Sommario/riassunto	This book explores the fabrication of soft material and biomimetic MEMS sensors, presents a review of MEMS/NEMS energy harvesters and self-powered sensors, and focuses on the recent efforts in developing flexible and wearable piezoelectric nanogenerators. It also includes a critical analysis of various energy harvesting principles, such as electromagnetic, piezoelectric, electrostatic, triboelectric, and magnetostrictive. Included are chapters that: Describe self/low-powered MEMS devices that are developed through biomimetic and bio-inspired approaches; Review the recent progress in kinetic MEMS/NEMS-enabled energy harvesters as self-powered sensors; Comprehensively review the ongoing research done in the field of

nanofiber-based flexible and wearable energy harvesters; Explore the current trends in the field of soft materials research and future challenges. This multidisciplinary book is appropriate for students and professionals in the fields of material science, mechanical engineering, electrical engineering, and bioengineering.

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