Coherent control of electron spin dynamics in nano-engineered semiconductor structures

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List of publications

1. *Spin-dephasing anisotropy for electrons in a quasi-1D GaAs wire without quantum confinement*
   S. Z. Denega, O. V. Zwier, and C. H. van der Wal,
   in preparation.

2. *Optical time-resolved study of the Landé g factor in n-doped GaAs materials*
   S. Z. Denega, D. Reuter, A. D. Wieck, and C. H. van der Wal,
   in preparation.

3. *Ultrafast mapping of optical polarization states onto spin coherence of localized electrons in a semiconductor*
   S. Z. Denega, M. Sladkov, D. Reuter, A. D. Wieck,
   and C. H. van der Wal,
   submitted to Phys. Rev. Lett. (arXiv:1103.4307).

4. *Suppressed spin dephasing for two-dimensional and bulk electrons in GaAs wires due to engineered cancellation of spin-orbit interaction terms*
   S. Z. Denega, T. Last, J. Liu, A. Slachter, P. J. Rizo, P. H. M. van Loosdrecht, B. J. van Wees, D. Reuter, A. D. Wieck, and C. H. van der Wal,
   Phys. Rev. B **81**, 153302 (2010).

5. *Spin-dephasing anisotropy for electrons in a diffusive quasi-1D GaAs wire*
   J. Liu, T. Last, E. J. Koop, S. Denega, B. J. van Wees and C. H. van der Wal,
   J. Supercond. Novel Magn. **23**, 11 (2010).

6. *Optical probing of spin dynamics of two-dimensional and bulk electrons in a GaAs/AlGaAs heterojunction system*
   P. J. Rizo, A. Pugzlys, A. Slachter, S. Z. Denega, D. Reuter, A. D. Wieck, P. H. M. van Loosdrecht, C. H. van der Wal,
   New J. Phys. **12**, 113040 (2010).