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Charge and spin transport in Nb-doped SrTiO₃ using Co/AlO_x spin injection contacts

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List of publications

Publications described in this thesis

1. "Electric field effects on spin accumulation in Nb-doped SrTiO₃ using tunable spin injection contacts at room temperature",
A. M. Kamerbeek, E. K. de Vries, A. Dankert, S. P. Dash, B. J. van Wees, and T. Banerjee
Appl. Phys. Lett. **104**, 212106 (2014).
2. "Electric Field Control of Spin Lifetimes in Nb-SrTiO₃ by Spin-Orbit Fields",
A. M. Kamerbeek, P. Högl, J. Fabian, and T. Banerjee
Phys. Rev. Lett **115**, 136601 (2015).
3. "Electrostatic analysis of n-doped SrTiO₃ metal-insulator-semiconductor systems",
A. M. Kamerbeek, T. Banerjee, and R. J. E. Hueting
J. Appl. Phys. **118**, 225704 (2015).
4. "Coexistence of electro-resistance and tunneling anisotropic magneto-resistance in Co/Nb:SrTiO₃ devices at room temperature",
A. M. Kamerbeek, R. Ruitter and T. Banerjee
in preparation.
5. "Inherent temperature driven inversion of spin accumulation in Nb:SrTiO₃",
A. M. Kamerbeek, R. Ruitter, P. Högl, J. Fabian, and T. Banerjee
in preparation.

Other publications

6. "Towards the understanding of the origin of charge-current-induced spin voltage signals in the topological insulator Bi₂Se₃",
E. K. de Vries, A. M. Kamerbeek, N. Koirala, M. Brahlek, M. Salehi, S. Oh, B. J.



van Wees, and T. Banerjee
Phys. Rev. B **92**, 201102(R) (2015).

7. "Probing hot electron transport across an epitaxial Schottky interface of SrRuO₃/Nb:SrTiO₃",
S. Roy, A. M. Kamerbeek, K. G. Rana, S. Parui and T. Banerjee
Appl. Phys. Lett. **102**, 192909 (2013).
8. "Interface-engineered templates for molecular spin memory devices",
K. V. Raman*, A. M. Kamerbeek*, A. Mukherjee, N. Atodiresei, T. K. Sen, P. Lazić, V. Caciuc, R. Michel, D. Stalke, S. K. Mandal, S. Blügel, M. Münzenberg and Jagadeesh S. Moodera
Nature **493**, 509 (2013).

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