

Publications of F. Schmidt-Kaler, Uni Ulm

(from 2003 to today)

- 82) "Quantum Computing with Cold Ions and Atoms: Experiments with Ion Traps"
F. Schmidt-Kaler, Chapter 6. Quantum Computing: Implementations
Lectures on Quantum Information, Wiley-VCH, Berlin, ISBN-13: 978-3-527-40527-5
- 81) "Sideband cooling and coherent dynamics in a microchip multi-segmented ion trap",
S. Schulz, U. Poschinger, F. Ziesel and F. Schmidt-Kaler
arXiv:0712.3249, submitted to New J. Phys.
- 80) "Transport of ions in a segmented linear Paul trap in printed-circuit-board technology"
G. Huber, T. Deuschle, W. Schnitzler, R. Reichle, K. Singer and F. Schmidt-Kaler
accepted by New J. Phys. at 19. Nov. 2007.
- 79) "Les constructeurs de qubits"
F. Schmidt-Kaler and P. Grangier
Les Dossiers de la Recherche 29, 60 (November 2007).
- 78) "Quantum Physics Exploring Gravity in the Outer Solar System: The Sagas Project "
P. Wolf, Ch. J. Bordé, A. Clairon, L. Duchayne, A. Landragin, P. Lemonde, G. Santarelli, W.
Ertmer, E. Rasel, F.S. Cataliotti, M. Inguscio, G.M. Tino, P. Gill, H. Klein, S. Reynaud, C.
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- 76) "Optimization of frequency modulation transfer spectroscopy on the calcium $4^1 S_0$ to
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- 75) "Optimization of segmented linear Paul traps and transport of stored particles"
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- 74) "Robust state preparation of a single trapped ion by adiabatic passage",
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- 73) "Concept of deterministic single ion doping with sub-nm spatial resolution"
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- 54) „Implementing the Deutsch-Jozsa algorithm on an ion-trap quantum computer“, S. Gulde, M. Riebe, G.P.T. Lancaster, C. Becher, J. Eschner, H. Häffner, F. Schmidt-Kaler, I.L. Chuang, R. Blatt, *Nature* 421, 48-50 (2003).
- 53) „The coherence of qubits based on single Ca⁺ ions“, F. Schmidt-Kaler, S. Gulde, M. Riebe, T. Deuschle, A. Kreuter, G. Lancaster, C. Becher, J. Eschner, H. Häffner, and R. Blatt, *J. Phys. B: At. Mol. Opt. Phys.* 36, 623–636 (2003).
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