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Autore	Matiko Joseph W.
Titolo	Applications of energy harvesting technologies in buildings / / Joseph W. Matiko, Stephen P. Beeby
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ISBN	1-5231-4620-6 1-63081-410-5
Descrizione fisica	1 online resource (216 pages) : illustrations, charts, photographs
Collana	Artech House integrated microsystems series
Disciplina	720.47
Soggetti	Sustainable buildings Sustainable architecture Energy harvesting
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Applications of Energy Harvesting Technologies in Buildings; Contents; 1 Introduction; 1.1 Background and Motivation; 1.2 Home and Building Automation ; 1.2.1 Wireless BAS; 1.2.2 Wireless Home Automation ; 1.3 The Scope of the Book; References; 2 Energy Harvesting in the Built Environments; 2.1 Introduction; 2.2 Energy-Harvesting Sources in Built Environments; 2.2.1 Energy Harvesting from Light Sources; 2.2.2 Energy Harvesting from Thermal Sources; 2.2.3 Energy Harvesting from Periodic Kinetic Sources; 2.2.4 Energy Harvesting from Intermittent Kinetic Sources 2.2.5 Energy Harvesting from Electromagnetic Waves2.2.6 Energy Harvesting from Inductive Power Transfer; 2.2.7 Energy Harvesting from Airflow; 2.2.8 Hybrid Energy Harvesting; 2.2.9 Summary of Energy Levels in Built Environments; 2.3 Empirical Energy Measurements in the Built Environments; 2.3.1 Energy Levels in Residential and Commercial Buildings; 2.3.2 Comparison of Power Levels Reported in the Literature and Those Obtained Imperially; 2.4 Energy-Harvesting Sources on the Human Body; 2.5 Conclusions; References 3 Solar Cell-Powered Sensor Node for Emotion Monitoring Systems in Ambient-Assisted Living Environment3.1 Introduction; 3.1.1 Overview

Sommario/riassunto

This timely new resource explores the available energy sources within commercial and residential buildings and the available technologies for energy harvesting. Energy harvesting within built environments is presented using strong research and commercial examples. This book includes clear and concise case studies on solar cell powered sensor nodes for emotion monitoring systems in ambient assistive living environments and inductive/RF power transfers. Thermoelectric energy harvesting and power management circuit design, airflow and vibration energy harvesting is also explored. The book concludes with a look at the future of energy harvesting in buildings.

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Autore	Rai Praveen Kumar
Titolo	Advances in Water Resource Planning and Sustainability / / edited by Praveen Kumar Rai
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ISBN	981-9936-60-8
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (321 pages)
Collana	Advances in Geographical and Environmental Sciences, , 2198-3550
Disciplina	333.91
Soggetti	Water Hydrology Sustainability Power resources Natural Resource and Energy Economics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Remote sensing in water resource monitoring A comprehensive review on monitoring the quality and quantity of the water resources using remote sensing applications -- Assessment of Vegetation Dynamics of Paddy Crop using”TIMESAT” and Remote Sensing & GIS Techniques in Command Areas -- Assessment of River Water Dynamics and Optically Active Water Quality Parameters over Punjab, Based on Cloud Computing -- Analysis of land use/land coverchange and its impact on 2021 Chiplun Flood, Maharashtra, India -- Flood Disaster Hazards: A State-of-the-Art Review of Causes, Impacts, and Monitoring -- Impact of Land Use Systems and Climate Change on Water Resources: Indian Perspectives -- Seawater Intrusion Mapping along Penneru River Basin Area, SPS Nellore District, Andhra Pradesh – A Case Study -- Flood detection and Flood Mapping using Multi-temporal Synthetic Aperture Radar and Optical data -- Climate Change and Its impact -- Impact of land use changes on water resource: Assessment through Remote Sensing -- Vulnerability to Climate Change in different sectors of Lugvalley, Kullu district of Himachal Pradesh -- Assessment of Groundwater level and fluctuations using Geospatial Techniques in Nambiyar Watershed, South India -- River Flood Monitoring and

	Management: A Review -- Evaluation of Groundwater Quality for Irrigation-A Case Study of West Godavari District of Andhra Pradesh -- Interactions of Hydrological Parameters and the Effects on Perennial Riverbanks of the Indo-Bhutan Region in Eastern Himalaya -- Ecosystem Services in the Riverine Landscapes -- Evaluation of Morphometric Analysis of Kharag River basin, Odisha using Geospatial Techniques.
Sommario/riassunto	Sustainable water resources planning deals with the interface of water resources science and the needs of human populations. It highlights works that addresses practical methods and basic research in, for example: quantity and quality management of groundwater and surface water resources; sustainability of water resources and water availability; water use and reuse including managed aquifer recharge and storage; geopolitical and socio-economic aspects of water resource management; water development and human activity impacts on ecological systems and human health, including, for instance, agricultural and climatic impacts, subsurface waste storage and injection, geothermal energy development and subsurface energy storage. This book provides up-to-date systematic and scientific analyses of such water problems and suggests sustainable measures to overcome them through effective surface and sub-surface water resource management. It is immensely valuable to students, researchers, water resource managers, hydrologists and all those who are engaged or interested in any aspect of river water conservation and management of water resources.