Abstracts

Electromagnetic analysis for microwave FET modeling (Authors' Reply)

R.H. Jansen, E. Larique, S. Mons, D. Baillargeat, S. Verdeyme, M. Aubourg, P. Guillon and R. Quere. "Electromagnetic analysis for microwave FET modeling (Authors' Reply)." 1998 Microwave and Guided Wave Letters 8.8 (Aug. 1998 [MGWL]): 296-296.

For the original paper see ibid., vol. 8, p. 41-43 (Jan. 1998). The commenter states that the concept of EM-based microwave field-effect transistor (FET) modeling, as outlined in the aforementioned paper, is not new and has been published before. It is pointed out that a first version was published by Jansen (1989) and includes measurement results and implementation into the commercial LINMIC+ software version 2.0, Oct. 1987. Also a nonlinear version of the EM analysis for microwave FET modeling has been published already by Jansen and Pogatzki (1991). It is claimed that virtually the only difference between the published material is the use of finite-element modeling (FEM) analysis instead of other EM methods for the distributed passive part of the FET/HEMT. In reply the authors wish to underline the work on electromagnetic-based microwave component modeling by Jansen. They state that the methodology applied in their paper for the modeling of a FET is actually well known, and, moreover, they did not asserted that they were the first to have developed such a solution. Nevertheless, with the development of an efficient electromagnetic solver and the increase of workstation capabilities, they were now able to apply a rigorous method for the treatment of the passive part of the FET, which has not, in their opinion, been done before in previous papers.

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