

Magnesium Paper

- , 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)
- Time transfer through optical fibres over a distance of 73 km 15 with an uncertainty below 100 ps
 - , M. Rost et al., Metrologia, **49**(6), 772-778 (2012)
 - An ultraviolet laser system for laser cooling and trapping of metastable magnesium
- , A.P. Kulosa et al., Arxiv-Version (2012)
 - The $X1\Sigma+g$ ground state of Mg2 studied by Fourier-transform spectroscopy
- , H. Knöckel et al., J. Chem. Phys. **138**, 094303 (2013)
 - Erratum: “The $X1\Sigma+g$ ground state of Mg2 studied by Fourier-transform spectroscopy” [J. Chem. Phys. **138**, 094303 (2013)]
 - The $A1\Sigma+$ system of Mg2
- , 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)

Other Groups

- Spectroscopy of the Mg $1S0$ – $3P1$ intercombination transition in a luminescent cell with walls at room temperature
 - , V. I. Baraulya et al., Quantum Electronics, Volume **37**, Number 12 (2007)
 - Precision spectroscopy of Mg atoms in a magneto-optical trap
- , A. N. Goncharov et al., Quantum Electronics, Volume **44**, Number 6 (2014)
 - Absolute frequency and isotope shift of the magnesium $(3s2)1S0 \rightarrow (3s3d)1D2$ two-photon transition by direct frequency-comb spectroscopy
- , E. Peters et al., Phys. Rev. A **92**, 063403 (2015)
- <hi #ffc90e>ToDo: Danish Group</hi>
- An optical frequency standard based on ultracold magnesium atoms,

<http://iopscience.iop.org/article/10.1088/1742-6596/793/1/012008/pdf> (2017)

- Higher-order effects on uncertainties of clocks of Mg atoms in an optical lattice,
<http://iopscience.iop.org/article/10.1088/1742-6596/793/1/012020/pdf> (2017)

Sub-Doppler cooling

- Deep laser cooling of magnesium atoms using a $33P_2 \rightarrow 33D_3$ 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)

From:

<https://iqwiki.iqo.uni-hannover.de/> - IQwiki

Permanent link:

<https://iqwiki.iqo.uni-hannover.de/doku.php?id=groups:mg:mgpaperpaper&rev=1494418015>

Last update: **2017/05/10 12:06**

