

Advanced high voltage power device concepts

Baliga, B. Jayant, author

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20410759&lokasi=lokal>

Abstrak

The devices described in “Advanced MOS-Gated Thyristor Concepts” are utilized in microelectronics production equipment, in power transmission equipment, and for very high power motor control in electric trains, steel-mills, etc. Advanced concepts that enable improving the performance of power thyristors are discussed here, along with devices with blocking voltage capabilities of 5,000-V, 10,000-V and 15,000-V. Throughout the book, analytical models are generated to allow a simple analysis of the structures and to obtain insight into the underlying physics. The results of two-dimensional simulations are provided to corroborate the analytical models and give greater insight into the device operation.