

A Special Issue Of Analog Integrated Circuits And Signal Processing An International Journal Volume 14 Nos 1 2 1997

*This volume contains revised and extended research articles written by prominent researchers. Topics covered include electrical engineering, circuits, artificial intelligence, data mining, imaging engineering, bioinformatics, internet computing, software engineering, and industrial applications. The book offers tremendous state-of-the-art advances in electrical engineering and also serves as an excellent reference work for researchers and graduate students working with/on electrical engineering. Contents:*Low-Noise Measurements of Small Currents and Voltages for Characterization of Semiconductor Nanostructures at Low Temperatures (J Jacob and B Fiedler)*An Integrated Approach to Power Quality Problems in Micro-Grids (Tsao-Tsung Ma)Discriminating Among Inrush Current, External Short Circuit and Internal Winding Fault in Power Transformer Using Coefficient of DWI (Jittiphong Klomjit and Athapol Ngoopitakkul)Classification of Epileptic EEG Subbands Based on the Local Maxima (S Janjarsjitt)A Concurrent Error Detection and Correction Based Fault-Tolerant XOR-MNOR Circuit for Highly Reliable Applications (Mouna Karmani, Chiraz Khedhiri, Belgacem Hamdi, Ka Lok Man, Eng Gee Lim and Chi-Un Lei)Probability Distributions on an AND-OR Tree Under Directional Algorithms (Toshio Suzuki and Ryota Nakamura)An Efficient Differential Full Adder (Chiraz Khedhiri, Mouna Karmani, Belgacem Hamdi and Ka Lok Man)Using the Web-Camera Based Eye Tracking Technology to Explore the Audience's Attention Preferences on the Different Layout Compositions of Information (Hui-Hui Chen, Yi-Ting Yeh, Chiao-Wen Kao, Bor-Jiunn Hwang and Chin-Pan Huang)Human Identification Based on Tensor Representation of the Gait Motion Capture Data (Henryk Josiński, Adam Świński, Karol Jedrasiak and Daniel Kostrzewa)Formal Modelling and Verification of Compensating Web Transactions (Shirshendu Das, Shounak Chakraborty, Hemangee K Kapoor and Ka Lok Man)A Machine Learning Approach for Classification of Internet Web Sites (Ajay S Patil and B V Pawar)Web Services For Chronic Pain Monitoring (Nuno Gonçalo Coelho Costa Pombo, Pedro José Guerra de Araújo and Joaquim Manuel Vieira da Silva Viana)Parallel Binomial American Option Pricing on CPU-GPU Hybrid Platform (Nan Zhang, Chi-Un Lei and Ka Lok Man)The Subsystem Grouping Scheme Using Use Case Dependency Graph and Domain-Specific Semantic Model for Large Complex Systems (Nanchaya Khrueahong and Wiwat Vatanawood)MOBM: A Methodology for Building Practical Domain Ontologies from Database Information (Minyoung Ra, Donghee Yoo, Sungchun No, Jinhee Shin and Changhee Han)A Trial of the Dynamic Weighted Sum Method for Multi-Objective Optimization (Hong Zhang)A Multi-Agent Platform to Manage Distributed and Heterogeneous Knowledge by Using Semantic Web (Inaya Lahoud, Davy Monticolo, Vincent Hilaire and Samuel Gomes)An Intelligent Train Marshaling Based on the Processing Time Considering Group Layout of Freight Cars (Yoichi Hirashima)A Web-Based Multilingual Intelligent Tutor System Based on Jackson's Learning Styles Profiler and Expert Systems (H Movafegh Ghadirli and M Rastgarpour)Automatic Medical Image Segmentation by Integrating KFCM Clustering and Level Set Based FTC Model (M Rastgarpour and J Shanbehzadeh)Fingerprint Image Depuration by Multi-Stage Computational Method (Iwasokun Gabriel Babatunde, Akinyokun Oluwole Charles, Alese Boniface Kayode and Olabode Olatubosun)Human Bio Functions as FPGAs Chip Design – An Insulin Perspective (Ammar El Hassan, Loay Alzubaidi and Jaafar Al Ghazo)Hamaker Coefficient Concept Approach as a Surface Thermodynamic Tool for Interpreting the Interaction Mechanisms of Human Immunodeficiency Virus and the Lymphocytes (C H Achebe and S N Omenyi) Readership: Professionals, academics and graduate students in electrical & electronic engineering, artificial intelligence/machine learning, pattern recognition/image analysis, computer engineering. Keywords:Electrical Engineering;Circuits;Artificial Intelligence;Data Mining;Imaging Engineering;Bioinformatics;Internet Computing;Software Engineering;Industrial Applications*

The book contains a selection of articles on special research topics on Mathematical Biology and the interdisciplinary fields of mathematical modelling of biosystems. The treatment is both pedagogical and advanced to enhance future scientific research. We include comprehensive reviews written by prominent leaders of scientific research groups, new results on Population Dynamics such as Hybrid Discrete-Continuous Models of Cell Populations and the Hopf bifurcation on Predator-Prey Models, and some state of the art research on Medical Physics such as Optimization Methods applied to Raman Spectroscopy. Other topics covered focus on evolution biology, infectious diseases, DNA structure and many more.

Changes in the present challenge us to reinterpret the past, but historians have not yet come to grips with the convergence of computing, media, and communications technology. Today these things are inextricably intertwined, in technologies such as the smartphone and internet, in convergent industries, and in social practices. Yet they remain three distinct historical subfields, tilted by different groups of scholars using different tools. We often call this conglomeration “the digital,” recognizing its deep connection to the technology of digital computing. Unfortunately, interdisciplinary studies of digital practices, digital methods, or digital humanities have rarely been informed by deep engagement with the history of computing. Contributors to this volume have come together to reexamine an apparently familiar era in the history of computing through new lenses, exploring early digital computing and engineering practice as digital phenomena rather than as engines of mathematics and logic. Most focus on the period 1945 to 1960, the era in which the first electronic digital computers were created and the computer industry began to develop.

Because digitality is first and foremost a way of reading objects and encoding information within them, we are foregrounding topics that have until now been viewed as peripheral in the history of computing: betting odds calculators, card file systems, program and data storage, programmable calculators, and digital circuit design practices. Reconceptualizing the “history of computing” as study of the “early digital” decenters the stored program computer, repositioning it as one of many digital technologies.

[A Special Issue of Analog Integrated Circuits and Signal Processing An International Journal Volume 8, No. 1 \(1995\)](#)

[Low-Voltage Low-Power Analog Integrated Circuits](#)

[Special issue: Analog design issues in digital VLSI circuits and systems](#)

[IJPHM Special Issue on Wind Turbine PHM \(Color\)](#)

[NBS Special Publication](#)

[Special Issue--analog Signal Processing](#)

[Special Issue on Analog Circuit Techniques in the Digital-oriented Era](#)

[Design of High-Frequency Integrated Analogue Filters](#)

Low-Voltage Low-Power Analog Integrated Circuits brings together in one place important contributions and state-of-the-art research results in this rapidly advancing area. Low-Voltage Low-Power Analog Integrated Circuits serves as an excellent reference, providing insight into some of the most important issues in the field.

Two large international conferences on Advances in Engineering Sciences were held in Hong Kong, March 16–18, 2016, under the International MultiConference of Engineers and Computer Scientists (IMECS 2016), and in London, UK, 29 June – 1 July, 2016, under the World Congress on Engineering (WCE 2016) respectively. This volume contains 21 revised and extended research articles written by prominent researchers participating in the conferences. Topics covered include engineering mathematics, computer science, electrical engineering, manufacturing engineering, industrial engineering, and industrial applications. The book offers state-of-the-art advances in engineering sciences and also serves as an excellent reference work for researchers and graduate students working with/on engineering sciences.

Smart Sensor Interfaces brings together in one place important contributions and up-to-date research results in this fast moving area. Smart Sensor Interfaces serves as an excellent reference, providing insight into some of the most challenging research issues in the field.

[Exploring the Early Digital](#)

[Special Issue on Analog, Mixed-signal and RF Testing](#)

[Analog and Digital Filter Design](#)

[Analog Circuits](#)

[A Special Issue of Analog Integrated Circuits and Signal Processing, An International Journal Volume 14, Nos. 1/2 \(1997\)](#)

[Analog Signal Processing](#)

[Biomat 2011 - International Symposium On Mathematical And Computational Biology](#)

[Special Issue on Analog/mixed Signal Circuit Design and Synthesis](#)

[Iaeng Transactions On Engineering Sciences: Special Issue For The International Association Of Engineers Conferences 2016](#)

Analog Signal Processing brings together in one place important contributions and state-of-the-art research results in this rapidly advancing area. Analog Signal Processing serves as an excellent reference, providing insight into some of the most important issues in the field.

This book brings together leading researchers to highlight recent advances and identify promising directions for future development. Motivated by the market for mobile and wireless communications, fully integrated analog filters for high-frequency applications are now receiving great interest world-wide. Chapters are dedicated to MOSFET-C and Gm-C filters, current-mode continuous-time filters, log-domain filters, switched-current filters, adaptive

filters and on-chip automatic tuning. The topical nature of the book and caliber of the authors ensures that this book will be of wide interest to the electronics community world-wide.

Modeling and Simulation of High Speed VLSI Interconnects brings together in one place important contributions and state-of-the-art research results in this rapidly advancing area. Modeling and Simulation of High Speed VLSI Interconnects serves as an excellent reference, providing insight into some of the most important issues in the field.

[Special Issue on Analog, Mixed-signal, RF, and MEMS Testing](#)

[Special Issue](#)

[Special Issue on the 1994 ISSCC--analog, Signal Processing, and Logic Circuits](#)

[Special Issue on Analog LSI and Related Technology](#)

[Special Issue on Analog Circuits](#)

[Special Issue on Low-power Analog, Digital LSIs and ASICs for Multimedia](#)

[Smart Sensor Interfaces](#)

[Joint special issue on VLSI analog and digital signal processing](#)

[Analog VLSI Neural Networks](#)

An international conference on Advances in Engineering Sciences was held in Hong Kong, March 13-15, 2019, under the International MultiConference of Engineers and Computer Scientists (IMECS 2019). This unique compendium contains 12 revised and extended research articles written by prominent researchers participating

in the conferences. Topics covered include engineering physics, computer science, electrical engineering, industrial engineering, and industrial applications. The volume offers state-of-the-art advances in engineering sciences and also serves as an excellent reference material for researchers and graduate students working with/on engineering sciences.

Analog Design Issues in Digital VLSI Circuits and Systems brings together in one place important contributions and up-to-date research results in this fast moving area. Analog Design Issues in Digital VLSI Circuits and Systems serves as an excellent reference, providing insight into some of the most challenging research issues in the field.

This issue of the STI Review focuses on the new rationale and approaches in technology and innovation policy.

[Special Issue on High-performance Analog-to-digital and Digital-to-analog Converters](#)

[A Special Issue of Analog Integrated Circuits and Signal Processing](#)

[IAENG Transactions on Electrical Engineering Volume 1](#)

[Symbolic Analysis of Analog Circuits, Techniques, and Applications](#)

[STI Review, Volume 1998 Issue 1 Special Issue on New Rationale and Approaches in Technology and Innovation Policy](#)

[Special Issue: Analog, Mixed-signal and RF Testing](#)

[Special Issue on Analog and Signal Processing Circuits](#)

[Modeling and Simulation of High Speed VLSI Interconnects](#)

[Iaeng Transactions On Engineering Sciences: Special Issue For The International Association Of Engineers Conferences 2019](#)

This book brings together important contributions and state-of-the-art research results in the rapidly advancing area of symbolic analysis of analog circuits. It is also of interest to those working in analog CAD. The book is an excellent reference, providing insights into some of the most important issues in the symbolic analysis of analog circuits.

This book brings together in one place important contributions and state-of-the-art research in the rapidly advancing area of analog VLSI neural networks. The book serves as an excellent reference, providing insights into some of the most important issues in analog VLSI neural networks research efforts.

[Analog, Signal Processing, and Communications Circuits](#)

[Special Issue on the 1995 ISSCC](#)

[Analog Design Issues in Digital VLSI Circuits and Systems](#)

[A Special Issue of Analog Integrated Circuits and Signal Processing, an International Journal, Vol. 14, Nos. 1-2\(1997\)](#)

[Analog and Mixed Signal Testing](#)

[Special Issue on Analog and Mixed-signal IC Design and Design Methodologies](#)

[A Special Issue of Analog Integrated Circuits and Signal Processing An International Journal Vol. 5, No. 1 \(1994\)](#)

[Special Issue on Analog Integrated Circuits](#)