

Special Issue

Alternative Power Supply System and Circuits for Low-Power Biomedical and Implantable Devices

Message from the Guest Editor

Biomedical and implantable devices mostly rely on external power sources as their primary energy source. However, batteries have a limited supply of energy and have to be recharged or replaced once the energy is consumed. Combining power management circuitry and advanced micro/nanotechnologies enables the fabrication and development of novel energy storage and harvesting technologies to supply continuous source of power to biomedical and implantable devices. The purpose of this Special Issue is to publish high-quality research papers addressing recent advances on biofuel cells and energy harvesting technologies.

- Development of non-enzymatic or enzymatic biofuel cells
- Development of piezoelectric, thermoelectric, or electromagnetic energy harvesters
- Design of novel ambient RF energy harvester systems
- Fuel Cell Technologies & Applications
- Photovoltaic Technologies & Applications
- Power management in energy harvesting sensors or biosensors
- Case Studies & Best Practices
- Other

Guest Editor

Dr. Gymama Slaughter

1. Center for Bioelectronics, Old Dominion University, Norfolk, VA 23508, USA

2. Department of Electrical and Computer Engineering, Old Dominion University, Norfolk, VA, USA

Deadline for manuscript submissions

closed (30 June 2017)



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*Journal of Low Power
Electronics and Applications*
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
jlpea@mdpi.com

mdpi.com/journal/

jlpea





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About the Journal

Message from the Editor-in-Chief

Journal of Low Power Electronics and Applications is an open access journal which provides an advanced forum for rapid dissemination of innovative research and important results in all aspects of low power electronics and design.

It publishes reviews, regular research papers and short communications. Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. The full experimental details must be provided so that the results can be reproduced.

Editor-in-Chief

Dr. Davide Bertozzi

Reader in Advanced Processing Technologies, Department of Computer Science, University of Manchester, Manchester M13 9PL, UK

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 24.2 days after submission; acceptance to publication is undertaken in 3.8 days (median values for papers published in this journal in the second half of 2025).

Journal Rank:

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