2026 IEEE 14th International Workshop on Energy Harvesting & Energy-Neutral Sensing Systems (ENSsys 2026)

Saint-Malo, France
11 May 2026

IEEE Catalog Number: CFP267CJ-POD
ISBN: 979-8-3195-2134-7

IEEE Advancing Technology for Humanity

Copyright © 2026, IEEE

All Rights Reserved

Copyright and Reprint Permissions:

Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

*** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.

IEEE Catalog Number:	CFP267CJ-POD
ISBN (Print-On-Demand):	979-8-3195-2134-7
ISBN (Online):	979-8-3195-2133-0

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA

Phone:	(845) 758-0400
Fax:	(845) 758-2633
E-mail:	curran@proceedings.com
Web:	www.proceedings.com



TABLE OF CONTENTS

A Class AAA Solar Testbed for Reproducible Long-Term Characterization of Energy-Harvesting Systems 1
Lukas Schulthess, Andreas Rätz, Michele Magno, Philipp Mayer

Impact of Periodically Varying Illumination on Photovoltaic-Based Energy Harvesting Performance 8
Leander B. Hörmann, Lukas Springer, Veronika Putz

Raising Soil Microbial Fuel Cells into Robust Bio-Batteries 15
Simon Guterman, Pichaya Limprayoon, Diego Shipmon, John Mamish, Josiah Hester, Yaman Sangar

Exploring Biodegradable Non-volatile Memories for Intermittent Computing 22
Matteo Visotto, Andrea Maioli, Luca Mottola

Energy-Adaptive and Delivery-Assured Batteryless LoRaWAN Image Sensing via Cross-Layer Co-Design 29
Samit Hasan, Yidi Wang, Daniel S. Truesdell, Victor Ariel Leal Sobral, Jonathan L. Goodall Benton H. Calhoun

Energy–Latency Characterization of an Integrated Wake-Up Radio SoC 36
Patrick Pastorelli, Davide Brunelli, Matteo Nardello

Open World Radio Frequency Energy Harvesting-Based Eavesdropping Attack Model 43
Jiawen Chen, Tao Ni, Weitao Xu

Performance of a Piezoelectric Energy Harvester Under Harmonic and Transient Railway Excitation 50
Lucky Adoh, David Thompson, Daniil Yurchenko, Giacomo Squicciarini

An Interactive Digital-Twin Dashboard for Energy Harvesting assisted IIoT 52
Huijun Tang, Ling Li, Chang Liu, Hongjian Sun

Passive Wearable Haptic Feedback Using Infrastructure-Powered Electromagnetic Actuation 54
Hua Huang

Time-Aware Modeling of RRAM Persistence in Closed-Loop RISC-V Intermittent Systems 56
Huiqiao Zhang, Markus Fritscher, Christian Wenger, Dietmar Fey

An Energy Analysis of Indoor UWB Localization Using RF and Photovoltaic Energy Harvesting 58
Gabriele Marasca, Martina Lacavalla, Rudi Paolo Paganelli, Aldo Romani