

Guest Editorial

Special Issue on the 2019 IEEE International Symposium on Circuits and Systems

THIS special issue of the IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS—PART II: EXPRESS BRIEFS (*TCAS-II*) follows the successful co-publication initiative started last year by the IEEE Circuits and Systems Society (CASS) to publish a selection of the best papers accepted for presentation at the IEEE International Symposium on Circuits and Systems (ISCAS), held this year in Sapporo, Japan, on May 26–29. As *TCAS-II* only publishes five-page briefs, and hence both conference and journal versions of selected works would be largely overlapped, the papers included in this issue represent the only record published in *IEEE Xplore* and they will not appear in the *Proceedings of IEEE ISCAS*, which will however contain DOI links to the corresponding *TCAS-II* papers. Similar to other IEEE societies, IEEE-CASS intends to shift the role of IEEE conferences toward networking events as well as a scientific discussion opportunity, rather than putting the emphasis on the conference paper publication itself.

The selection process of the papers of this special issue has been carried out by following a procedure similar to that used last year. First, a preliminary selection of 52 papers was done among the 1285 newly submitted papers to ISCAS, and those selected papers were invited to submit revised versions to *TCAS-II*. This first selection was made on the basis of the timeliness and quality of technical results presented, the outcome of the review process and the recommendations of the Review Committee Members (RCMs) and Track Chairs (TCs) who were involved in the review process of ISCAS. Among those papers selected, a total of 48 authors accepted the invitation to submit the improved versions of their manuscripts to *TCAS-II*, by taking into account the suggestions and recommendations given by ISCAS reviewers.

In a second step, revised manuscripts were submitted to *TCAS-II* for further review, involving both ISCAS reviewers and other highly qualified reviewers in order to guarantee the highest quality of the papers finally accepted for publication at *TCAS-II*. This second review process was handled by the following Guest Editors (alphabetically listed): Andreas G. Andreou, Shoushun Chen, Zbigniew Galias, Hanho Lee, Vasily Moshnyaga, Nathan Neihart, Wen-Hsiao Peng, Georgios Sirakoulis, Fernando Tyrone, Chuan Zhang and Bo Zhao—all of them leading experts in diverse research areas covering the whole spectrum of topics included in ISCAS.

The deadline for submitting revised papers was on February 25 and final decisions were taken on March 25. As in the previous edition of this special issue, this means a really tight schedule, justified by the fact that selected papers would be practically considered as manuscripts subject to minor revision, and prompted by the need to have all papers available during the conference, published either in *TCAS-II* or in the *Proceedings of ISCAS*. As a result of the review process, 34 papers were finally accepted for publication at *TCAS-II*. These papers cover a wide variety of research areas. These include, among others, the following topics: circuit theory; analog and mixed-signal circuits (bootstrap circuits, regulators, oscillators, phase-locked loops and data converters); Radio-Frequency (RF) and millimeter-wave Integrated Circuits (ICs); wireless and implantable/injectable devices; digital filters and multirate signal processing; 3D integrated systems and multimedia computing architectures; power and energy converters; nonlinear networked systems; emerging memory and memristor technology, neural networks and neuromorphic computing.

We hope readers find this selection of papers interesting and those of you who attend ISCAS can take the opportunity to discuss with authors about their works included in the special issue that you are holding.

To conclude this guest editorial, we would like to express our deepest gratitude to all authors contributing to this special issue, for their excellent research and hard work to write their papers and to address their revisions in a tight and stressful time window. We are also indebted to the hundreds of reviewers involved in both the conference and the journal review rounds, as well as the RCMs and TCs of ISCAS who helped to select high-quality papers. Last, but not least, we wish to thank the Editor-in-Chief of *TCAS-II*, Prof. C. K. Michael Tse, and our excellent Guest Editorial team for their enormous dedication, professionalism and huge efforts to make this special issue a great success, one more time in a record time!

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