

Magnesium Paper

- Unordered List Item

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- Broadband laser cooling on narrow transitions

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- Manipulation of Atoms by Laser Light

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- The Magnesium Ramsey Interferometer: Applications and Prospects

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- High-resolution isotope shift measurement of the MgI 1S0 - 3P1 intercombination transition

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- Optical Ramsey interferences on laser cooled and trapped atoms, detected by electron shelving
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- Atom-interferometric determination of the dc-Stark shift of the Mg-intercombination line

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- Scheme for measuring a Berry phase in an atom interferometer

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- Three-beam atom interferometer

H. Hinderthür et al., Phys. Rev. A **56**, 2085 (1997)

- Atom interferometry with polarizing beam splitters

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- Sub-kilohertz optical spectroscopy by time domain atom interferometry

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- A high-resolution Ramsey-Bordé spectrometer for optical clocks based on cold Mg atoms

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- Optical quenching of metastable magnesium

, N. Rehbein et al., PR A **76**, 043406 (2007)

- Frequency-stabilized Nd:YVO4 thin-disk laser

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- 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
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- Long-distance remote comparison of ultrastable optical frequencies with 10–15 instability in fractions of a second
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 - 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
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- Towards a Mg Lattice Clock: Observation of the $S01-P03$ Transition and Determination of the Magic Wavelength
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Sub-Doppler cooling

- Deep laser cooling of magnesium atoms using a $33P2 \rightarrow 33D3$ dipole transition
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Other topics

- Absolute frequency and isotope shift of the magnesium $(3s^2)1S0 \rightarrow (3s3d)1D2$ two-photon transition by direct frequency-comb spectroscopy
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