THz Science & Technology Best Paper Award

Recognizes, on an annual basis, the most significant contribution in a paper published in the IEEE Transactions on Terahertz Science and Technology.

L. John, A. Tessmann, A. Leuther, P. Neininger, T. Merkle, and T. Zwick, for their paper "*Broadband 300-GHz Power Amplifier MMICs in InGaAs mHEMT Technology*", in IEEE Transactions on Terahertz Science and Technology, Vol. 10, No. 3, pp. 309-320, May 2020.

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Laurenz John received the Master of Science (M.Sc.) and Ph.D. (Dr.-Ing) degrees in Electrical Engineering and Information Technologies from the Karlsruhe Institute of Technology (KIT), Karlsruhe, Germany, in 2016 and 2021, respectively.

He is currently an RF design engineer and project leader with Fraunhofer IAF, Freiburg, Germany. Since 2016, he has been involved in the design and characterization of InGaAs-channel HEMT devices and integrated circuits on GaAs and Si substrates for wireless applications up to 800 GHz. His current research interests include IC and package design for radar, communication and quantum computing applications at mm-wave and THz frequencies.

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Axel Tessmann received the Dipl.-Ing. and Ph.D. degrees in electrical engineering from the University of Karlsruhe, Karlsruhe, Germany, in 1997 and 2006, respectively. In 1997, he joined the Microelectronics Department, Fraunhofer Institute for Applied Solid State Physics IAF, Freiburg, Germany, where he is involved in the development of monolithically integrated circuits and subsystems for high-resolution imaging systems and high data rate wireless communication links. He is currently a Group Manager of the Millimeter-Wave Packaging and Subsystem Group.

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Thomas Merkle received his M.Sc. degree from the University of Stuttgart, Germany, in 1999, and his Ph.D. degree from the University of Ilmenau, Germany, in 2006, all in electrical engineering. Upon the completion of his M.Sc. he joined the Fraunhofer Institute of Applied Solid State Physics (IAF), Freiburg, Germany, where he worked in the field of nonlinear characterization and modelling of GaAs and GaN HEMTs, and design of MMICs up to 110 GHz. From 2005 to 2010, he was a Post-Doctoral Fellow at the CSIRO ICT Centre, Sydney, Australia, with focus on active integrated antennas for phased-array communication links at 71-86 GHz. From 2010 to 2013, he was a Senior Research Engineer at the Sony Technology Center in Germany, responsible for the design of sub-millimeter-wave ICs and SiPs. In December 2013, he returned to the Fraunhofer IAF overseeing research projects in the area of millimeter-wave and submillimeter-wave wireless communications, radar, and related device technologies. Since 2018, Thomas is Deputy Head of the Business Unit High Frequency Electronics at the IAF.

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Thomas Zwick received the Dipl.-Ing. and the Dr.-Ing. degrees from the Universität Karlsruhe (TH), Germany, in 1994 and 1999, respectively. In February 2001, he joined IBM as research staff member at the IBM T. J. Watson Research Center, Yorktown Heights, NY, USA. From October 2004 to September 2007, Thomas Zwick was with Siemens AG, Lindau, Germany, managing the RF development team for automotive radars. In October 2007, he became a full professor at the Karlsruhe Institute of Technology (KIT), Germany. He is the director of the Institute of Radio Frequency Engineering and Electronics at the KIT.