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# **Reliability and Failure Analysis for Future GaN Technologies**

Guest Editors:

### Dipl. Phys. Frank Altmann

Fraunhofer Institute for Microstructure of Materials and Systems IMWS, Head of Business Unit Electronic Materials and Components, Walter-Hülse-Straße, 106120 Halle (Saale), Germany

#### Prof. Dr. Matteo Meneghini

Department of Information Engineering, University of Padova, Via Gradenigo 6/B, I-35131 Padova, Italy

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# **Message from the Guest Editors**

The topics of saving global resources by increasing energy efficiency, mastering the problems of future digitalization and communication in society, and transforming mobility systems toward green electric cars and autonomous driving are among the most significant problems global society has to address today. A major target consists in developing powerful, efficient, and reliable electronic devices to provide the required high-performing hardware components. In this context, a huge potential for GaNbased semiconductor devices is currently arising, complementing traditional Si-based electronics for many high-speed applications, such challenging as 5G communication systems, and high-frequency power converters for consumer applications, for data centers, for industry and energy technology, as well as for sensors in mobility applications. Current GaN-device research activities are focusing on size reduction, cost effectiveness, and reliability while dealing with several challenges such as:









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# **Editor-in-Chief**

### Prof. Dr. Maryam Tabrizian

 Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

### Message from the Editor-in-Chief

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