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## Abstract

In this paper an equivalent model for floating gate transistor has been proposed for smart dust. Smart dust has an advantage of discrete size with substantial functionality and connectivity so; it will provide new methods to sense and interact with the environment especially in rural areas . Using the floating gate voltage value, capacitive coupling coefficients has been found at different bias conditions. The proposed model can be extended to the transient conditions as

well. The SPICE equivalent model is designed and current voltage characteristics and Transfer characteristics are comparatively analyzed.

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### Index Terms

Computer Science

Circuits And Systems

**Keywords**

Fgmos Floating Gate Transistor Capacitive Coupling Coefficient Smart Dust