

Bibliography

- [1] Peter J. Mohr and Barry N. Taylor. CODATA recommended values of the fundamental physical constants: 2002. *Reviews of Modern Physics*, 77(1):1, March 2005. doi: 10.1103/RevModPhys.77.1. URL <http://link.aps.org/abstract/RMP/v77/p1>.
- [2] Zachary Dutton, Naomi Ginsberg, Christopher Slowe, and Lene Vestergaard Hau. The art of taming light: Ultra-slow and stopped light. *Europhysics News*, March/April(2):33–38, 2004. URL <http://www.europhysicsnews.com/full/26/article1/article1.html>.
- [3] Lene Vestergaard Hau, S. E. Harris, Zachary Dutton, and Cyrus H. Behroozi. Light speed reduction to 17 metres per second in an ultracold atomic gas. *Nature*, 397(6720):594–598, February 1999. doi: 10.1038/17561. URL <http://www.nature.com/nature/journal/v397/n6720/full/397594a0.html>.
- [4] K.-J. Boller, A. Imamoglu, and S. E. Harris. Observation of electromagnetically induced transparency. *Physical Review Letters*, 66(20):2593–2596, May 1991. doi: 10.1103/PhysRevLett.66.2593. URL <http://link.aps.org/abstract/PRL/v66/p2593>.
- [5] Michael Fleischhauer. Electromagnetically induced transparency and coherent-state preparation in optically thick media. *Optics Express*, 4(2):107–112, January 1999. URL <http://www.opticsinfobase.org/abstract.cfm?URI=oe-4-2-107>.
- [6] A. M. Akulshin, S. Barreiro, and A. Lezama. Electromagnetically induced absorption and transparency due to resonant two-field excitation of quasi-degenerate levels in Rb vapor. *Physical Review A*, 57(4):2996–3002, April 1998. doi: 10.1103/PhysRevA.57.2996. URL <http://link.aps.org/abstract/PRA/v57/p2996>.
- [7] Erik Gustafsson. *Design Study of a Magneto-Optical Trap for Laser Cooling of Rubidium Atoms*. PhD thesis, Lund Reports on Atomic Physics, LRAP-325, June 2004. URL http://www.atto.fysik.lth.se/publications/master/gustafsson_LRAP325_2004.pdf.

- [8] Angela S. Mellish and Andrew C. Wilson. A simple laser cooling and trapping apparatus for undergraduate laboratories. *American Journal of Physics*, 70(9):965–971, September 2002. doi: 10.1119/1.1477435. URL <http://link.aip.org/link/?AJP/70/965/1>.
- [9] E. Arimondo, M. Inguscio, and P. Violino. Experimental determinations of the hyperfine structure in the alkali atoms. *Reviews of Modern Physics*, 49(1):31–75, January 1977. doi: 10.1103/RevModPhys.49.31. URL <http://link.aps.org/abstract/RMP/v49/p31>.
- [10] Achim Peters, Keng Yeow Chung, and Steven Chu. Measurement of gravitational acceleration by dropping atoms. *Nature*, 400:849–852, August 1999. doi: doi:10.1038/23655. URL http://www.nature.com/nature/journal/v400/n6747/abs/400849a0_fs.html.
- [11] D. S. Weiss, B. C. Young, and S. Chu. Precision measurement of \hbar/m_{cs} based on photon recoil using laser-cooled atoms and atomic interferometry. *Applied Physics B: Lasers and Optics*, 59(3):217–256, September 1994. doi: 10.1007/BF01081393. URL <http://www.springerlink.com/content/w2703mp20t144426/>.
- [12] Cheng Chin, Véronique Leiber, Vladan Vuletić, Andrew J. Kerman, and Steven Chu. Measurement of an electron’s electric dipole moment using Cs atoms trapped in optical lattices. *Physical Review A*, 63(3):033401, February 2001. doi: 10.1103/PhysRevA.63.033401. URL <http://link.aps.org/abstract/PRA/v63/e033401>.
- [13] A. Steane. Quantum computing. *Reports on Progress in Physics*, 61(2):117–173, February 1998. doi: 10.1088/0034-4885/61/2/002. URL <http://stacks.iop.org/0034-4885/61/117>.
- [14] J. J. García-Ripoll, P. Zoller, and J. I. Cirac. Quantum information processing with cold atoms and trapped ions. *Journal of Physics B: Atomic, Molecular and Optical Physics*, 38(9):S567–S578, April 2005. doi: 10.1088/0953-4075/38/9/008. URL <http://stacks.iop.org/0953-4075/38/S567>.
- [15] Martin Weitz. Towards controlling larger quantum systems: From laser cooling to quantum computing. *IEEE Journal of Quantum Electronics*, 36(12):1346–1357, December 2000. doi: 10.1109/3.892553. URL <http://ieeexplore.ieee.org/search/wrapper.jsp?arnumber=892553>.
- [16] D. B. Sullivan, J. J. Bollinger, W. D. Lee, D. Meekhof, T. E. Parker, J. C. Bergquist, F. L. Walls, J. C. Bergquist, and D. J. Wineland. Primary atomic frequency standards at NIST. *Journal of Research of The National Institute of*