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Editorial for the J-EDS Special Issue for ESSERC 2024

THE EUROPEAN Solid-State Electronics Research Conference (ESSERC), for the first time merging ESSDERC and ESSCIRC into one conference after about 50 years of working closely together, provides an annual international forum to showcase novel and groundbreaking results and ideas. The conference is considered to be Europe's flagship conference in electronics research, fostering discussions and knowledge exchanges on current and emerging topics between semiconductor technologists, device physicists, circuit designers and system architects, both from academia, research institutes and industry.

The 1st edition of ESSERC was held in September 2024 in Bruges, Belgium, a historical European location. Organized jointly by KU Leuven and imec, ESSERC 2024 received a record number of submission, of which 185 papers (about 37%) were accepted. After the conference, the Technical Program Chairs with the help of the Track Chairs have identified a sub-group of the accepted papers based on the paper reviews provided by the members of the Technical Program Committee. These papers have been invited to a special issue of JSSC, TCAS-I or, in case of device- or technology-oriented papers, to this special issue of the IEEE JOURNAL OF ELECTRON DEVICES SOCIETY (J-EDS). In particular, the authors have been asked to submit an extended version of their conference paper containing at least 30% novel and additional material. To meet the high review standards of J-EDS, all papers have undergone the usual, rigorous review process. I am very pleased to bring to you this special issue of J-EDS which features seven selected papers and represent various exciting device- and technology-related topics presented at ESSERC 2024.

I would like to thank the authors of the selected papers for submitting their excellent research work for publication in this special issue of J-EDS, as well as the reviewers for their valued expertise and dedication. Furthermore, I extend my acknowledgment to the Technical Program Committee members and the Chairs of ESSERC 2024. Special thanks go to Singh Anushka and above all to Steven Perez of the J-EDS Editorial Office for their assistance during the entire editorial process. Finally, I would like to thank Man Wong, J-EDS Editor-in-Chief, for his support of ESSERC.

See you at ESSERC 2025 in Munich, Germany!

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