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## **Cavity quantum electrodynamics with quantum dots in microcavities**

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### **Citation**

Gudat, J. (2012, June 19). *Cavity quantum electrodynamics with quantum dots in microcavities*. *Casimir PhD Series*. Retrieved from <https://hdl.handle.net/1887/19553>

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**Author:** Gudat, Jan

**Title:** Cavity quantum electrodynamics with quantum dots in microcavities

**Issue Date:** 2012-06-19

# List of Publications

- S. M. Thon, M. T. Rakher, H. Kim, J. Gudat, W. T. M. Irvine, P. M. Petroff, and D. Bouwmeester, *Strong coupling through optical positioning of a quantum dot in a photonic crystal cavity*, Appl. Phys. Lett. 94, 111115 (2009).
- C. Bonato, D. Ding, J. Gudat, S. Thon, H. Kim, P.M. Petroff, M. P. van Exter, and D. Bouwmeester, *Tuning micropillar cavity birefringence by laser induced surface defects*, Appl. Phys. Lett. 95, 251104 (2009)
- M. P. van Exter, J. Gudat, G. Nienhuis, and D. Bouwmeester, *Spin quantum jumps in a singly charged quantum dot*, Phys. Rev. A 80, 023812 (2009).
- C. Bonato, F. Haupt, S. S. R. Oemrawsingh, J. Gudat, D. Ding, M. P. van Exter, and D. Bouwmeester, *CNOT and Bell-state analysis in the weak-coupling cavity QED regime* Phys. Rev. Lett. 104, 160503 (2010).
- J. Gudat, C. Bonato, E. van Nieuwenburg, S. Thon, H. Kim, P. M. Petroff, M. P. van Exter, and D. Bouwmeester, *Permanent tuning of quantum dot transitions to degenerate microcavity resonances*, Appl. Phys. Lett. 98, 121111 (2011).
- S. M. Thon, H. Kim, C. Bonato, J. Gudat, J. Hagemeyer, P. M. Petroff, and D. Bouwmeester, *Independent electrical tuning of separated quantum dots in coupled photonic crystal cavities*, Appl. Phys. Lett. 99, 161102 (2011).
- C. Bonato, E. van Nieuwenburg, J. Gudat, S. Thon, H. Kim, M. P. van Exter, and D. Bouwmeester, *Strain tuning of quantum dot optical transitions via laser-induced surface defects resonances*, Phys. Rev. B, 84, 075306 (2011).

- J. Gudat, C. Bonato, K. de Vries, D. Ding, H. Kim, S. M. Thon, P. M. Petroff, M. P. van Exter, D. Bouwmeester, *Optical modes in oxide-apertured micropillars*, submitted (2012).