

# Abstracts

## CMOS layout and bias optimization for RF IC design applications

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*Cheon Soo Kim, Hyun Kyu Yu, Hanjin Cho, Seonghearn Lee and Kee Soo Nam. "CMOS layout and bias optimization for RF IC design applications." 1997 MTT-S International Microwave Symposium Digest 2. (1997 Vol. II [MWSYM]): 945-948.*

High frequency and low noise performance of 0.8 /spl mu/m polysilicon gate CMOS device has been analyzed intensively with the various multi-finger polysilicon gate layout and bias to find the optimal condition. From the analysis, the optimal width of unit gate finger and bias condition have been found to maximize  $f_{\text{sub max}}$  and minimize  $F_{\text{sub min}}$ . At the conditions,  $F_{\text{sub min}}$ , gain and noise resistance characteristics of large width transistors are also analyzed.

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