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Nota di contenuto	Frontmatter -- Preface -- Contents -- Part I: Fundamentals and methods -- Finite element modeling of energy harvesters: application to vibrational devices / Palma, Roberto / Pérez-Aparicio, José L. / Museros, Pedro -- Solar energy harvesting for wireless sensor systems / Viehweger, Christian -- Efficiency of vibration energy harvesting systems / Hadas, Zdenek / Smilek, Jan -- Energy management concepts for wireless sensor nodes / University of Technology Chemnitz, Martin -- Part II: Vibration converters and hybridization -- Magnetoelectric vibration energy harvesting / Naifar, Slim / Bradai, Sonia / Choura, Slim / Kanoun, Olfa -- Nonlinear electromagnetic vibration converter with bistable RMSHI for power harvesting from ambient vibration / Trigona, Carlo / Bradai, Sonia / Naifar, Slim / Kanoun, Olfa / Baglio, Salvatore -- Energy harvesting from an oscillating vertical piezoelectric cantilever with clearance / ygas, Krystian / Wolszczak, Piotr / Stczek, Pawe / Litak, Grzegorz -- On hybridization of electromagnetic vibration converters / Bradai, Sonia / Naifar, Slim / Elleuch, Riadh / Kanoun, Olfa -- Hybrid vibrational energy harvesting using piezoelectric and magnetostrictive transducers / Rysak, Andrzej / Borowiec, Marek / Syta, Arkadiusz / Litak, Grzegorz

-- Part III: Wireless energy transfer -- Beamforming design for secure SWIPT systems under a non-linear energy harvesting model / Boshkovska, Elena / Zlatanov, Nikola / Chen, Xiaoming / Ng, DerrickWing Kwan / Schober, Robert -- Radio frequency power transfer for wireless sensors in indoor applications / Chaour, Issam / Fakhfakh, Ahmed / Kanoun, Olfa -- Modeling and simulation of inductive-based wireless power transmission systems / Haerinia, Mohammad -- Wireless power transmission via a multi-coil inductive system / Kallel, Bilel / Bouattour, Ghada / Kanoun, Olfa / Trabelsi, Hafedh -- Energy management for inductive power transmission / Bouattour, Ghada / Kallel, Bilel / Kanoun, Olfa / Derbel, Houda -- Part IV: Energy saving and management strategies -- Towards energy-efficient power management for wireless sensors networks / Chéour, Rym / Jmal, Mohamed Wassim / Kanoun, Olfa / Abid, Mohamed -- Optimal energy allocation in energy harvesting and sharing wireless sensor networks / Knorn, Steffi / Quevedo, Daniel E. -- Energy-efficient techniques in wireless sensor networks / Khriji, Sabrine / Houssaini, Dhouha El / Kammoun, Ines / Kanoun, Olfa -- A wake-up receiver for online energy harvesting enabled wireless sensor networks / Bdiri, Sadok / Derbel, Faouzi / Kanoun, Olfa -- Part V: System design and applications -- Wireless sensor networks in agricultural applications / Houssaini, Dhouha El / Khriji, Sabrine / Besbes, Kamel / Kanoun, Olfa -- Piezoelectric energy harvesting for monitoring of rail bridge infrastructure / Cahill, Paul / Pakrashi, Vikram -- Hybrid energy harvesting methodologies for energizing sensors towards power grid applications / Yang, Feng / Du, Lin -- Energy harvesting for a wireless monitoring system of overhead high-voltage power lines / Zhao, Xinming / Keutel, Thomas / Kanoun, Olfa -- Series: Advances in Signals, Systems and Devices

Sommario/riassunto

Wireless sensors and sensor networks (WSNs) are nowadays becoming increasingly important due to their decisive advantages. Different trends towards the Internet of Things (IoT), Industry 4.0 and 5G Networks address massive sensing and admit to have wireless sensors delivering measurement data directly to the Web in a reliable and easy manner. These sensors can only be supported, if sufficient energy efficiency and flexible solutions are developed for energy-aware wireless sensor nodes. In the last years, different possibilities for energy harvesting have been investigated showing a high level of maturity. This book gives therefore an overview on fundamentals and techniques for energy harvesting and energy transfer from different points of view. Different techniques and methods for energy transfer, management and energy saving on network level are reported together with selected interesting applications. The book is interesting for researchers, developers and students in the field of sensors, wireless sensors, WSNs, IoT and manifold application fields using related technologies. The book is organized in four major parts. The first part of the book introduces essential fundamentals and methods, while the second part focusses on vibration converters and hybridization. The third part is dedicated to wireless energy transfer, including both RF and inductive energy transfer. Finally, the fourth part of the book treats energy saving and management strategies. The main contents are: Essential fundamentals and methods of wireless sensors Energy harvesting from vibration Hybrid vibration energy converters Electromagnetic transducers Piezoelectric transducers Magneto-electric transducers Non-linear broadband converters Energy transfer via magnetic fields RF energy transfer Energy saving techniques Energy management strategies Energy management on network level Applications in agriculture Applications in structural health monitoring

	Application in power grids Prof. Dr. Olfa Kanoun is professor for measurement and sensor technology at Chemnitz university of technology. She is specialist in the field of sensors and sensor systems design.

2.

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Autore	Paltridge Brian
Titolo	Genre, frames and writing in research settings / / Brian Paltridge
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Lingua di pubblicazione	Inglese
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Note generali	Based on four of the author's articles published in various sources, 1993-1995.
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Nota di contenuto	GENRE, FRAMES AND WRITING IN RESEARCH SETTINGS; Editorial page; Title page; Copyright page; Table of contents; Acknowledgements; List of Figures; List of Tables; CHAPTER 1. Introduction; CHAPTER 2. Approaches to Genre; CHAPTER 3. Genre and Frames; CHAPTER 4. A Sample Analysis: Writing up research; CHAPTER 5. Summary and Conclusions; Appendix; Bibliography; Name Index; Subject Index
Sommario/riassunto	This book presents a perspective on genre based on what it is that leads users of a language to recognise a communicative event as an instance of a particular genre. Key notions in this perspective are those of prototype, inheritance, and intertextuality; that is, the extent to which a text is typical of the particular genre, the qualities or properties

that are inherited from other instances of the communicative event, and the ways in which a text is influenced by other texts of a similar kind. The texts which form the basis of this discussion are drawn from experimental research reporting in