### Title;

# 21.5dBm Power-Handling 5GHz Transmit/Receive CMOS Switch Realized by Voltage Division Effect of Stacked Transistor Configuration with <u>D</u>epletion-Layer-<u>E</u>xtended <u>T</u>ransistors (DETs)

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# [75 Word Abstract]

This paper reports for the first time an over-20dBm power-handling 5GHz transmit/receive (T/R) CMOS switch. The Depletion-layer-Extended Transistor (DET) enables the voltage division effect of the stacked transistor configuration to work in CMOS, thus realizing this high power-handling capability. Furthermore, with the benefit of the insertion-loss improvement effects in the DET, low insertion-losses of 0.95dB and 1.44dB are obtained at 5GHz in the transmit-mode and receive-mode, respectively.