Hamidian A., Malignaggi A., Shu R., Ali M.K., and Boeck G., "Multigigabit 60 GHz OOK Front-End in 90 nm CMOS," Silicon Monolithic Integrated Circuits in RF Systems (SiRF), 2013 IEEE 13<sup>th</sup> Topical Meeting on, pp. 96-98, Jan. 2013.

<u>Abstract</u>: In this work an on-off shift keying transmitter front-end for 60 GHz wireless communication is presented. To enhance the transmitter performance, a novel modulator topology is implemented. Designed and fabricated in 90 nm CMOS, the transmitter occupies 0.38 mm<sup>2</sup> and provides 8 dBm output power with 36 mW DC power consumption. The transmitter measurement in a complete 60 GHz wireless set-up showed more than 6 Gbit/s data rate over 4 m distance.