High-Voltage GaN Power Devices with Highest Quality and Highest Reliability

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Power electronics is ubiquitous in modern society. It enables the power conversion in automotive, energy harvesting, IT infrastructures, consumer & industrial applications (from laptop chargers to data centers, from photovoltaic inverters to electric vehicles). At the core of power electronics, power transistors are operated as high-frequency high-voltage switches. Gallium nitride (GaN), a wide band-gap semiconductor, enables the implementation of smaller, faster and more efficient power transistors than silicon. In this seminar, we'll review the key elements to understand the highest quality and highest reliability GaN technology and its path to a successful commercialization.

Welcome to the GaN revolution.

Davide Bisi received the M.S. degree from University of Modena and Reggio Emilia in 2011, and Ph.D. degree from University of Padova in 2015. In 2016, he joined Transphorm, Inc. (Goleta, USA) for advanced GaN FETs research & development. Davide is a member of the ESREF and WIPDA conferences technical committee. He is author of more than 50 technical papers and recipient of 3 best-paper-awards in the field of GaN devices.

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Highest Performance, Highest Reliability GaN