

Magnesium Paper

- Laser cooling and storage of free atom
 , W. Ertmer, Physica Scripta, Volume **36**, Number 2 (1987)
- Broadband laser cooling on narrow transitions
 , H. Wallis et al., Journal of the Optical Society of America B Vol. 6, Issue 11, pp. 2211-2219 (1989)
- Manipulation of Atoms by Laser Light
 , W. Ertmer, Physica Scripta, Volume 1992, T40 (1992)
- The Magnesium Ramsey Interferometer: Applications and Prospects
 U. Sterr et al., Applied Physics B, Volume **54**, Issue 5, pp 341-346 (1992)
- High-resolution isotope shift measurement of the MgI 1S0 - 3P1 intercombination transition
 , U. Sterr et al., Applied Physics B, Volume **56**, Issue 2, pp 62-64 (1993)
- Optical Ramsey interferences on laser cooled and trapped atoms, detected by electron shelving
 , K. Senkstock et al., Optics Communications 103, 73-78 (1993)
- Atom-interferometric determination of the dc-Stark shift of the Mg-intercombination line
 , V. Rieger et al., Optics Communications 99, 172-176 North-Holland (1993)
- Scheme for measuring a Berry phase in an atom interferometer
 , M. Reich et al., Phys. Rev. A **47**, 2518 (1993)
- Three-beam atom interferometer
 H. Hinderthür et al., Phys. Rev. A **56**, 2085 (1997)
- Atom interferometry with polarizing beam splitters
 , H. Hinderthür et al., Phys. Rev. A **57**, 4730 (1998)
- Sub-Kilohertz Optical Spectroscopy with a Time Domain Atom Interferometer
 , F. Ruschewitz et al., Phys. Rev. Lett. **80**, 3173 (1998)
- Sub-kilohertz optical spectroscopy by time domain atom interferometry
 , K. Senkstock et al., Precision Electromagnetic Measurements Digest, Conference (1998)
- Doppler Cooling and Trapping on Forbidden Transitions
 , T. Binnewies et al., PRL **87**, 123002 (2001)
- Improved high resolution spectroscopy with cold magnesium atoms
 , A. Douillet et al., Frequency Control Symposium and PDA Exhibition Jointly with the 17th European Frequency and Time Forum, 2003. Proceedings of the 2003 IEEE International
- Modelling three-dimensional-quench cooling for alkaline-earth atoms
 , T. E. Mehlstäubler et al., Journal of Optics B: Quantum and Semiclassical Optics, Volume **5**, Number 2 (2003)
- A high-resolution Ramsey-Bordé spectrometer for optical clocks based on cold Mg atoms
 , J. Keupp et al., The European Physical Journal D - Atomic, Molecular, Optical and Plasma Physics, Volume **36**, Issue 3, pp 289-294 (2005)
- Optical quenching of metastable magnesium
 , N. Rehbein et al., PR A **76**, 043406 (2007)
- Frequency-stabilized Nd:YVO4 thin-disk laser
 , H. Stoehr et al., Applied Physics B, Volume **91**, Issue 1, pp 29-33 (2008)
- Absolute frequency measurement of the magnesium intercombination transition S01→P13
 , J. Friebe et al., PR A **78**, 033830 (2008)
- Observation of sub-Doppler temperatures in bosonic magnesium

- , T. E. Mehlstäubler et al., PR A **77**, 021402(R) (2008)
- Telecommunication fiber link for the remote characterization of a magnesium optical frequency standard
 , O. Terra et al., Proc. SPIE 7431, Time and Frequency Metrology II, 74310B (2009)
- Phase-Coherent Frequency Comparison of Optical Clocks Using a Telecommunication Fiber Link
 , H. Schnatz et al., IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control (Volume: **57**, Issue: 1 (2010)
- Long-distance remote comparison of ultrastable optical frequencies with 10–15 instability in fractions of a second
 , A. Pape et al., Optics Express Vol. **18**, Issue 20, pp. 21477-21483 (2010)
 - Remote frequency measurement of the $1S0 \rightarrow 3P1$ transition in laser-cooled ^{24}Mg
- J. Friebe et al., New Journal of Physics, Volume **13** (2011)
- Beating the density limit by continuously loading a dipole trap from millikelvin-hot magnesium atoms
 , M. Riedmann et al., PR A **86**, 043416 (2012)
 - An ultraviolet laser system for laser cooling and trapping of metastable magnesium
- , A.P. Kulosa et al., Arxiv-Version (2012)
 - The $A1\Sigma^+$ system of Mg_2
- , H. Knöckel et al., Eur. Phys. J. D **68**: 293. (2014)
- Towards a Mg Lattice Clock: Observation of the $S01-P03$ Transition and Determination of the Magic Wavelength
 , A. P. Kulosa et al., PRL **115**, 240801 (2015)

Sub-Doppler cooling

- Deep laser cooling of magnesium atoms using a $33P2 \rightarrow 33D3$ dipole transition
 , D. V. Brazhnikov et al., Laser Physics, Volume 24, Number 7 (2014)
- Quantum treatment of two-stage sub-Doppler laser cooling of magnesium atoms
 , O. N. Prudnikov et al., PR A **92**, 063413 (2015)
- New Approaches in Deep Laser Cooling of Magnesium Atoms for Quantum Metrology
 , O. Prudnikov et al., European Frequency and Time Forum (EFTF) (2016)

Other topics

- Absolute frequency and isotope shift of the magnesium $(3s^2)1S0 \rightarrow (3s3d)1D2$ two-photon transition by direct frequency-comb spectroscopy
 , E. Peters et al., Phys. Rev. A **92**, 063403 (2015)

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