

Trapped Ions and Laser Cooling II

Selected publications of the Ion Storage Group of the Time and Frequency Division, NIST, Boulder, Colorado

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Supported in part by
U.S. Office of Naval Research
800 North Quincy
Arlington, VA 22217

and

U.S. Air Force Office of Scientific Research
Bolling Air Force Base, DC 20332



U.S. DEPARTMENT OF COMMERCE, C. William Verity, Secretary

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY, Ernest Ambler, Director

Issued October 1988

National Institute of Standards and Technology Technical Note 1324
Natl. Inst. Stand. Technol., Tech Note 1324, 200 pages (Oct. 1988)
CODEN:NTNOEF

U.S. GOVERNMENT PRINTING OFFICE
WASHINGTON: 1988

For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402

PREFACE

This collection of papers represents the work on laser cooled, stored atomic ions by the Time and Frequency Division of the National Institute of Standards and Technology (formerly the National Bureau of Standards) from July, 1985 to September, 1988. It follows the collection of papers, contained in NBS Technical Note 1086, "Trapped Ions and Laser Cooling" (June 1985). Although the primary goal of this research has been the development of techniques necessary for achieving high resolution spectroscopy, we have also been able to investigate related areas of research.

Papers listed with the prefix A are not included here but can be obtained on request. We intend to update this publication periodically to include new work not contained here. We hope this collection of papers will be useful to our colleagues in this and related fields.

We gratefully acknowledge the important contributions of several colleagues, post-doctoral and guest researchers, and students, including Charles Manney, Earl Beaty, Larry Brewer, Sarah Gilbert, Hamid Hemmati, Randy Hulet, John Prestage, Ule Daniel, Frank Diedrich, Dan Larson, Gerd Leuchs, Shao Zhong Xing, and Franklin Ascarrunz. We also acknowledge the continued support of the U.S. Office of Naval Research and the U.S. Air Force Office of Scientific Research.

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Boulder, Colorado
September, 1988

CONTENTS

Page

Contents of previous NBS Technical Note 1086.....	ix
List of Additional Publications.....	xi

SPECTROSCOPY AND FREQUENCY STANDARDS

1. "Energy and Radiative Lifetime of the $5d^9 6s^2 \ ^2D_{5/2}$ State in HgII by Doppler-Free Two-Photon Laser Spectroscopy," J.C. Bergquist, D.J. Wineland, Wayne M. Itano, Hamid Hemmati, H.-U. Daniel, and G. Leuchs.....	TN-1
2. "Measurements of the g_J - Factors of the $6s \ ^2S_{1/2}$ and $6p \ ^2P_{3/2}$ States in $^{198}\text{Hg}^+$," "W.M. Itano, J.C. Bergquist, and D.J. Wineland.....	TN-5
3. "Absorption Spectroscopy at the Limit: Detection of a Single Atom," D.J. Wineland, W.M. Itano, and J.C. Bergquist.....	TN-8.
4. "Laser-Cooling Limits and Single-Ion Spectroscopy," D.J. Wineland, W.M. Itano, J.C. Bergquist and R.G. Hulet.....	TN-11
5. "Recoilless Optical Absorption and Doppler Sidebands of a Single Trapped Ion," J.C. Bergquist, W.M. Itano, and D.J. Wineland.	TN-24
6. " Hg^+ Single Ion Spectroscopy," J.C. Bergquist, F. Diedrich, W.M. Itano, and D.J. Wineland.....	TN-27
7. "High Accuracy Spectroscopy of Stored ions," D.J. Wineland, W.M. Itano, J.C. Bergquist, J.J. Bollinger, F. Diedrich, and S.L. Gilbert.....	TN-33
8. "Frequency Standards Utilizing Penning Traps," J.J. Bollinger, S.L. Gilbert, W.M. Itano, and D.J. Wineland.....	TN-39

QUANTUM JUMPS

1. "Observation of Quantum Jumps in a Single Atom," J.C. Bergquist, R.G. Hulet, W.M. Itano, and D.J. Wineland.....	TN-46
2. "Quantum Jumps via Spontaneous Raman Scattering," R.G. Hulet and D.J. Wineland.....	TN-50
3. "Precise Test of Quantum Jump Theory," R.G. Hulet, D.J. Wineland, J.C. Bergquist, and W.M. Itano.....	TN-55
4. "Radiative Decay Rates in Hg^+ from Observations of Quantum Jumps in a Single Ion," W.M. Itano, J.C. Bergquist, R.G. Hulet, and D.J. Wineland.....	TN-59
5. "Photon Antibunching and Sub-Poissonian Statistics from Quantum Jumps in One and Two Atoms," W.M. Itano, J.C. Bergquist, and D.J. Wineland.....	TN-63

NONNEUTRAL PLASMA STUDIES

1. "Angular Momentum of Trapped Atomic Particles,"
D.J. Wineland, J.J. Bollinger, W.M. Itano, and J.D. Prestage.....TN-67
2. "Sympathetic Cooling of Trapped Ions: A Laser-Cooled Two-Species Nonneutral Ion Plasma,"
D.J. Larson, J.C. Bergquist, J.J. Bollinger, W.M. Itano,
and D.J. Wineland.....TN-76
3. "Ion Trapping Techniques: Laser Cooling and Sympathetic Cooling,"
J.J. Bollinger, L.R. Brewer, J.C. Bergquist, W.M. Itano,
D.J. Larson, S.L. Gilbert, and D.J. Wineland.....TN-80
4. "Static Properties of a Nonneutral ${}^9\text{Be}^+$ Ion Plasma,"
L.R. Brewer, J.D. Prestage, J.J. Bollinger, W.M. Itano,
D.J. Larson, and D.J. Wineland.....TN-91
5. "Atomic Ion Coulomb Clusters in an Ion Trap,"
D.J. Wineland, J.C. Bergquist, W.M. Itano, J.J. Bollinger
and C.H. Manney.....TN-106
6. "Shell-Structure Phase of Magnetically Confined Strongly Coupled
Plasmas,"
S.L. Gilbert, J.J. Bollinger, and D.J. Wineland.....TN-110
7. "Liquid and Solid Ion Plasmas,"
D.J. Wineland, W.M. Itano, J.C. Bergquist, S.L. Gilbert,
J.J. Bollinger, and F. Ascarrunz.....TN-114
8. "Quantitative Study of Laser Cooling in a Penning Trap,"
W.M. Itano, L.R. Brewer, D.J. Larson, J.J. Bollinger, S.L. Gilbert,
and D.J. Wineland.....TN-130

GENERAL ARTICLES

1. "Optical Pumping of Stored Atomic Ions,"
D.J. Wineland, W.M. Itano, J.C. Bergquist, J.J. Bollinger,
and J.D. Prestage.....TN-132
2. "Laser Spectroscopy of Trapped Atomic Ions,"
W.M. Itano, J.C. Bergquist, and D.J. Wineland.....TN-144
3. "Precise Optical Spectroscopy with Ion Traps,"
W.M. Itano, J.C. Bergquist, R.G. Hulet, and D.J. Wineland.....TN-150
4. "Laser Cooling,"
D.J. Wineland and W.M. Itano.....TN-156

APPARATUS

1. "Simple Electrodes for Quadrupole Ion Traps,"
E.C. Beatty.....TN-163
2. "Ion Traps for Large Storage Capacity,"
D.J. Wineland.....TN-168
3. "Thermal Shifts of the Spectral Lines in the ${}^4F_{3/2}$ to ${}^4I_{11/2}$
Manifold of an Nd: YAG Laser,"
Shao Zhong Xing and J.C. Bergquist.....TN-182

CONTENTS OF NBS TECHNICAL NOTE 1086

"Trapped Ions and Laser Cooling,"

(Issued June 1985)

	Page
1. "Radiation-Pressure Cooling of Bound Resonant Absorbers," D. J. Wineland, R. E. Drullinger, and F. L. Walls.....	TN-1
2. "Laser Cooling of Atoms," D. J. Wineland and W. M. Itano.....	TN-5
3. "Laser-to-Microwave Frequency Division Using Synchrotron Radiation," D. J. Wineland.....	TN-25
4. "Laser to Microwave Frequency Division Using Synchrotron Radiation II," J. C. Bergquist and D. J. Wineland.....	TN-30
5. "Frequency and Time Standards Utilizing Laser Cooled Ions," W. M. Itano and D. J. Wineland.....	TN-34
6. "Laser Induced Magnetron Compression (Expansion) of Ions Stored in a Penning Trap," D.J. Wineland, R.E. Drullinger, J.C. Bergquist, and W.M. Itano..	TN-35
7. "High-Resolution Optical Spectra of Laser Cooled Ions," R. E. Drullinger, D. J. Wineland, and J. C. Bergquist.....	TN-36
8. "Double-Resonance and Optical-Pumping Experiments on Electromagnetically Confined, Laser Cooled Ions," D.J. Wineland, J.C. Bergquist, W.M. Itano, and R.E. Drullinger..	TN-40
9. "Spectroscopy of a Single Mg^+ Ion," D. J. Wineland and W. M. Itano.....	TN-43
10. "Proposed Stored $^{201}Hg^+$ Ion Frequency Standards," D. J. Wineland, W. M. Itano, J. C. Bergquist, and F. L. Walls...	TN-47
11. "Precision Measurement of the Ground-State Hyperfine Constant of $^{25}Mg^+$," W. M. Itano and D. J. Wineland.....	TN-57
12. "Laser Cooling of Ions Stored in Harmonic and Penning Traps," W. M. Itano and D. J. Wineland.....	TN-67
13. "Shift of $^2S_{1/2}$ Hyperfine Splittings Due to Blackbody Radiation," W. M. Itano, L. L. Lewis, and D. J. Wineland.....	TN-87
14. "Laser Cooled, Stored Ion Experiments at NBS and Possible Applications to Microwave and Optical Frequency Standards," D. J. Wineland, J. C. Bergquist, R. E. Drullinger, H. Hemmati, W. M. Itano, and F. L. Walls.....	TN-90

	Page
15. "Spectroscopy of Stored Ions," D. J. Wineland.....	TN-97
16. "Magnetic Field Dependence of (s,ℓ) Electron Configurations," D. J. Wineland and W. M. Itano.....	TN-107
17. "Laser Cooling and Double Resonance Spectroscopy of Stored Ions," W. M. Itano and D. J. Wineland.....	TN-108
18. "Generation of Continuous-Wave 194-nm Radiation by Sum- Frequency Mixing in an External Ring Cavity," H. Hemmati, J. C. Bergquist, and W. M. Itano.....	TN-117
19. "Laser Fluorescence Mass Spectroscopy," D. J. Wineland, J. J. Bollinger, and W. M. Itano.....	TN-120
20. "Time and Frequency Standards Based on Charged Particle Trapping," W. M. Itano, D. J. Wineland, H. Hemmati, J. C. Bergquist, and J. J. Bollinger.....	TN-125
21. "Frequency Standard Research Using Stored Ions," D. J. Wineland, W. M. Itano, J. C. Bergquist, J. J. Bollinger, and H. Hemmati.....	TN-128
22. "Precision Measurements of Laser Cooled $^9\text{Be}^+$ Ions," J. J. Bollinger, D. J. Wineland, W. M. Itano, and J. S. Wells...	TN-132
23. "Hyperfine Structure of the $2p^2P_{1/2}$ State in $^9\text{Be}^+$," J. J. Bollinger, J. S. Wells, D. J. Wineland, and W. M. Itano...	TN-137
24. "Trapped Ions, Laser Cooling, and Better Clocks," D. J. Wineland.....	TN-141
25. "Spectroscopy of Stored Atomic Ions," D. J. Wineland, W. M. Itano, J. C. Bergquist, J. J. Bollinger, and J. D. Prestage.....	TN-147
26. "Strongly Coupled Nonneutral Ion Plasma," J. J. Bollinger and D. J. Wineland.....	TN-172
27. "Laser-Cooled-Atomic Frequency Standard," J. J. Bollinger, J. D. Prestage, W. M. Itano, and D. J. Wineland.....	TN-176
28. "Limits for Spatial Anisotropy by Use of Nuclear-Spin- Polarized $^9\text{Be}^+$ Ions," J. D. Prestage, J. J. Bollinger, W. M. Itano, and D. J. Wineland.....	TN-180

Additional publications of the Time and Frequency
Division Ion Storage Group not included in this technical note
or NBS Technical Note 1086

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