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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Introduction -- Ge-based Schottky barrier height modulation technology -- Metal germanide technology -- Contact resistance of Ge-based devices -- Conclusions.
Sommario/riassunto	This book mainly focuses on reducing the high parasitic resistance in the source/drain of germanium nMOSFET. With adopting of the Implantation After Germanide (IAG) technique, P and Sb co-implantation technique and Multiple Implantation and Multiple Annealing (MIMA) technique, the electron Schottky barrier height of NiGe/Ge contact is modulated to 0.1eV, the thermal stability of NiGe is improved to 600 and the contact resistivity of metal/n-Ge contact is drastically reduced to $3.8 \times 10^{-7} \text{ cm}^2$, respectively. Besides, a reduced source/drain parasitic resistance is demonstrated in the fabricated Ge nMOSFET. Readers will find useful information about the

source/drain engineering technique for high-performance CMOS devices at future technology node.
