

Hünlich, Rolf; Albinus, Günter; Gajewski, Herbert; Glitzky, Annegret; Röpke, Wilfried; Knopke, Jürgen

Modelling and simulation of power devices for high-voltage integrated circuits. (English)

[Zbl 1037.94550](#)

Jäger, Willi (ed.) et al., Mathematics – key technology for the future. Joint projects between universities and industry. Berlin: Springer (ISBN 3-540-44220-0/hbk). 401-412 (2003).

Summary: Process and device simulators turned out to be important tools in the design of high-voltage integrated circuits and in the development of their technology. The main goal of this project was the improvement of the device simulator WIAS-TeSCA in order to simulate different power devices in high-voltage integrated circuits developed by the industrial partner. Some simulation results are presented. Furthermore, we discuss some aspects of the mathematics of relevant model equations upon which device and process simulations are based.

For the entire collection see [[Zbl 1016.00014](#)].

MSC:

94C05 Analytic circuit theory

Software:

[WIAS-TeSCA](#)