
FOREWORD

Special Section on Selected Papers from the 18th Workshop on Circuits and Systems in Karuizawa

The eighteenth workshop on Circuits and Systems in Karuizawa was held successfully during April 25th to 26th, 2005. The workshop ran in 99 selected contributions, 14 invited talks and a special lecture, which were focused both on fundamental and application aspects of hot topics in broader circuits and systems including nonlinear problems, signal processing, VLSI technology, and concurrent systems. The workshop has been organized and run by the workshop committee of 78 young and active researchers and engineers, which was supported by the System and Signal Processing Sub-Society and the Technical Group of Nonlinear Problems, IEICE. The success of the 18th Workshop on Circuits and Systems in Karuizawa was totally realized by their contribution.

In response of the call for papers for this special section, we received 37 submissions, which were enhanced and expanded versions of the papers presented at the workshop. Through the same review process as the regular section, we selected 27 papers to form this Special Section.

Among the young speakers of the workshop papers, the workshop committee selected the following six as winners of the Young Excellent Author Award. Two of them are also included in this special section.

Takashi Kawamoto (Hitachi Ltd.), Seiichiro Moro (Univ. of Fukui), Shogo Muramatsu (Niigata Univ.), Kohji Takano (IBM Japan Ltd.), Shigeki Toriumi (Chuo Univ.), Takaya Yamamoto (The Univ. of Tokyo)

As guest editor, I greatly appreciate their effort of the editorial committee members of this special section. I would also like to thank the reviewers for their cooperation in spite of a limited time due to the tight schedule for special section. Finally I would like to express my deep thanks to all the authors who submitted papers to this special section.

Secretary: Shogo Muramatsu (Niigata University)

Guest Associate Editors: Yoshito Higa (Texas Instruments Japan Ltd.), Eitake Ibaragi (Analog Devices Inc.), Yoshinao Isobe (National Institute of Advanced Industrial Science and Technology), Kazuhito Ito (Saitama University), Tomoaki Kimura (IBM Japan Ltd.), Akira Kitajima (Osaka Electro-Communication University), Shigeki Obote (Ibaraki University), Takashi Sato (Renesas Technology Corp.), Tetsuya Shimamura (Saitama University), Nobuhiro Shiramizu (Hitachi Ltd.), Takashi Takenaka (NEC Corporation), Satoshi Taoka (Hiroshima University), Masahiro Wada (Konan University), Takayuki Watanabe (University of Shizuoka), Toshinori Yamada (Saitama University)

Yoshifumi Nishio, Guest Editor

Yoshifumi Nishio (*Member*) received B.E., M.E., and Ph.D. degrees in electrical engineering from Keio University, Yokohama Japan, in 1988, 1990, and 1993, respectively. In 1993, he joined the Department of Electrical and Electronic Engineering at Tokushima University, Tokushima Japan, where he is currently an Associate Professor. From May 2000 he spent a year in the Laboratory of Nonlinear Systems (LANOS) at the Swiss Federal Institute of Technology Lausanne (EPFL) as a Visiting Professor. His research interests include analysis and application of chaos in electrical circuits, analysis of synchronization in coupled oscillatory circuits, development of analyzing methods for nonlinear circuits, theory and application of cellular neural networks, and neural network architecture. He was the Chair of the IEEE CAS Technical Committee on Nonlinear Circuits and Systems (NCAS) during 2004–2005 and is currently the Steering Committee Secretary of the IEICE Research Society of Nonlinear Theory and its Applications (NOLTA). He is serving as an Associate Editor for the IEEE Transactions on Circuits and Systems Part I and the RISP Journal of Signal Processing. He is a member of the IEEE and the RISP.

