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| Nota di contenuto | Frontmatter -- Table of Contents -- Introduction: Writing European History in 2022 -- Temporality, Narrative Structure and Strategy in the Works of Two Nahua Scholars, Fernando de Alva Ixtlilxochitl and Domingo de Chimalpahin -- "Will the Day Break in the East?": The Origins of Anglo-Prussian Protestant Bishopric in Jerusalem, 1840–1880 -- Trading and Invading: The Kaiserin-Augusta-River-Expedition and its Collecting Strategies in German New Guinea -- Of "Golden Bridges" and "Big Bags": Thinking the Colonial Massacre in British, German and Dutch Manuals of Colonial Warfare, c. 1860–1910 -- Protecting Bad Intel in a Dirty War: Britain's Emergency in Kenya and the Origins of the 'Migrated Archives', 1952–1960 -- Forum -- Researching the History of Social Differentiation and Human Categorization -- Biographical Notes |
| Sommario/riassunto | The present issue of the European History Yearbook showcases research initially presented at the annual Mainz-Oxford graduate workshop "European History Across Boundaries from the Sixteenth to the Twentieth Century". The essays shed the straightjacket of national history and cross boundaries and borders. They do so by discussing the transcultural, transnational, and transimperial scopes of their research. Methodologically speaking, the European history that the authors have been researching and writing draws on comparative history, the study of transfer processes and entanglements, and the |

histoire croisée, among others. The contributions are not only interested in writing European history across boundaries but also in decentering Europe. Individual papers deal with Central America, East Africa, the Middle East, and Oceania. They take the readers far away from the imperial metropolises of Berlin, Madrid, or London - and yet still tell a story about these European imperial centres and societies.

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| Nota di contenuto | Cover -- Title Page -- Copyright Page -- Contents -- Preface -- Acknowledgements -- Chapter 1 Self-Powered Sensory Transducers: A Way Toward Green Internet of Things -- 1.1 Introduction -- 1.2 Need of the Work -- 1.3 Energy Scavenging Schemes in WSN -- 1.3.1 Photovoltaic or Solar Cell -- 1.3.2 Temperature Gradient -- 1.3.3 Pressure Variations -- 1.3.4 Plant Microbial Fuel -- 1.3.5 Wind/Liquid Flow -- 1.3.6 Vibrations -- 1.3.7 Friction -- 1.4 Self Powered Systems and Green IoT (G-IoT) -- 1.5 Application Area and Scope of Self-Powered System in G-IoT -- 1.5.1 Terrestrial Applications -- 1.5.1.1 |

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 1.5.1.4 Medicines -- 1.5.1.5 Environment Monitoring -- 1.5.1.6
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Sommario/riassunto

This book is an attempt to aim at a very futuristic vision of achieving self-powered cyber-physical systems by applying a multitude of current technologies such as ULP electronics, thin film electronics, ULP transducers, autonomous wireless sensor networks using energy harvesters at the component level and energy efficient clean energy for powering data centers and machines at the system level. This is the need of the hour for cyber-physical systems since data requires energy when it is stored, transmitted, or converted to other forms. Cyber-physical systems will become energy hungry since the industry trend is towards ubiquitous computing with massive deployment of sensors and actuators. This is evident in using blockchain technologies such as Bitcoin or running epochs for artificial intelligence (AI) applications. Hence, there is a need for research to understand energy patterns and distribution in cyber-physical systems and adopt new technologies to transcend to self-powered cyber-physical systems. This book explores the recent trends in energy management, self-powered devices, and methods in the cyber-physical world. Written and edited by a team of experts in the field, this book tackles a multitude of subjects related to cyber physical systems (CPSs), including self-powered sensory transducers, ambient energy harvesting for wireless sensor networks, actuator methods and non-contact sensing equipment for soft robots, alternative optimization strategies for DGDCs to improve task distribution and provider profits, wireless power transfer methods, machine learning algorithms for CPS and IoT applications, integration of renewables, electric vehicles (EVs), smart grids, RES micro-grid and EV systems for effective load matching, self-powered car cyber-physical systems, anonymous routing and intrusion detection systems for VANET security, data-driven pavement distress prediction methods, the impact of autonomous vehicles on industries and the auto insurance market, Intelligent transportation systems and associated security concerns, digital twin prototypes and their automotive applications, farming robotics for CPS farming, self-powered CPS in smart cities, self-powered CPS in healthcare and biomedical devices, cyber-security considerations, societal impact and ethical concerns, and advances in human-machine interfaces and explore the integration of self-powered CPS in industrial automation.
