Abstract

in integrated circuits implemented to attain high value resistance. Incremental resistance for both non-tunable, tunable pseudo-resistor has been estimated in Cadence Analog Design Environment using 0.18µm technology. Pseudo-resistors make use of diode-connected MOS devices working in subthreshold region and consume less area as compared to the discrete counterpart. Different V-R curves for both non-tunable and tunable pseudo-resistors are obtained and a comparison is presented in terms of linearity and consistency. Low tuning voltages, currents and smaller W/L ratios are selected for analysis to obtain high value resistors greater than 1011 Ω. It also leads to the design of Low power integrated circuits
References


Index Terms

Computer Science Circuits And Systems
Keywords
Tunable Pseudo-resistors  Topologies  Integrated Circuits  Subthreshold Region.