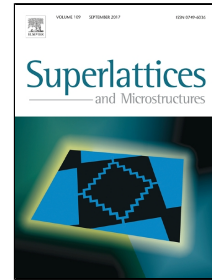


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Impact of parasitic resistances on the electrical characteristics of a SiC MESFET

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### Highlights

- The analytical expressions of parasitic resistances and capacitances are developed.
- The impact of extrinsic resistances of a SiC-MESFET on the drain current, drain conductance and mutual conductance is studied.
- The mathematical expression of cut-off frequency of the device is derived and studied considering the presence of extrinsic elements.
- Theoretically computed parasitic resistances are compared with the experimentally extracted data reported earlier.

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