

2026 Argentine Conference on Electronics (CAE 2026)

**Tucuman, Argentina
12-13 March 2026**



**IEEE Catalog Number: CFP26S41-POD
ISBN: 979-8-3195-0683-2**

**Copyright © 2026 by the Institute of Electrical and Electronics Engineers, Inc.
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:	CFP26S41-POD
ISBN (Print-On-Demand):	979-8-3195-0683-2
ISBN (Online):	979-8-3195-0682-5
ISSN:	2836-1016

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

CURRAN ASSOCIATES INC.
proceedings
.com

Table of Contents

Low Power and Low Complexity 0.3V CMOS Voltage References Using Single VT MOSFETs	1
<i>J. Goyret, M. Cassani, M. Carrá, L. Caivano, M. Inza</i>	
Design of a multi-core hybrid CMOS-memristor chip for analog programming	6
<i>L. Camuñas-Mesa, R. Méndez-Romero, T. Serrano-Gotarredona, B. Linares-Barranco</i>	
Low-Latency Architecture for Open-Circuit Fault Diagnosis in Electric Drive Inverter Power Switches	12
<i>F. Togni, F. Aguilera, G. Bossio, L. Venghi</i>	
Design of a Variation-Resilient 2 MHz PWM Circuit for 28 nm Buck Converters Using an Error-Budget Approach	18
<i>O. Amaya, V. Muñoz, J. Ardila</i>	
Analog Mixer with Ionizing-Radiation-Test Capabilities	24
<i>P. Ferreyra, I. Alvarado, J. Patiño, J. Amado, F. Dadam, C. Barrientos</i>	
Multi-agent System for Managing and Monitoring Load Consumption in Electrical Microgrids	29
<i>P. Silva, L. Krzyzanowski, G. Fernández, F. Botterón</i>	
Exploring hardware/software trade-offs for CORDIC acceleration in a customized processor	35
<i>D. Rosso, G. Riva, C. Zerbini</i>	
Electrometric Measurement and Dynamic Compensation of a Vanadium Self-Powered Neutron Detector	41
<i>T. Guerrero, J. Ronchetti</i>	
Fully Passive Integrated Optical NOT Gate Using a Phase-Apodized Spiral Bragg Grating	49
<i>M. Tosi, L. Rossini, J. Azaña, P. Caso</i>	
A 50GHz Bandwidth Distributed Amplifier Analog Front-End for 80GS/s Time-Interleaved Track-and-Hold in 45-nm CMOS	55
<i>F. Tolosa, B. Reyes</i>	
A Multi-Channel Synchronous Acquisition System on the Redpitaya STEMLab Platform: Application to Atmospheric Muon Rate Measurements	61
<i>M. Mattenet, L. Estrada, L. Cabrera, M. Berisso</i>	
Innovation in Linear Algebra Teaching: Modelling and Solving the “Lights Out!” Game with Python and Arduino	67
<i>J. Gak, V. Artigue, J. Flores Godoy</i>	
Testbed for Custom Open-Source Power Management Integrated Circuit in Harsh Space Environments	71
<i>I. Muñoz, J. Marin, F. Illanes, M. Diaz Quezada, C. A. Rojas</i>	
Design of a STEAM–PBL Teacher Training Framework for Robotics and Computational Thinking in Primary Education	77
<i>R. Moirano, P. Julián, C. Cincunegui, M.V. Acuña, F. Falconieri, G. Difranco</i>	