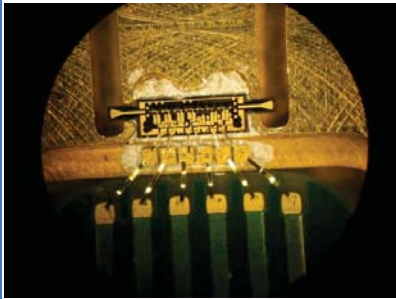
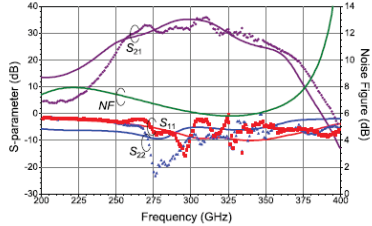


Activity Title:	<i>D4P05: TRP - Low-noise amplifiers for 300 GHz - IAF (DE)</i>		
Contract type	ITT AO 1-6646	Budget (k€)	600
Company (-ies) (including country)	Fraunhofer - IAF		
Team (name of the participants in the project)	Mikko Kantanen, MilliLab, Finland Petri Jukkala, Da-Design, Finland Sebasitan Diebold, KIT-IHE, Germany		
(*) Speaker (s)	Dr. Axel Hülsmann	Email	axel.huelsmann@iaf.fraunhofer.de
Short Speaker Information (experience and involvement in this project – maximum 60 words)	Dr. Axel Hülsmann received his diploma degree in solid state electronics from RWTH Aachen in 1986 and his Ph.D. in electrical engineering from TU-Munich in 1994. With some years of interruption in industry he is with Fraunhofer-IAF since 1986 working on lasers, HEMTs and MMICs based on III-V semiconductors. He had almost all positions at Fraunhofer-IAF and is now deputy manager of the microelectronics business unit and manages the sensor-systems group.		
Summary of the activity (maximum 400 words and 2 pictures)	<p>This project aimed to investigate the feasibility of 35 nm T-gate mHEMT and 100 nm T-gate ABCS technologies for LNAs working at 300 GHz and above using European semiconductor technologies. Furthermore, the project demonstrated good performance of LNAs in a waveguide package by designing, fabricating and testing of low-noise amplifier MMICs for 300 GHz.</p>  		

(*) The speaker needs to do the registration through this website