Holger Maune was born in Cologne, Germany, in 1981. He received the Dipl.-Ing. and Dr.-Ing. degree in communications engineering from the Technische Universität Darmstadt, Darmstadt, Germany, in 2006 and 2011, respectively. His research focuses on reconfigurable smart radio frequency (RF) systems based on electronically tunable microwave components such as phase shifters, adaptive matching networks, tunable filters, duplexer, and multiband antennas. Their integration into system components such as adaptively matched power amplifiers, reconfigurable RF frontends or fully integrated electronically beam-steering transceiver antenna arrays is in the focus of the work. The tunable microwave components are based on novel approaches and innovative functional materials and technologies such as ferroelectric (BST) thin- and thick films and microwave liquid crystals (LC). Beyond novel concepts and design, a major interest is on modelling and precise high-frequency characterization, e.g. by means of scattering parameter measurements in dependence of frequency, temperature and static field strengths. Moreover, dedicated functional tests such as intermodulation and harmonic distortion are of major interest.