Erratum

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Erratum: "Suppression of D'yakonov-Perel spin relaxation in InAs and InSb by *n*-type doping at 300 K" [Appl. Phys. Lett. 83, 5220 (2003)]

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Figure 2, the spin decay for *n*-InAs with concentration 1×10^{17} cm^{-3}, showed a spin lifetime of $\tau_s=1.6\pm0.5$ ns. The data of Fig. 2 were incorrect due to an artifact of the quarter-wave plates used and this was discovered when we replaced it with a ZnSe photo-elastic modulator (PEM) at normal incidence with no other optical components between it and the sample. The corrected data for Fig. 2 are shown below with $\tau_s=24\pm2$ ps. This represents an increase in lifetime with doping over that of the lower concentration sample as before, but far less pronounced than we previously thought. Our remark that this increase is in excellent agreement with the predictions of the simple models is no longer justified.

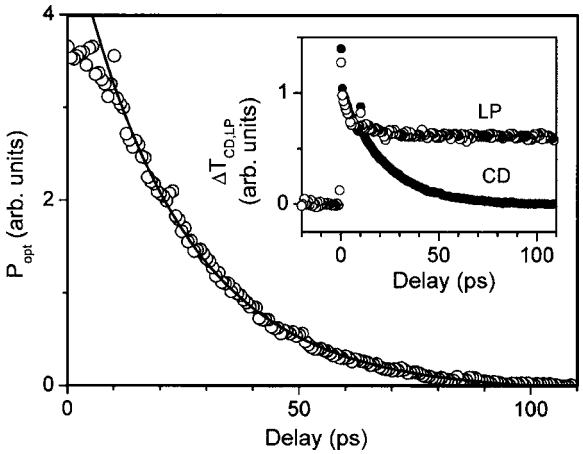

FIG. 2. The optical polarization $P_{opt}=\Delta T_{CD}/\Delta T_{LP}$ as a function of pump-probe delay time for heavily doped *n*-InAs at 300 K (sample IC311, $n=1.0\times10^{17}$ cm^{-3}). The use of the photoelastic modulator directly gives the circular dichroism (CD), $\Delta T_{CD}=\Delta T_{SCP}-\Delta T_{OCP}$, i.e., the difference in the transmission changes for pump and probe having the same circular polarization (SCP) and the opposite (OCP), shown as the solid symbols in the inset. The population decay, $\Delta T_{LP}\propto\Delta T_{SCP}+\Delta T_{OCP}$, was obtained from a linearly polarized (LP) experiment, shown as the open symbols in the inset. The solid curve is a fit of a single exponential, giving a measured decay constant of $\tau_s=24\pm2$ ps.

