

Abstract Submitted
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Sputtered Gold as an Effective Schottky Gate for Strained Si/SiGe Nanostructures GAVIN SCOTT, MING XIAO, UCLA Dept of Physics, ED CROKE, HRL Laboratories, ELI YABLONOVITCH, UCLA Dept of Electrical Engineering, HONGWEN JIANG, UCLA Dept of Physics — Metallization of Schottky surface gates by sputtering Au on strained Si/SiGe heterojunctions enables the depletion of the two dimensional electron gas (2DEG) at a relatively small voltage while maintaining an extremely low level of leakage current. A fabrication process has been developed to enable the formation of sub-micron Au electrodes sputtered onto Si/SiGe without the need of a wetting layer.

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