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Bio:

GONG CHEN received the B.S. degree in electronic engineering from University of Electronic Science and Technology of China (UESTC), in 2005, the M.S. degree in Information, Production and Systems (IPS) from the Waseda University, Japan, in 2010, and the Ph.D. degree in Integrated circuits and systems from the Kitakyushu University, Japan, in 2013.

During 2013-2016, he joined the the Advanced Semiconductor Research Institute, Panasonnic, Osaka, Japan. In 2018, he completed a research assignment from IPS at Waseda University. Since 2018, , he has been a Chair of the Microelectronic Department, Chengdu University of Information Engineering, Chengdu, China. His current research interests include physics, analog and mixed-signal electronics, and their joint feasibility aspects. He has authored or co-authored about 25 papers and holds six patents.

Speech Title:

Low-Power ADC Design Overview and Survey of State-of-the-Art Techniques

低功耗 ADC 设计概述和先进技术调研

Speech Abstract:

This topic presents an overview for low-power analog-to-digital converters (ADCs). It covers the operation principle, error analysis, and practical design issues. Furthermore, this topic provides a comprehensive survey of state-of-the-art low-power design techniques for every circuit block in ADC, including comparator, capacitive digital-to-analog converter (DAC), and logic control circuit. The goal of this topic is to provide a useful overview to ADC designers who want to improve the energy efficiency targeting low-to-medium speed applications.

本主题概述了低功耗模数转换器（ADC）。它涵盖了工作原理、误差分析和实际的设计问题。此外，本主题还对 ADC 中每个电路模块的先进低功耗设计技术进行了全面调研，包括比较器、电容式数模转换器（DAC）和逻辑控制电路。本主题的目标是针对低到中速应用的低功耗 ADC 设计者提供一个有用的概述。