

Frank Schwierz received the Dr.-Ing. and Dr. habil. degrees from Technische Universität (TU) Ilmenau, Germany, in 1986 and 2003, respectively. Presently he serves as Privatdozent at TU Ilmenau and is Head of the RF & Nano Device Research Group. His research is focused on novel device and material concepts for future electronics. At present, he is particularly interested in two-dimensional electronic materials.

Dr. Schwierz is conducting research projects funded by the European Community, German government agencies, and the industry. Together with partners from academia and industry, he was involved in the development of the fastest Si-based transistors worldwide in the late 1990s, of Europe's smallest MOSFETs in the early 2000s, as well as of the fastest GaN HEMTs on Si and the fastest GaN tri-gate HEMTs worldwide in the 2010s. His recent work on two-dimensional materials made a major contribution to the current understanding of the merits and drawbacks of graphene transistors.

Dr. Schwierz has published more than 270 journal and conference papers including 50 invited/keynote papers. He is author of the books *Modern Microwave Transistors – Theory, Design, and Performance* (J. Wiley & Sons 2003) and *Nanometer CMOS* (Pan Stanford Publishing 2010) and editor of the book *Two-Dimensional Electronics – Prospects and Challenges* (MDPI 2016).

Dr. Schwierz is Senior Member of the IEEE. He serves as committee member of international conferences (most notably IEDM 2018 and 2019), as a Distinguished Lecturer of the IEEE Electron Devices Society, and as an editor of the IEEE Transactions on Electron Devices. Moreover, he has been one of the key contributors to the Emerging Research Devices Technology Working Groups of the 2013 and 2015 ITRS editions.