Abstracts

Measurement based nonlinear electrothermal modeling of GaAs FET with dynamical trapping effects

Z. Ouarch, J.M. Collantes, J.P. Teyssier and R. Quere. "Measurement based nonlinear electrothermal modeling of GaAs FET with dynamical trapping effects." 1998 MTT-S International Microwave Symposium Digest 98.2 (1998 Vol. II [MWSYM]): 599-602.

This paper presents MESFET measurement methods based on pulsed measurements that separate trapping and thermal effects. Derived from these measurements, a model of the trapping effect is determined, as well as a thermal model. The proposed nonlinear model is validated from DC to RF frequencies, it handles dynamical dispersive effects and does not depend on the hot bias point.

❑ Return to main document.