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**Dependence of spin-injection spectra of CoFe/GaAs contacts on temperature and annealing conditions** GIAN SALIS, IBM Research - Zurich, ANDREAS FUHRER, SANTOS F. ALVARADO — Spin injection from CoFe contacts into bulk GaAs epilayers is studied experimentally. Close to the metal/semiconductor interface the GaAs epilayer is highly n-doped, allowing efficient spin injection through the Schottky tunnel barrier. Spin polarization in the GaAs channel is measured as a non-local voltage at CoFe detection contacts. Similar to spin injection from Fe contacts, an inversion of the sign of injected spin polarization is found at a finite forward bias  $U_c$  applied to the injection contact. We investigate the dependence of the nonlocal signal on  $U_c$ . From the data, the spin polarization of the differential interface conductance is obtained, providing spectral information on the spin-polarized density of states. The dependence of these spectra on measurement temperature as well as on annealing and growth conditions is discussed and compared to samples with Fe injection contacts.

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