

## List of Publications of H.-J. Kluge 1969–2005

1. Kluge, H.-J., E.W. Otten, and G. Zimmermann, *HFS Measurements in the  $4s4p\ ^1P_1$  State of  $^{43}\text{Ca}$  by the Level Crossing Technique*, *J.de Phys.* **30C1**, 15–17 (1969).
2. Bonn, J., G. Huber, H.-J. Kluge, U. Köpf, L. Kugler, and E.W. Otten, *Optical Pumping of Neutron-Deficient  $^{187}\text{Hg}$* , *Phys.Lett.* **36B**, 41–43 (1971).
3. Bonn, J., G. Huber, H.-J. Kluge, L. Kugler, and E.W. Otten, *Sudden Change in the Nuclear Charge Distribution of Very Light Mercury Isotopes*, *Phys.Lett.* **38B**, 308 (1972).
4. Bonn, J., G. Huber, H.-J. Kluge, U. Köpf, L. Kugler, E.W. Otten, and J. Rodriguez, *Determination of Nuclear Spins, Moments and Charge Volumes far from Stability by Optical Pumping*, *J.Phys.Soc.Jap.* **34**, 317 (1973).
5. Kluge, H.-J. *Optische Pumpexperimente an Quecksilberisotopen fernab der  $\beta$ -Stabilität*, in *Physik 1973 Plenarvorträge*. 1973, Physik Verlag. p. 377.
6. Kluge, H.-J. and H. Sauter, *Levelcrossing Experiments in the First Excited  $^1P_1$  States of the Alkaline Earths*, *Z.Phys.* **270**, 295–309 (1974).
7. Bonn, J., G. Huber, H.-J. Kluge, E.W. Otten, D. Lode, and ISOLDE Collaboration, *Orientation of  $^{199\text{m}}\text{Hg}$  by Optical Pumping Detected by Gamma-Radiation Anisotropy*, *Z.Phys.* **A272**, 375–380 (1975).
8. Huber, G., H.-J. Kluge, L. Kugler, and E.W. Otten, *Determination of the Isotopic Shift of  $^{192}\text{Hg}$  in the Line of  $l = 2537\ \text{\AA}$  by Zeeman Scanning the Hanle Signal*, *Z.Phys.* **A272**, 381–385 (1975).
9. Rodriguez, J., J. Bonn, G. Huber, H.-J. Kluge, and E.W. Otten, *Determination of Spin, Magnetic Moment and Isotopic Shift of Neutron-Rich  $^{206}\text{Hg}$  by Optical Pumping*, *Z.Phys.* **A272**, 369–374 (1975).
10. Bonn, J., G. Huber, H.-J. Kluge, and E.W. Otten, *Spins, Moments and Charge Radii in the Isotopic Series  $^{181}\text{Hg}$ - $^{191}\text{Hg}$* , *Z.Phys.* **A276**, 203–217 (1976).
11. Huber, G., J. Bonn, H.-J. Kluge, and E.W. Otten, *Nuclear Radiation Detected Optical Pumping of Neutron-Deficient Hg Isotopes*, *Z.Phys.* **A276**, 187–202 (1976).
12. Duke, C., H. Fischer, H.-J. Kluge, H. Kremmling, T. Kühl, and E.W. Otten, *Determination of the Isotope Shift of  $^{190}\text{Hg}$  by On-line Laser Spectroscopy*, *Phys.Lett.* **60A**, 303–306 (1977).
13. Kühl, T., P. Dabkiewicz, H. Fischer, H.-J. Kluge, H. Kremmling, and E.W. Otten, *Nuclear Shape Staggering in Very Neutron Deficient Hg-Isotopes Detected by Laser Spectroscopy*, *Phys.Rev.Lett.* **39**, 180–183 (1977).
14. Duke, C., H. Fischer, H.-J. Kluge, H. Kremmling, T. Kuhl, and E.-W. Otten, *Determination of the isotope shift of  $^{190}\text{Hg}$  by on-line laser spectroscopy*, *Physics Letters B* **68**, 129–132 (1977).
15. Bonn, J., F. Buchinger, P. Dabkiewicz, H. Fischer, S.L. Kaufmann, H.-J. Kluge, H. Kremmling, L. Kugler, R. Neugart, E.W. Otten, L.v. Reisky, J.M. Rodriguez-Giles, H.-J. Steinacher, and K.P.C. Spath, *Determination of Nuclear Spins of Short-Lived Rb and Cs Isotopes by  $\beta$ -Radiation Detected Optical Pumping*, *Hyperfine Interactions* **4**, 174–178 (1978).
16. Dabkiewicz, P., C. Duke, H. Fischer, H.-J. Kluge, T. Kühl, H. Kremmling, E.W. Otten, and H.A. Schuessler, *Laser Spectroscopy of Short-Lived Hg Isotopes: Coexistence of Nuclear Shapes Around  $A = 185$* . 1978: European Physical Society.
17. Fischer, H., P. Dabkiewicz, P. Freiling, H.-J. Kluge, H. Kremmling, R. Neugart, and E.W. Otten, *Nuclear Spins of  $^{76}\text{Rb}$  and  $^{119}\text{Cs}$  by  $\beta$ -Radiation Detected Optical Pumping*, *Z.Phys.* **A284**, 3–8 (1978).
18. Kluge, H.-J., *On-Line Laser Spectroscopy of Short-Lived Mercury Isotopes*, *Hyperfine Interactions* **4**, 61–72 (1978).
19. Dabkiewicz, P., F. Buchinger, H. Fischer, H.-J. Kluge, H. Kremmling, T. Kühl, A.C. Mueller, and H.A. Schuessler, *Nuclear Shape Isomerism in  $^{185}\text{Hg}$  Detected by Laser Spectroscopy*, *Phys.Lett.* **B82**, 199–203 (1979).
20. Kluge, H.-J., *Optical Spectroscopy of Short-Lived Isotopes*, in *Progress in Optical Spectroscopy*, H. Kleinpoppen, Editor. 1979, Plenum Press: New York. p. 727–768.
21. Kremmling, H., P. Dabkiewicz, H. Fischer, H.-J. Kluge, T. Kühl, and H.A. Schuessler, *Nuclear spins of the isomers  $^{191\text{m}}$ - $^{185\text{m}}\text{Hg}$  Determined by On-line Quantum-Beat Spectroscopy*, *Phys.Rev.Lett.* **43**, 1376–1380 (1979).
22. Stroke, H.H., D. Proetel, and H.-J. Kluge, *Odd-Even Staggering in Mercury Isotope Shifts: Evidence for Coriolis Effects in Particle-Core Coupling*, *Phys.Lett.* **B82**, 204–207 (1979).

23. Dietz, K.-J., P. Dabkiewicz, H.-J. Kluge, H. Kremmling, T. Kühl, and H.A. Schuessler, *Pressure Broadening and Pressure Shift of the Cadmium Intercombination Line*, J.Phys. **13B**, 2794–2757 (1980).
24. Kluge, H.-J., *Laser Spectroscopy of Short-Lived Isotopes*, Journ.Opt.Soc.Am. **70**, 645 (1980).
25. Buchinger, F., P. Dabkiewicz, H.-J. Kluge, A.C. Mueller, E.W. Otten, and ISOLDE Collaboration, *The Isotope Shift of the Radioactive Cd-Isotopes ( $102 < A < 120$ ) Determined by On-Line Laser Spectroscopy*, Hyperfine Interactions **9**, 165–168 (1981).
26. Ahrens, J., K.-J. Dietz, H.-J. Gessinger, H.-J. Kluge, F. Neugebauer, E.W. Otten, H.H. Andresen, W. Heil, R. Neuhausen, R. Thornagel, and B. Wagner, *Design and Test of a Cerenkov Detector System for Studying Parity Violation Effects in Electron-Nucleon-Scattering*. 1983. New York: AIP.
27. Blaich, T., G. Bollen, K.-H. Georgi, H.-J. Kluge, and H. Kremmling, *Fast Multiscaling Module with a Dwell Time of Two Nanoseconds and its Application to Quantum Beat Spectroscopy*, Rev.Sci.Instr. **54**, 706–709 (1983).
28. Kluge, H.-J., H. Kremmling, H.A. Schuessler, J. Streib, and K. Wallmeroth, *Determination of the Isotope Shift in the D1 Line between  $^{197}\text{Au}$  and  $^{195}\text{Au}$* , Z.Phys. **A309**, 187–192 (1983).
29. Kluge, H.-J., H. Kremmling, J. Streib, and K. Wallmeroth, *High-Temperature Resonance Cell for Laser Spectroscopy on Low Vapor Pressure Elements*, Rev.Sci.Instr. **55**, 873–874 (1984).
30. Ahrens, J., H.G. Andresen, H.-W. Blasius, A. Bornheimer, D. Conrath, K.-J. Dietz, W. Gasteyer, H.-J. Gessinger, W. Hartmann, W. Heil, H.-J. Kluge, H. Kessler, T. Kettner, L. Koch, F. Neugebauer, R. Neuhausen, E.W. Otten, E. Reichert, and B. Wagner, *Parity Violation in Quasi-Elastic Scattering of Polarized Electrons*, Nucl. Phys. A **446**, C377–C379 (1985).
31. Kluge, H.-J., *Optical Measurements of Ground State Properties of Short-Lived Nuclei in Resonance Cells*, Hyperfine Interactions **24**, 69 – 93 (1985).
32. Kluge, H.-J., *Concluding Remarks: Application of Lasers to Nuclear Physics*, Hyperfine Interactions **24**, 331–347 (1985).
33. Kluge, H.-J., *Nuclear Ground State Properties: Recent Results and Prospects at ISOLDE*, Hyperfine Interactions **22**, 559–572 (1985).
34. Kluge, H.-J., F. Ames, W. Ruster, and K. Wallmeroth, *Laser Ion Sources. in Accelerated Radioactive Beams Workshop*. 1985. Parksville, Canada: TRIUMF, Vancouver, Canada.
35. Krönert, U., J. Bonn, H.-J. Kluge, W. Ruster, K. Wallmeroth, P. Peuser, and N. Trautmann, *Laser Resonant Ionization of Plutonium*, Appl.Phys. **B38**, 65–70 (1985).
36. Peuser, P., G. Herrmann, H. Rimke, P. Sattelberger, N. Trautmann, W. Ruster, F. Ames, J. Bonn, H.-J. Kluge, U. Krönert, and E.W. Otten, *Trace Detection of Plutonium by Three-Step Photoionization with a Laser System Pumped by a Copper Vapor Laser*, Appl.Phys. **B38**, 249–253 (1985).
37. Streib, J., H.-J. Kluge, H. Kremmling, R.B. Moore, H.W. Schaaf, K. Wallmeroth, and ISOLDE Collaboration, *Isotope Shifts of Neutron-Deficient Gold Isotopes with  $193 > A > 190$* , Z.Phys. **A321**, 537–547 (1985).
38. Bodenstedt, E., R. Coussement, H.-J. Kluge, P. Raghavan, K.H. Speidel, N.J. Stone and P.N. Tandon *Techniques for the Measurement of G-Factors of Nuclear-States, Their Merits, Limitations, Sensitivity, etc. – Panel Discussion*, Hyperfine Interactions **26**, 1069–1075 (1985).
39. Bemis, C.E., H.-J. Kluge, R. Neugart, Y. Niv, C. Thibault, H. Schüssler and D.E. Murnick *Laser Applications in Nuclear Physics*, Hyperfine Interaction **24**, 321–329 (1985).
40. Kluge, H.-J., H. Schnatz, L. Schweikhard, and F. Träger, *A Penning Trap for Studying Cluster Ions*, Z.Phys. **D3**, 189–194 (1986).
41. Kluge, H.-J., *Ground State Studies at ISOLDE*, ACS Symposium Series **324**, 370–379 (1986).
42. Kluge, H.-J., *ISOLDE Users Guide*. 86-05 ed, ed. H.-J. Kluge, Genève: CERN (1986).
43. Schnatz, H., G. Bollen, P. Dabkiewicz, P. Egelhof, F. Kern, H. Kalinowsky, L. Schweikhard, H. Stolzenberg, H.-J. Kluge, and ISOLDE Collaboration, *In-Flight Capture of Ions into a Penning Trap*, Nucl.Instr.and Meth. **A251**, 17–20 (1986).
44. Trautmann, N., P. Peuser, H. Rimke, P. Sattelberger, G. Herrmann, F. Ames, U. Krönert, W. Ruster, J. Bonn, H.-J. Kluge, and E.W. Otten, *Laser Resonant-Ionization Mass Spectrometry of Actinides*, Journal of the Less Common Metals **122**, 533 (1986).
45. Ulm, G., S.K. Bhattacharjee, P. Dabkiewicz, G. Huber, H.-J. Kluge, T. Kühl, H. Lochmann, E.W. Otten, K. Wendt, S.A. Ahmad, W. Klempt, R. Neugart, and ISOLDE Collaboration, *Isotope Shift of  $^{182}\text{Hg}$  and an Update of Nuclear Moments and Charge Radii in the Isotope Range  $^{181}\text{Hg}$ - $^{206}\text{Hg}$* , Z.Phys. **A325**, 247–259 (1986).
46. Kluge, H.J., *Ground-State Studies at ISOLDE*, ACS Symposium Series **324**, 370–379 (1986).
47. Kluge, H.-J., *Ground-State Studies at ISOLDE*. 1986.
48. Bollen, G., H.-J. Kluge, U. Krönert, and K. Wallmeroth, *On-Line Resonance Ionization Mass Spectroscopy of Short-Lived Isotopes*. 1987. Bristol: American Institute of Physics.
49. Bollen, G., H.-J. Kluge, K. Wallmeroth, H.W. Schaaf, R.B. Moore, and ISOLDE Collaboration, *High Power Pulsed Dye Laser with a Fourier Limited Bandwidth*, J.Opt.Soc.Am **B4**, 329–336 (1987).
50. Bollen, G., P. Dabkiewicz, P. Egelhof, T. Hilberath, H. Kalinowsky, F. Kern, H. Schnatz, L. Schweikhard, H. Stolzenberg, R.B. Moore, H.-J. Kluge, G.M. Temmer, G. Ulm, and ISOLDE Collaboration, *First Absolute Mass Measurements of Short-Lived Isotopes*, Hyperfine Interactions **38**, 793–802 (1987).
51. Buchinger, F., P. Dabkiewicz, H.-J. Kluge, A.C. Mueller, E.W. Otten, and ISOLDE Collaboration, *The N-Dependence of Cd Mean Square Charge Radii ( $54 < N < 72$ ) and the Nuclear Moments of  $^{103}\text{Cd}$* , Nucl.Phys. **A462**, 305–332 (1987).

52. Kluge, H.-J., *Resonance Ionization Mass Spectroscopy for Nuclear Research and Trace Analysis*, *Hyperfine Interactions* **37**, 347–364 (1987).
53. Krönert, U., S. Becker, T. Hilberath, H.-J. Kluge, C. Schulz, and ISOLDE Collaboration, *Resonance Ionization Mass Spectroscopy with a Pulsed Thermal Atomic Beam*, *Appl.Phys.* **A44**, 339–345 (1987).
54. Neu, W., G. Passler, G. Sawatzky, R. Winkler, and H.-J. Kluge, *Isotope Shift and Hyperfine Structure of Stable Platinum Isotopes*, *Z.Phys.* **D7**, 193 (1987).
55. Rimke, H., G. Herrmann, C. Mühleck, P. Sattelberger, N. Trautmann, F. Ames, H.-J. Kluge, E.W. Otten, D. Rehklaue, and W. Ruster, *Detection of Trace Amounts of Actinides by Resonance Ionization Mass Spectrometry*, *Inorganica Chimica Acta* **140**, 277 (1987).
56. Wallmeroth, K., G. Bollen, A. Dohn, P. Egelhof, J. Grüner, F. Lindenlauf, U. Krönert, J. Campos, A. Rodriguez-Yunta, M.J.G. Borge, A. Venugopalan, J. Wood, R.B. Moore, and H.-J. Kluge, *Sudden Change in the Nuclear Charge Distribution of Very Light Gold Isotopes*, *Phys.Rev.Lett.* **58**, 1516–1519 (1987).
57. Wallmeroth, K., G. Bollen, M.J.G. Borge, J. Campos, A. Dohn, P. Egelhof, J. Grüner, H.-J. Kluge, U. Krönert, F. Lindenlauf, R.B. Moore, A. Rodriguez, A. Venugopalan, J. Wood, and ISOLDE Collaboration, *Nuclear Shape Transition in Neutron-Deficient Gold Isotopes*, *Hyperfine Interactions* **34**, 21 (1987).
58. Ahrens, J., H.G., Andresen, H.-J. Gessinger, W. Hartmann, W. Heil, H.-J. Kluge, R. Neuhausen, E.W. Otten, E. Reichert, F.P. Schäfer, and B. Wagner *Measurement of the Parity Violation in the Quasi-free Scattering of Polarized Electrons from Be-9*, *Helvetica Physica Acta* **60**, 738 (1987).
59. Ames, F., A. Becker, H.-J. Kluge, H. Rimke, W. Ruster, and N. Trautmann, *A Laser Ion Source for Trace Analysis*, *Fresenius Z.Anal.Chem.* **331**, 133–135 (1988).
60. Kluge, H.-J. and N. Trautmann, *Resonanzionisationspektroskopie*, *Nachr.Chem.Tech.Lab.* **36**, 1190–1195 (1988).
61. Kluge, H.-J., *Precision Measurements of Masses of Radioactive Atoms Using ISOLDE and Ion Traps*, *Physica Scripta* **T22**, 85–89 (1988).
62. Krönert, U., S. Becker, G. Bollen, M. Gerber, T. Hilberath, H.-J. Kluge, G. Passler, and ISOLDE Collaboration, *Observation of Strongly Deformed Ground-State Configurations in  $^{184}\text{Au}$  and  $^{183}\text{Au}$  by Laser Spectroscopy*, *Z.Phys.* **A331**, 521–522 (1988).
63. Ruster, W., F. Ames, M. Mang, C. Mühleck, D. Rehklaue, H. Rimke, P. Sattelberger, G. Herrmann, H.-J. Kluge, E.W. Otten, and N. Trautmann, *Determination of Trace Elements by Resonant Ionization Mass Spectrometry (RIMS)*, *Fresenius Z.Anal.Chem.* **331**, 182–185 (1988).
64. Trautmann, N., G. Herrmann, C. Mühleck, P. Peuser, H. Rimke, P. Sattelberger, F. Ames, H.-J. Kluge, E.W. Otten, D. Rehklaue, and W. Ruster, *Laser Resonance Ionization Mass Spectrometry as a Sensitive Analytical Method for Actinides and Technetium*, *Isotopenpraxis* **24**, 217–219 (1988).
65. Trautmann, N., G. Herrmann, M. Mang, C. Mühleck, H. Rimke, P. Sattelberger, F. Ames, H.-J. Kluge, E.W. Otten, D. Rehklaue, and W. Ruster, *Low-Level Detection of Actinides by Laser Resonance Photoionization*, *Radiochimica Acta* **44/45**, 107–110 (1988).
66. Heil, W., J. Ahrens, H.G. Andresen, A. Bornheimer, D. Conrath, K.-J. Dietz, W. Gasteyer, H.-J. Gessinger, W. Hartmann, J. Jethwa, H.-J. Kluge, H. Kessler, T. Kettner, L. Koch, F. Neugebauer, R. Neuhausen, E.W. Otten, E. Reichert, F.P. Schäfer, and B. Wagner, *Improved Limits on the Weak, Neutral, Hadronic Axialvector Coupling Constants from Quasielastic Scattering of Polarized Electrons*, *Nucl.Phys.* **B327**, 1–31 (1989).
67. Hilberath, T., S. Becker, G. Bollen, M. Gerber, H.-J. Kluge, U. Krönert, G. Passler, and ISOLDE Collaboration, *The Charge Radii of  $^{198}\text{Pt}$ – $^{183}\text{Pt}$* , *Z.Phys.* **A332**, 107–108 (1989).
68. Krönert, U., S. Becker, G. Bollen, M. Gerber, T. Hilberath, H.-J. Kluge, G. Passler, and ISOLDE Collaboration, *Resonance Ionization Mass Spectroscopy of  $^{184}\text{Au}$  ( $T_{1/2} = 53$  s) and  $^{183}\text{Au}$  ( $T_{1/2} = 42$  s) in a Pulsed Atomic Beam*. 1989. Bristol: IOP.
69. Neu, W., R. Neugart, E.W. Otten, G. Passler, K. Wendt, B. Fricke, E. Arnold, H.-J. Kluge, G. Ulm, and ISOLDE Collaboration, *Quadrupole Moments of Radium Isotopes from the  $7p\ ^2P_{3/2}$  Hyperfine Structure in Ra II*, *Z.Phys.* **D11**, 105–111 (1989).
70. Rimke, H., G. Herrmann, M. Mang, C. Mühleck, J. Riegel, P. Sattelberger, N. Trautmann, F. Ames, H.-J. Kluge, E.W. Otten, D. Rehklaue, W. Ruster, and F. Scheerer, *Principle and Analytical Applications of Resonance Ionization Mass Spectrometry*, *Mikrochimica Acta*, 233–230 (1989).
71. Ruster, W., F. Ames, H.-J. Kluge, E.W. Otten, D. Rehklaue, F. Scheerer, G. Herrmann, C. Mühleck, J. Riegel, H. Rimke, P. Sattelberger, and N. Trautmann, *A Resonance Ionization Mass Spectrometer as an Analytical Instrument for Trace Analysis*, *Nucl.Instr.Meth.* **A281**, 547–558 (1989).
72. Sattelberger, P., M. Mang, G. Herrmann, J. Riegel, H. Rimke, N. Trautmann, F. Ames, and H.-J. Kluge, *Separation and Detection of Trace Amounts of Technetium*, *Radiochimica Acta* **48**, 165–169 (1989).
73. Schweikhard, L., M. Blundschling, R. Jertz, and H.-J. Kluge, *A New Detection Scheme for FT-ICR Spectrometry in Penning Traps*, *Rev.Sci.Instrum.* **60**, 2631–2634 (1989).
74. Schweikhard, L., M. Blundschling, R. Jertz, and H.-J. Kluge, *Fourier Transform Mass Spectrometry without Ion Cyclotron Resonance: Direct Observation of the Trapping Frequency of Trapped Ions*, *Int.J.of Mass.Spectrom.and Ion Processes* **89**, R7–R12 (1989).

75. Wallmeroth, K., G. Bollen, A. Dohn, P. Egelhof, U. Krönert, M.J.G. Borge, J. Campos, A. Rodriguez-Yunta, K. Heyde, C. DeCoster, J. Wood, H.-J. Kluge, and ISOLDE Collaboration, *Nuclear Shape Transition in Light Gold Isotopes*, Nucl.Phys. **A493**, 224–252 (1989).
76. Achenbach, W., J. Ahrens, A. Bornheimer, K. Dietz, H.-J. Gessinger, W. Heil, E. Hilgers, H.-J. Kluge, F. Neugebauer, and E.W. Otten, *A Large Acceptance Imaging Gas Cerenkov Detector System*, Nucl.Instr.Meth. **A294**, 234 (1990).
77. Ames, F., T. Brumm, K. Jäger, H.-J. Kluge, B.M. Suri, H. Rimke, N. Trautmann, and R. Kirchner, *A High-Temperature Laser Ion Source for Trace Analysis and Other Applications*, Appl.Phys.B **51**, 200–206 (1990).
78. Becker, P., S. Becker, G. Bollen, H.-J. Kluge, G. Savard, W. Stampf, and H. Stolzenberg, *The Inchworm as a Precision Translator in a High Magnetic Field and UHV Environment*, Vacuum **40**, 495–498 (1990).
79. Becker, S., G. Bollen, F. Kern, H.-J. Kluge, R.B. Moore, G. Savard, L. Schweikhard, and H. Stolzenberg, *Mass Measurements of Very High Accuracy by TOF-ICR of Ions Injected into a Penning Trap*, Int.J.Mass Spectr.and Ion Processes **99**, 53–77 (1990).
80. Heil, W., J. Ahrens, H.G. Andresen, A. Bornheimer, D. Conrath, K.-J. Dietz, W. Gasteyer, H.-J. Gessinger, W. Hartmann, J. Jethwa, H.-J. Kluge, H. Kessler, T. Kettner, L. Koch, F. Neugebauer, R. Neuhausen, E.W. Otten, E. Reichert, F.P. Schäfer, and B. Wagner, *Measurement of the Parity Violation in the Quasi-Elastic Scattering of Polarized Electrons from  $^9\text{Be}$* , J.Physique **15**, 39–50 (1990).
81. Hilberath, T., S. Becker, G. Bollen, M. Gerber, H.-J. Kluge, U. Krönert, G. Passler, and ISOLDE Collaboration, *Charge Radii and Shape Transitions in Short-Lived Hg, Au and Pt Isotopes*, Hyperfine Interactions **59**, 97–100 (1990).
82. Kluge, H.-J. and S. Tesch, *Geladene in Einzelhaft: Teil I*, *Wissenschaft und Fortschritt*, **40**, 97–100, 116–118 (1990).
83. Kluge, H.-J. and N. Trautmann, *Ein Resonanzionisations-Massenspektrometer als analytisches Instrument für die Spurenanalyse*, PTB-Mitteilungen **100**, 251–254 (1990).
84. Schweikhard, L., M. Lindinger, and H.-J. Kluge, *Quadrupole-Detection FT-ICR Mass Spectrometry*, Int.J.Mass Spectrom.Ion Processes **98**, 25–33 (1990).
85. Schweikhard, L., M. Lindinger, and H.-J. Kluge, *Parametric-Mode Excitation/Dipole-Mode Detection FT-ICR*, Rev.Sci.Instrum. **61**, 1055–1058 (1990).
86. Stolzenberg, H., S. Becker, G. Bollen, F. Kern, H.-J. Kluge, T. Otto, G. Savard, L. Schweikhard, G. Audi, and R.B. Moore, *Accurate Mass Determination of Short-Lived Isotopes by a Tandem Penning Trap Mass Spectrometer*, Phys.Rev.Lett. **65**, 3104–3107 (1990).
87. Kluge, H.-J. and S. Tesch, *Geladene in Einzelhaft: Teil II*, *Wissenschaft und Fortschritt*, **40**, 116–118 (1990).
88. Ames, F., H.-J. Kluge, B.M. Suri, A. Venugopalan, H. Rimke, N. Trautmann, and R. Kirchner, *RIS of Technetium in a Laser Ion Source for a Solar-Neutrino Experiment*. 1991. Bristol and Philadelphia: IOP.
89. Ames, F., H.-J. Kluge, E.W. Otten, B.M. Suri, A. Venugopalan, H. Herrmann, H. Rimke, N. Trautmann, R. Kirchner, and B. Eichler, *Release Studies of Atomic Technetium*, Annalen der Physik **48**, 1–14 (1991).
90. Fedoseyev, V.N., Y.A. Kudryavtsev, V.S. Letokhov, V.I. Mishin, H.L. Ravn, S. Sundell, H.-J. Kluge, and F. Scheerer, *A Laser Ion Source for On-Line Isotope Separation*. 1991. Bristol and Philadelphia: IOP.
91. Jertz, R., G. Bollen, H.-J. Kluge, L. Schweikhard, H. Stolzenberg, I. Bergström, C. Carlberg, and R. Schuch, *Highly-Charged Ions in a Penning Trap: Mass Measurements etc*, Z.Phys. **D21**, 179–180 (1991).
92. Kluge, H.-J., *Resonance Ionization Mass Spectroscopy of Radioactive Isotopes*. 1991. Bristol and Philadelphia: IOP.
93. Krönert, U., S. Becker, G. Bollen, M. Gerber, T. Hilberath, H.-J. Kluge, G. Passler, and ISOLDE Collaboration, *On-line Laser Spectroscopy by Resonance Ionization of Laser-Desorbed, Refractory Elements*, Nucl.Instr.Meth. **A300**, 522–537 (1991).
94. Lindinger, M., S. Becker, G. Bollen, K. Dasgupta, R. Jertz, H.-J. Kluge, L. Schweikhard, M. Vogel, and K. Lützenkirchen, *Cluster Isobars for High-Precision Mass Spectroscopy*, Z.Physik **D20**, 441–443 (1991).
95. Passler, G., S. Becker, G. Bollen, M. Gerber, T. Hilberath, H.-J. Kluge, U. Krönert, A. Venugopalan, and ISOLDE Collaboration, *Charge Radii and Shape Transitions in Short-Lived Hg, Au and Pt Isotopes. in Vth Intern.l Symposium on Resonance Ionization Spectroscopy and its Applications (RIS-90)*. 1991. Varese, Italy: IOP, Bristol & Philadelphia.
96. Sattelberger, P., R. Deißberger, G. Herrmann, J. Riegel, H. Rimke, N. Trautmann, F. Ames, and H.-J. Kluge, *Resonance Ionization Mass-Spectroscopy of Neptunium*. 1991. Bristol and Philadelphia: IOP.
97. Savard, G., S. Becker, G. Bollen, H.-J. Kluge, R.B. Moore, T. Otto, L. Schweikhard, H. Stolzenberg, and U. Wiess, *A New Cooling Technique for Heavy Ions in a Penning Trap*, Phys.Lett. **A158**, 247–252 (1991).
98. Suri, B.M., F. Ames, H.-J. Kluge, F. Scheerer, and N. Trautmann, *A Laser Ion Source for Ion Implantation Applications. in Vth Intern. Symposium on Resonance Ionization Spectroscopy and its Applications (RIS90)*. 1991. Varese, Italy: IOP, Bristol & Philadelphia.
99. Wendt, K., K. Christian, H.-J. Kluge, L. Monz, E.W. Otten, G. Passler, J. Stenner, K. Stratmann, K. Zimmer, G. Herrmann, N. Trautmann, and K. Walter, *Collinear Resonance Ionization Spectroscopy for the Quantitative Detection of Strontium-90 and Strontium-89 in Environmental Samples. in Vth Intern. Symposium on Resonance Ionization Spectroscopy and its Applications (RIS-90)*. 1991. Varese, Italy: IOP, Bristol & Philadelphia.

100. Albus, F., F. Ames, H.-J. Kluge, S. Kraß, B.M. Suri, F. Scheerer, A. Venugopalan, R. Deibenberger, S. Köhler, J. Riegel, N. Trautmann, F.-J. Urban, and R. Kirchner, *A Highly Efficient and Selective Laser Ion Source by Three-Step Resonant Laser Ionization. in Vth Intern. Symposium on Resonance Ionization Spectroscopy and its Applications" (RIS92)*. 1992. Santa Fe, USA: IOP, Bristol and Philadelphia.
101. Bollen, G., H.-J. Kluge, T. Otto, G. Savard, L. Schweikhard, H. Stolzenberg, G. Audi, R.B. Moore, G. Rouleau, and ISOLDE Collaboration, *Mass Determination of Francium and Radium Isotopes by a Penning Trap Mass Spectrometer*, *J.Mod.Optics* **39**, 257–262 (1992).
102. Bollen, G., H. Hartmann, H.-J. Kluge, M. König, T. Otto, G. Savard, H. Stolzenberg, and ISOLDE Collaboration, *Towards a Perfect Penning Trap Mass Spectrometer for Unstable Isotopes*, *Physica Scripta* **46**, 581–586 (1992).
103. Bollen, G., H.-J. Kluge, T. Otto, G. Savard, and H. Stolzenberg, *Ramsey Technique Applied in a Penning Trap Mass Spectrometer*, *Nucl.Instr.Methods* **B70**, 490–493 (1992).
104. Bollen, G., H.-J. Kluge, M. König, T. Otto, G. Savard, H. Stolzenberg, R.B. Moore, G. Rouleau, G. Audi, and ISOLDE Collaboration, *Resolution of Nuclear Ground and Isomeric State by a Penning Trap Mass Spectrometer*, *Phys.Rev.C* **46**, R2140–R2143 (1992).
105. Hilberath, T., S. Becker, G. Bollen, H.-J. Kluge, U. Krönert, G. Passler, J. Rikowska, R. Wyss, and ISOLDE Collaboration, *Ground State Properties of Neutron-Deficient Platinum Isotopes*, *Z. Phys.* **A342**, 1–15 (1992).
106. Kluge, H.-J., *Lasers at Accelerators – Past, Present and Future*, *Hyperfine Interactions* **74**, 287–305 (1992).
107. Kluge, H.-J. and G. Bollen, *Ion Traps – Recent Applications and Developments*, *Nucl.Instr.Methods* **B70**, 473–481 (1992).
108. Monz, L., R. Hohmann, H.-J. Kluge, S. Kunze, J. Lantzsch, E.W. Otten, G. Passler, P. Senne, J. Stenner, K. Stratmann, K. Wendt, K. Zimmer, G. Herrmann, N. Trautmann, and K. Walther, *Collinear Resonance Ionization Spectroscopy for the Detection of Strontium-90 and Strontium-89 in Environmental Samples*. 1992. Bristol and Philadelphia: IOP.
109. Riegel, J., F. Albus, F. Ames, R. Deibenberger, G. Herrmann, H.-J. Kluge, S. Köhler, P. Sattelberger, F. Scheerer, N. Trautmann, F.-J. Urban, and H. Wendeler, *Trace Analysis of Neptunium with Resonance Ionization Mass Spectroscopy (RIMS)*. 1992. Bristol and Philadelphia: IOP.
110. Scheerer, F., V.N. Fedoseyev, H.-J. Kluge, V.I. Mishin, V.S. Letokhov, H.L. Ravn, Y. Shirakabe, S. Sundell, and O. Tengblad, *A Chemically Selective Laser Ion Source for On-Line Mass Separation*, *Rev.Sci.Instr.* **63**, 2831–2833 (1992).
111. Scheerer, F., F. Albus, F. Ames, H.-J. Kluge, and N. Trautmann, *An Efficient Excitation Scheme for Resonance Ionization of Tin in a Laser Ion Source*, *Spectrochimica Acta* **47B**, 793–797 (1992).
112. 155. Urban, F.-J., R. Deibenberger, G. Herrmann, S. Köhler, J. Riegel, N. Trautmann, H. Albus, F. Wendeler, F. Ames, H.-J. Kluge, S. Kaß, and F. Scheerer, *Resonance Ionization Mass Spectroscopy of Plutonium with a Reflectron Time-of-Flight Mass Spectrometer*. 1992. Bristol and Philadelphia: IOP.
113. Wendt, K., G. Herrmann, R. Hohmann, H.-J. Kluge, S. Kunze, J. Lantzsch, L. Monz, E.W. Otten, G. Passler, J. Stenner, K. Stratmann, N. Trautmann, K. Walther, and K. Zimmer, *Determination of Term Energy, Hyperfine Structure and Life Time of Strontium Rydberg Levels by Resonance Ionization Spectroscopy in Collinear Geometry*. 1992. Bristol and Philadelphia: IOP.
114. Bergström, I., H. Borgenstrand, C. Carlberg, G. Rouleau, R. Schuch, B. Smith, G. Bollen, R. Jertz, H.-J. Kluge, E. Scharck, and T. Schwarz, *The Stockholm-Mainz Ion Trap Project*, *Physica Scripta* **47**, 475–480 (1993).
115. Bollen, G., H.-J. Kluge, M. König, H. Hartmann, T. Otto, G. Savard, H. Stolzenberg, G. Audi, R.B. Moore, G. Rouleau, and ISOLDE Collaboration, *High-Accuracy Mass Determination of Unstable Rb, Sr, Cs, Ba, Fr and Ra Isotopes with a Penning Trap Mass Spectrometer*. 1993: IAP.
116. Bushaw, B.A., J. Stenner, H. Stevens, J. Lantzsch, K. Zimmer, R. Schwalbach, K. Wendt, and H.-J. Kluge, *Hyperfine Structure in  $4s4d^3D-5snf$  Transitions of  $^{87}Sr$* , *Z.Phys.* **D28**, 275–281 (1993).
117. Jertz, R., D. Beck, G. Bollen, J. Emmes, H.-J. Kluge, E. Scharck, S. Schwarz, T. Schwarz, L. Schweikhard, P. Senne, C. Carlberg, I. Bergström, H. Borgenstrand, G. Rouleau, R. Schuch, and F. Söderberg, *Direct Determination of the Mass of  $^{28}Si$  as a Contribution to a New Definition of the Kilogram*, *Phys.Scripta* **48**, 399–404 (1993).
118. Kluge, H.-J. and G. Bollen, *ISOLTRAP: A Tandem Penning Trap Mass Spectrometer for Radioactive Isotopes*, *Hyperfine Interactions* **81**, 15–26 (1993).
119. Kunze, S., R. Hohmann, H.-J. Kluge, J. Lantzsch, L. Monz, J. Stenner, K. Stratmann, K. Wendt, and K. Zimmer, *Lifetime Measurements of Highly Excited Rydberg States of Strontium I*, *Z.Phys.* **D27**, 111–114 (1993).
120. Mishin, V.I., V.N. Fedoseyev, H.-J. Kluge, V.S. Letokhov, H.L. Ravn, F. Scheerer, Y. Shirakabe, S. Sundell, O. Tengblad, and ISOLDE Collaboration, *Chemically Selective Laser Ion Source for the CERN-ISOLDE On-Line Mass Separator Facility*, *Nucl.Instr.Meth.* **B73**, 550–560 (1993).
121. Monz, L., R. Hohmann, H.-J. Kluge, S. Kunze, J. Lantzsch, E.W. Otten, G. Passler, P. Senne, J. Stenner, K. Stratmann, K. Wendt, K. Zimmer, G. Herrmann, N. Trautmann, and K. Walter, *Fast, Low-Level Detection of Strontium-90 and Strontium-89 in Environmental Samples by Collinear Resonance Ionization Spectroscopy*, *Spectrochimica Acta* **48B**, 1655–1671 (1993).

122. Riegel, J., R. Deißberger, G. Herrmann, P. Sattelberger, N. Trautmann, H. Wendeler, F. Ames, H.-J. Kluge, F. Scheerer, and F.J. Urban, *Resonance Ionization Mass Spectroscopy for Trace Analysis of Neptunium*, Appl.Phys.B **56**, 275–280 (1993).
123. Becker, S., G. Dietrich, H.-U. Hasse, N. Klisch, H.-J. Kluge, D. Kreisle, S. Krückeberg, M. Lindinger, K. Lützenkirchen, L. Schweikhard, H. Weidele, and J. Ziegler, *Collision Induced Dissociation of Stored Gold Cluster Ions*, Z.Phys. **D30**, 341–348 (1994).
124. Becker, S., G. Dietrich, H.-U. Hasse, N. Klisch, H.-J. Kluge, D. Kreisle, S. Krückeberg, M. Lindinger, K. Lützenkirchen, L. Schweikhard, H. Weidele, and J. Ziegler, *Fragmentation Pattern of Gold Clusters Collided with Xenon Atoms*, Computational Material Sciences **2**, 633–637 (1994).
125. Becker, S., G. Dietrich, H.-U. Hasse, N. Klisch, H.-J. Kluge, D. Kreisle, S. Krückeberg, M. Lindinger, K. Lützenkirchen, L. Schweikhard, H. Weidele, and J. Ziegler, *Fragmentation of Gold Clusters Stored in a Penning Trap*, Rapid Comm.Mass Spectrom. **8**, 401–402 (1994).
126. Dietrich, G., K. Lützenkirchen, S. Becker, H.-U. Hasse, H.-J. Kluge, M. Lindinger, L. Schweikhard, J. Ziegler, and S. Kuznetsov, *Au<sup>+</sup>-Induced Decomposition of N<sub>2</sub>O*, Ber.Bunsenges. Phys.Chem. **98**, 1608–1612 (1994).
127. Hasse, H.-U., S. Becker, G. Dietrich, N. Klisch, H.-J. Kluge, S. Krückeberg, M. Lindinger, K. Lützenkirchen, L. Schweikhard, and J. Ziegler, *External-Ion Accumulation in a Penning Trap with Quadrupole Excitation Assisted Buffer Gas Cooling*, Int.J.Mass Spectr.Ion.Proc. **132**, 181–191 (1994).
128. Herrmann, G., H.-J. Kluge, G. Passler, N. Trautmann, and K. Wendt, *Resonanzionisations-Spektroskopie mit Lasern: eine neue hochempfindliche Methode zur Bestimmung langlebiger Isotope in der Umwelt*, Physikalische Blätter **50**, 929–933 (1994).
129. Kluge, H.-J., B.A. Bushaw, G. Passler, K. Wendt, and N. Trautmann, *Resonance Ionization Spectroscopy for Trace Analysis and Fundamental Research*, Fresenius J.Anal.Chem. **350**, 323–329 (1994).
130. Kluge, H.-J., *Resonance Ionization Spectroscopy and its Application*, Acta Physica Polonica **A86**, 159–171 (1994).
131. Otto, T., G. Bollen, H.-J. Kluge, G. Savard, L. Schweikhard, H. Stolzenberg, G. Audi, R.B. Moore, G. Rouleau, J. Szerypo, and ISOLDE Collaboration, *Penning Trap Mass Spectrometry of Neutron-Deficient Rb and Sr Isotopes*, Nucl.Phys. **A567**, 281–302 (1994).
132. 179. Passler, G., J. Rikowska, E. Arnold, H.-J. Kluge, L. Monz, R. Neugart, H.L. Ravn, K. Wendt, and ISOLDE Collaboration, *Quadrupole Moments and Nuclear Shapes of Neutron-Deficient Gold Isotopes*, Nucl.Phys. **A580**, 173–212 (1994).
133. Stratmann, K., R. Hohmann, H.-J. Kluge, S. Kunze, J. Lantsch, L. Monz, E.W. Otten, G. Passler, J. Stenner, K. Wendt, and K. Zimmer, *High-Resolution Field Ionizer for State-Selective Detection of Rydberg Atoms in Fast-Beam Laser Spectroscopy*, Rev.Sci.Instr. **65**, 1847–1852 (1994).
134. Ziegler, J., S. Becker, G. Dietrich, H.-J. Kluge, M. Lindinger, K. Lützenkirchen, L. Schweikhard, and C. Walther, *Photofragmentation of Stored Cluster Ions*. 1994.
135. Zimmer, K., J. Stenner, H.-J. Kluge, J. Lantsch, L. Monz, E.W. Otten, G. Passler, R. Schwalbach, M. Schwarz, H. Stevens, K. Wendt, G. Herrmann, S. Nieß, N. Trautmann, K. Walter, and B.A. Bushaw, *Determination of <sup>90</sup>Sr in Environmental Samples with Resonance Ionization Spectroscopy in Collinear Geometry*, in Appl.Phys.B. 1994. p. 117–121.
136. Dasgupta, K., M. Lindinger, St. Becker, and H.-J. Kluge, *Nonlinear-optical effects and their suppression in large-core fiberoptical laser-beam delivery systems for narrow-band pulsed dye-lasers*, Optics Communications **110**, 179–186 (1994).
137. Becker, S., K. Dasgupta, G. Dietrich, H.-J. Kluge, S. Kuznetsov, M. Lindinger, K. Lützenkirchen, L. Schweikhard, and J. Ziegler, *A Penning Trap Mass Spectrometer for the Study of Cluster Ions*, Rev.Sci.Instrum. **66**, 4902–4910 (1995).
138. Carlberg, C., D. Beck, I. Bergström, G. Bollen, H. Borgenstrand, J. Emmes, R. Jertz, H.-J. Kluge, G. Rouleau, E. Schark, R. Schuch, S. Schwarz, T. Schwarz, L. Schweikhard, P. Senne, and F. Söderberg, *SMILETRAP - A Wide Range High Precision Mass Spectrometer*, IEEE Trans.on Instr.and Measurement **44**, 553–557 (1995).
139. Carlberg, C., H. Borgenstrand, G. Rouleau, R. Schuch, F. Söderberg, I. Bergström, R. Jertz, T. Schwarz, H.J. Stein, G. Bollen, H.-J. Kluge, and R. Mann, *The SMILETRAP Facility*, Physica Scripta **T59**, 196–202 (1995).
140. Deissenberger, R., S. Köhler, F. Ames, K. Eberhardt, N. Erdmann, H. Funk, G. Herrmann, H.-J. Kluge, M. Nunnemann, G. Passler, J. Riegel, F. Scheerer, N. Trautmann, and F.-J. Urban, *First Determination of the Ionization Potential of Americium and Curium*, Angewandte Chemie Int.Ed.engl. **34**, 814–815 (1995).
141. Deißberger, R., S. Köhler, F. Ames, K. Eberhardt, N. Erdmann, H. Funk, G. Herrmann, H.-J. Kluge, M. Nunnemann, G. Passler, J. Riegel, F. Scheerer, N. Trautmann, and F.-J. Urban, *Erste Messung der Ionisationsenergie der Elemente Americium und Curium*, Angewandte Chemie **107**, 891–893 (1995).
142. Janas, Z., H. Keller, R. Kirchner, O. Klepper, A. Piechaczek, E. Roeckl, K. Schmidt, M. Huyse, J. von Schwarzenberg, J. Szerypo, P. Van Duppen, L. Vermeeren, F. Albus, H.-J. Kluge, G. Passler, F.P. Scheerer, N. Trautmann, V.N. Fedoseyev, V.I. Mishin, R. Grzywacz, A. Plochocki, K. Rykaczewski, and J. Zylicz, *Beta Decay of the New Isotope <sup>101</sup>Sn*, Physica Scripta **T56**, 262–265 (1995).
143. König, M., G. Bollen, H.-J. Kluge, T. Otto, and J. Szerypo, *Quadrupole Excitation of Stored Ion Motion at the True Cyclotron Frequency*, Int.J.Mass Spec.Ion Proc. **142**, 95–116 (1995).

144. Kluge, H.-J., *Highly-charged ions in storage rings and ion traps*, Nucl.Instr.Meth. **B98**, 500–507 (1995).
145. Lantzsich, J., B.A. Bushaw, G. Herrmann, H.-J. Kluge, L. Monz, S. Nieß, E.W. Otten, R. Schwalbach, M. Schwarz, J. Stenner, N. Trautmann, K. Walter, K. Wendt, and K. Zimmer, *Trace Analysis of the Radionuclides  $^{90}\text{Sr}$  and  $^{89}\text{Sr}$  in Environmental Samples I: Laser Mass Spectrometry*, Angew.Chem.Int.Ed.Engl. **34**, 181–183 (1995).
146. Lantzsich, J., B.A. Bushaw, G. Herrmann, H.-J. Kluge, L. Monz, S. Nieß, E.W. Otten, R. Schwalbach, M. Schwarz, J. Stenner, N. Trautmann, K. Walter, K. Wendt, and K. Zimmer, *Spurenbestimmung der Radionuklide Strontium-90 und Strontium-89 in Umweltproben I: Laser-Massenspektrometrie*, Angew.Chem. **107**, 202–204 (1995).
147. Schweikhard, L., S. Becker, K. Dasgupta, G. Dietrich, H.-J. Kluge, D. Kreisle, S. Krückeberg, S. Kutnetzov, M. Lindinger, K. Lützenkirchen, B. Obst, C. Walther, H. Weidele, and J. Ziegler, *Trapped Metal Cluster Ions*, Phys.Scripta **T59**, 236–243 (1995).
148. Bollen, G., S. Becker, H.-J. Kluge, M. König, R.B. Moore, T. Otto, H. Raimbault-Hartmann, G. Savard, L. Schweikhard, H. Stolzenberg, and ISOLDE Collaboration, *ISOLTRAP: A Tandem Penning Trap Mass System for Accurate On-line Mass Determination of Short Lived Isotopes*, Nucl.Instr.Meth. **A368**, 675–697 (1996).
149. Bollen, G. and H.-J. Kluge, *Penning Trap Mass Spectrometer*, in *Handbook of Nuclear Properties*, W. Greiner, Editor. 1996, Clarendon Press: Oxford. p. 66–79.
150. Bosch, F., H.-J. Kluge, and G. Bollen, *Exotic Particles in Small and Large Ion Traps*, Acta Physica Polonica **B27**, 323–342 (1996).
151. Egelhof, P., H.F. Beyer, D. McCammon, F. v.Feilitzsch, A. v.Kienlin, H.-J. Kluge, D. Liesen, J. Meier, H.S. Moseley, and T. Stöhlker, *Application of Low-Temperature Calorimeters for Precise Lamb Shift Measurements on Hydrogenlike Very Heavy Ions*, Nucl.Instr.Meth. **A370**, 263–267 (1996).
152. Hermanspahn, K., W. Quint, S. Stahl, M. Tönges, G. Bollen, H.J. Kluge, R. Ley, R. Mann, and G. Werth, *The  $g_j$ -Factor of the Bound Electron: A Test of Bound-State QED*, Acta Physica Polonica **B27**, 357–367 (1996).
153. Hermanspahn, K., W. Quint, S. Stahl, M. Tönges, G. Bollen, H.-J. Kluge, R. Ley, R. Mann, and G. Werth, *Measurement of the  $g_j$  Factor of Hydrogenic Ions: A Sensitive Test of Bound State QED*, Hyperfine Interactions **99**, 91–95 (1996).
154. Rouleau, G., H. Borgenstrand, C. Carlberg, R. Schuch, F. Söderberg, I. Bergström, R. Jertz, T. Schwarz, J. Stein, G. Bollen, H.-J. Kluge, and R. Mann, *The SMILETRAP (Stockholm-Mainz-Ion-LEvitation-TRAP) Facility*, Hyperfine Interactions **99**, 73–81 (1996).
155. Schwarz, T., R. Jertz, J. Stein, I. Bergström, H. Borgenstrand, C. Carlberg, G. Rouleau, R. Schuch, F. Söderberg, G. Bollen, H.-J. Kluge, and R. Mann, *SMILETRAP - Atomic Mass Measurements with ppb Accuracy by Using Highly Charged Ions*, Hyperfine Interactions **99**, 83–89 (1996).
156. Walther, C., S. Becker, G. Dietrich, H.-J. Kluge, M. Lindinger, K. Lützenkirchen, L. Schweikhard, and J. Ziegler, *Photo Fragmentation of Metal Clusters Stored in a Penning Trap*, Z.Phys. **D38**, 51–58 (1996).
157. Weidele, H., S. Becker, H.-J. Kluge, M. Lindinger, L. Schweikhard, C. Walter, J. Ziegler, and D. Kreisle, *Delayed Electron Emission of Negatively Charged Tungsten Clusters*, Surf.Rev.and Lett. **3**, 541–544 (1996).
158. Wolf, A., H.J. Kluge, and H. Orth, *Atomic physics with stored highly charged ions*. in *1st Euroconference on Atomic Physics with Stored Highly Charged Ions*. 1996. Heidelberg, germany: Hyperfine Interactions.
159. Beck, D., F. Ames, G. Bollen, H.-J. Kluge, A. Kohl, M. König, D. Lunney, H. Raimbault-Hartmann, S. Schwarz, and J. Szerypo, *Towards Higher Accuracy with the ISOLTRAP Mass Spectrometer*, Nucl.Instr.Meth. **B126**, 374–377 (1997).
160. Beck, D., F. Ames, G. Audi, G. Bollen, H.-J. Kluge, A. Kohl, M. König, I. Martel, D. Lunney, R.B. Moore, H. Raimbault-Hartmann, M. de Saint Simon, E. Schark, S. Schwarz, J. Szerypo, and I. Collaboration, *Exploring New Mass Regions with the ISOLTRAP Spectrometer*, Hyperfine Interactions **108**, 219–225 (1997).
161. Beck, D., F. Ames, G. Audi, G. Bollen, H.-J. Kluge, A. Kohl, M. König, D. Lunney, I. Martel, R.B. Moore, H. Raimbault-Hartmann, E. Schark, S. Schwarz, M. de Saint Simon, J. Szerypo, and ISOLDE Collaboration, *Direct Mass Measurements of Unstable Rare Earth Isotopes with the ISOLTRAP Mass Spectrometer*, Nucl.Phys. **A626**, 343c–352c (1997).
162. Beyer, H.F., H.-J. Kluge, and V.P. Shevelko, *X-ray Radiation of Highly Charged Ions*, Springer, Heidelberg, (1997).
163. Borgenstrand, H., C. Carlberg, G. Rouleau, R. Schuch, F. Söderberg, E. Beebe, I. Bergström, L. Liljeby, A. Paal, A. Pikin, G. Bollen, H. Hartmann, R. Jertz, H.-J. Kluge, P. Senne, T. Schwarz, and R. Mann, *Precision Mass Measurements Using a Penning Trap and Highly Charged Ions Produced in an Electron Beam Ion Source*, Phys.Scripta **T71**, 88–95 (1997).
164. Kluge, H.-J., *High-accuracy Mass Measurements in Ion Traps and Storage Rings*, Hyperfine Interactions **108**, 207–218 (1997).
165. Radon, T., T. Kerscher, B. Schlitt, K. Beckert, T. Beha, F. Bosch, H. Eickhoff, B. Franzke, Y. Fujita, H. Geissel, M. Hausmann, H. Irnich, H.C. Jung, O. Klepper, H.-J. Kluge, C. Kozhuharov, G. Kraus, K.E.G. Löbner, G. Münzenberg, Y. Novikov, F. Nickel, F. Nolden, Z. Patyk, H. Reich, C. Scheidenberger, W. Schwab, M. Steck, K. Sümmerer, and H. Wollnik, *Schottky Mass Measurements of Cooled Proton-Rich Nuclei at the GSI Experimental Storage Ring*, Phys.Rev.Lett. **78**, 4701–4704 (1997).
166. Raimbault-Hartmann, H., D. Beck, G. Bollen, M. König, H.-J. Kluge, E. Schark, J. Stein, S. Schwarz, and J. Szerypo, *A Cylindrical Penning Trap for Capture, Mass Selective Cooling, and Bunching of Radioactive Ion Beams*, Nucl.Instr.Meth. **B126**, 378–382 (1997).
167. Schlitt, B., K. Beckert, F. Bosch, H. Eickhoff, B. Franzke, Y. Fujita, H. Geissel, M. Hausmann, H. Irnich, O. Klepper, H.-J. Kluge, C. Kozhuharov, G. Kraus, G. Münzenberg, F. Nickel, F. Nolden, Z. Patyk, T. Radon, H. Reich, C. Scheidenberger,

- W. Schwab, M. Steck, K. Sümmerer, T. Winkler, T. Beha, M. Falch, T. Kerscher, K.E.G. Löbner, H.C. Jung, H. Wollnik, and Y. Novikov, *Schottky Mass Spectrometry at the ESR: A Novel Tool for Precise Direct Mass Measurements of Exotic Nuclei*, Nucl.Phys. **A626**, 315c–325c (1997).
168. Schuch, R., E. Lindroth, and H.J. Kluge, *Preface. in 2nd Euroconference on atomic physics with stored highly charged ions*. 1997. Stockholm, Sweden: Hyperfine Interactions.
169. Wollnik, H., K. Beckert, T. Beha, and H.-J. Kluge, *Mass measurements of short lived nuclei at GSI*, Papers of the American Chemical Society **213**, (1997).
170. Wollnik, H., Beckert, K., Beha T. et al. *Direct mass measurements of proton-rich nuclei in theregion from tellurium to polonium*, Nuclear Physics A **616**, C346–C351 (1997)
171. Diederich, M., H. Häffner, N. Hermanspahn, N. Immel, H.-J. Kluge, R. Ley, R. Mann, W. Quint, S. Stahl, and G. Werth, *Observing a Single Hydrogen-like Ion in a Penning Trap at  $T = 4$  K*, Hyperfine Interactions **115**, 185–192 (1998).
172. Calabrese, R., V. Guidi, H.-J. Kluge, and L. Moi, *Preface*, Hyperfine Interactions **114**, 1–6 (1998).
173. Ames, F.A., G. Beck, D. Bollen, G. de Saint Simon, M., R. Jertz, H.-J. Kluge, A. Kohl, M. König, D. Lunney, I. Martel, R.B. Moore, T. Otto, Z. Patyk, H. Raimbault-Hartmann, G. Rouleau, G. Savard, E. Scharck, S. Schwarz, L. Schweikhard, H. Stolzenberg, J. Szerypo, and ISOLDE Collaboration, *High-Accuracy Mass Determination of Unstable Cesium and Barium Isotopes*, Nucl.Phys. **A651**, 3 (1999).
174. Becker-de Mos, B., R. Bock, S. Borneis, D. Hoffmann, H.-J. Kluge, T. Kühl, D. Marx, and M. Roth, *PHELIX - Petawatt High-Energy Laser for Heavy-Ion Experiments*, Photonics Science News **5**, (1999).
175. Diederich, M., H. Häffner, N. Hermanspahn, M. Immel, H.-J. Kluge, R. Ley, R. Mann, W. Quint, S. Stahl, J. Verdú, and G. Werth, *The g-factor of the Electron Bound in Hydrogen-like Ions*, Physica Scripta **T80**, 437–439 (1999).
176. Kluge, H.-J., *Trapping and cooling of highly charged or radioactive ions*, Nucl.Phys. **A654**, 1021c–1026c (1999).
177. Weidele, H., D. Kreisle, E. Recknagel, S. Becker, H.-J. Kluge, M. Lindinger, L. Schweikhard, C. Walther, and J. Ziegler, *Thermionic Electron Emission of Small Tungsten Cluster Anions on the Milliseconds Time Scale*, Journal of Chemical Physics **110**, 8754–8766 (1999).
178. Scheidenberger, C., F. Attallah, K. Beckert, F. Bosch, H. Eickhoff, M. Falch, B. Franzke, Y. Fujita, H. Geissel, M. Hausmann, M. Hellstrom, F. Herfurth, T. Kerscher, O. Klepper, H.J. Kluge, C. Kozhuharov, Y.A. Litvinov, K.E.G. Lobner, G. Munzenberg, F. Nolden, Y.N. Novikov, Z. Patyk, W. Quint, T. Radon, H. Reich, H. Schatz, B. Schlitt, J. Stadlmann, M. Steck, K. Summerer, L. Vermeeren, H. Weick, M. Winkler, T. Winkler, and H. Wollnik, *Mass measurements of relativistic exotic nuclei*, Acta Physica Hungarica New Series-Heavy Ion Physics **10**, 177–184 (1999).
179. Radon, T., H. Geissel, F. Attallah, K. Beckert, F. Bosch, A. Dolinskiy, H. Eickhoff, M. Falch, B. Franczak, B. Franzke, Y. Fujita, M. Hausmann, M. Hellstrom, F. Herfurth, T. Kerscher, O. Klepper, H.J. Kluge, C. Kozhuharov, Y. Litvinov, K.E.G. Lobner, G. Munzenberg, F. Nolden, Y. Novikov, Z. Patyk, W. Quint, H. Reich, C. Scheidenberger, B. Schlitt, J. Stadlmann, M. Steck, K. Summerer, L. Vermeeren, M. Winkler, T. Winkler, and H. Wollnik, *Mass measurements of relativistic projectile fragments in the storage ring ESR*, Pramana-Journal of Physics **53**, 609–618 (1999).
180. Beck, D., F. Ames, G. Audi, G. Bollen, F. Herfurth, H.-J. Kluge, A. Kohl, M. König, D. Lunney, I. Martel, R.B. Moore, H. Raimbault-Hartmann, E. Scharck, S. Schwarz, M. de Saint-Simon, J. Szerypo, and ISOLDE Collaboration, *Accurate masses of unstable rare-earth isotopes by ISOLTRAP*, Eur.Phys.J. **A8**, 307–329 (2000).
181. Schweikhard L., Kluge H.J. *Atomic Physics at Accelerators: Laser Spectroscopy and Applications (APAC '99) - Preface*, Hyperfine Interactions **127** (1–4): U2–U6 (2000)
182. Borneis, S., B. Becker-de Mos, H.-J. Kluge, T. Kühl, D. Marx, P.V. Nickles, P. Neumayer, W. Sandner, and W. Seelig, *X-ray laser spectroscopy at the ESR: a proposed novel tool for the investigation of exotic isotopes*, Hyperfine Interactions **127**, 537–542 (2000).
183. Dilling, J., D. Ackermann, J. Bernard, F.P. Hessberger, S. Hofmann, W. Hornung, H.-J. Kluge, E. Lamour, M. Maier, R. Mann, G. Marx, R.B. Moore, G. Münzenberg, W. Quint, D. Rodriguez, M. Schädel, J. Schönfelder, G. Sikler, C. Toader, L. Vermeeren, C. Weber, G. Bollen, O. Engels, D. Habs, P. Thirolf, H. Backe, A. Drezke, W. Lauth, W. Ludolphs, and M. Sewtz, The SHIPTRAP Collaboration, *The SHIPTRAP project: A capture and storage facility at GSI for heavy radionuclides from SHIP*, Hyperfine Interactions **127**, 491–496 (2000).
184. Häffner, H., K. Hermanspahn, P. Indelicato, H.-J. Kluge, E. Lindroth, V. Natarajan, W. Quint, S. Stahl, J. Verdú, and G. Werth, *Testing atomic structure theories with high-accuracy mass measurements on highly charged ions*, Hyperfine Interactions **127**, 271–276 (2000).
185. Häffner, H., T. Beier, K. Hermanspahn, H.-J. Kluge, W. Quint, S. Stahl, J. Verdú, and G. Werth, *High-Accuracy Measurement of the Magnetic Moment Anomaly of the Electron Bound in Hydrogenlike Carbon*, Physical Review Letters **85**, 5308–5311 (2000).
186. Hausmann, M., F. Attallah, K. Beckert, F. Bosch, A. Dolinskiy, H. Eickhoff, M. Falch, B. Franczak, B. Franzke, H. Geissel, T. Kerscher, O. Klepper, H.-J. Kluge, C. Kozhuharov, K.E.G. Löbner, G. Münzenberg, F. Nolden, Y.N. Novikov, T. Radon, H. Schatz, C. Scheidenberger, J. Stadlmann, M. Steck, T. Winkler, and H. Wollnik, *First Isochronous Mass Spectrometry at the Experimental Storage Ring ESR*, Nuc.Instr.and Methods in Physics Research A **446**, 569–580 (2000).



187. Bleile, A., P. Egelhof, H.J. Kluge, U. Liebisch, D. McCammon, H.J. Meier, O. Sebastian, C.K. Stahle, M. Weber, *Low-temperature X-ray detectors for precise Lamb shift measurements on hydrogen-like heavy ions*, Nucl. Instr. Meth. in Physics Research A - Accelerators Spectrometers Detectors and Associated Equipment **444**, 488–491 (2000)
188. Hermanspahn, K., H. Häffner, H.-J. Kluge, W. Quint, S. Stahl, J. Verdú, and G. Werth, *Observation of the Continuous Stern-Gerlach Effect on an Electron Bound in an Atomic Ion*, Phys.Rev.Lett. **84**, 427–430 (2000).
189. Schmitt, F., A. Dax, R. Kirchner, H.-J. Kluge, T. Kühl, I. Tanihata, M. Wakasugi, H. Wang, and C. Zimmermann, *Towards the determination of the charge radius of  $^{11}\text{Li}$  by laser spectroscopy*, Hyperfine Interactions **127**, 111–115 (2000).
190. Litvinov, Y.A., F. Attallah, K. Beckert, F. Bosch, M. Falch, B. Franzke, H. Geissel, M. Hausmann, T. Kerschner, O. Klepper, H.-J. Kluge, C. Kozhuharov, K.E.G. Löbner, G. Münzenberg, F. Nolden, Y.N. Novikov, Z. Patyk, W. Quint, T. Radon, C. Scheidenberger, V. Steck, L., and H. Wollnik, *Schottky Mass Measurements of Cooled Exotic Nuclei*, Hyperfine Interactions, 283–289 (2001).
191. Marx, G., D. Ackermann, J. Dilling, F.P. Hessberger, S. Hoffmann, H.-J. Kluge, R. Mann, G. Münzenberg, Z. Qamhieh, W. Quint, D. Rodriguez, M. Schädel, J. Schönfelder, G. Sikler, C. Toader, C. Weber, O. Engels, D. Habs, P. Thirolf, H. Backe, A. Dretzke, W. Lauth, W. Ludolphs, and t.S.C. Sewtz, *Status of the SHIPTRAP Project: A Capture and Storage Facility for Heavy Radionuclides from SHIP*, Hyperfine Interactions **132**, 468 (2001).
192. Quint, W., J. Dilling, S. Djekic, H. Häffner, N. Hermanspahn, H.-J. Kluge, G. Marx, R. Moore, D. Rodriguez, J. Schönfelder, G. Sikler, T. Valenzuela, J. Verdú, C. Weber, and G. Werth, *HITRAP: A Facility for Experiments with Trapped Highly Charged Ions*, Hyperfine Interactions **132**, 457–461 (2001).
193. Schwarz, S., F. Ames, G. Audi, D. Beck, G. Bollen, J. Dilling, F. Herfurth, H.-J. Kluge, A. Kellerbauer, A. Kohl, D. Lunney, R.B. Moore, H. Raimbault-Hartmann, C. Scheidenberger, G. Sikler, and J. Szerypo, *Accurate Mass Determination of Neutron-Deficient Nuclides Close to  $Z = 82$  with ISOLTRAP*, Hyperfine Interactions **132**, 337–340 (2001).
194. Schwarz, S., F. Ames, G. Audi, D. Beck, G. Bollen, C. de Coster, J. Dilling, O. Engels, R. Fossion, J.-E. Garcia Ramos, S. Henry, F. Herfurth, K. Heyde, A. Kellerbauer, H.-J. Kluge, A. Kohl, E. Lamour, D. Lunney, R.B. Moore, M. Oinonen, H. Raimbault-Hartmann, C. Scheidenberger, G. Sikler, J. Szerypo, C. Weber, and ISOLDE Collaboration, *Accurate Masses of Neutron-Deficient Isotopes Close to  $Z = 82$* , Nucl. Phys. A **693**, 533–545 (2001).
195. Tomaselli, M., S. Fritzsche, A. Dax, P. Egelhof, C. Kozhuharov, T. Kühl, D. Marx, M. Mutterer, S.R. Neumaier, W. Nörtershäuser, H. Wang, and H.-J. Kluge, *Microscopic Model for Charge and Matter Distributions of Nuclei*, Nuclear Physics A **690**, 298c–301c (2001).
196. Werth, G., H. Häffner, H.-J. Kluge, W. Quint, T. Valenzuela, and J. Verdú, *A Possible New Value for the Electron Mass from  $g$ -Factor Measurements on Hydrogen-Like Ions*, Hyperfine Interactions **132**, 207–213 (2001).
197. Bollen, G., F. Ames, G. Audi, D. Beck, J. Dilling, O. Engels, S. Henry, F. Herfurth, A. Kellerbauer, H.-J. Kluge, A. Kohl, E. Lamour, D. Lunney, R.B. Moore, M. Oinonen, C. Scheidenberger, S. Schwarz, G. Sikler, J. Szerypo, C. Weber, and ISOLDE Collaboration, *Mass Measurements on Short-Lived Nuclides with ISOLTRAP*, Hyperf. Int. **132**, 215–222 (2001).
198. Dilling, J., D. Ackermann, F.P. Heßberger, S. Hofmann, H.-J. Kluge, G. Marx, G. Münzenberg, Z. Patyk, W. Quint, D. Rodriguez, r. Scheidenberge, J. Schönfelder, G. Sikler, A. Sobiczewski, C. Toader, and C. Weber, *A Physics Case for SHIPTRAP: Measuring the Masses of Tansuranium Elements*, Hyperf. Int. **132**, 495 (2001).
199. Dilling, J., G. Audi, D. Beck, G. Bollen, F. Herfurth, A. Kellerbauer, H.-J. Kluge, D. Lunney, R.B. Moore, C. Scheidenberger, S. Schwarz, G. Sikler, J. Szerypo, and ISOLDE Collaboration, *Mass Measurements of  $^{114-124,130}\text{Xe}$  with the ISOLTRAP Penning Trap Spectrometer*, Hyperf. Int. **132**, 331–335 (2001).
200. Geissel, H., F. Attallah, K. Beckert, F. Bosch, M. Falch, B. Franzke, M. Hausmann, T. Kersch, O. Klepper, H.-J. Kluge, C. Kozhuharov, Y. Litvinov, K.E.G. Löbner, G. Münzenberg, N. Nankov, F. Nolden, Y. Novikov, T. Ohtsubo, Z. Patyk, T. Radon, C. Scheidenberger, J. Stadlmann, M. Steck, K. Sümmerer, H. Weick, and H. Wollnik, *Progress in Mass Measurements of Stored Exotic Nuclei at Relativistic Energies*, Nucl. Phys. A **685**, 115–126 (2001).
201. Hausmann, M., J. Stadlmann, F. Attallah, K. Beckert, P. Beller, F. Bosch, H. Eickhoff, M. Falch, B. Franczak, B. Franzeke, H. Geissel, T. Kersch, O. Klepper, H.-J. Kluge, C. Kozhuharov, A. Litvinov, K.E.G. Löbner, G. Münzenberg, N. Nankov, F. Nolden, N. Novikov, T. Ohtsubo, T. Radon, H. Schatz, C. Scheidenberger, M. Steck, Z. Sun, H. Weick, and H. Wollnik, *Isochronous Mass Measurements of Hot Exotic Nuclei*, Hyperf. Int. **132**, 291–297 (2001).
202. Herfurth, F., J. Dilling, A. Kellerbauer, G. Audi, D. Beck, G. Bollen, S. Henry, H.-J. Kluge, D. Lunney, R.B. Moore, C. Scheidenberger, S. Schwarz, G. Sikler, J. Szerypo, and ISOLDE Collaboration, *Breakdown of the Isobaric Multiplet Mass Equation (IMME) at  $A = 33$ ,  $T = 3/2$* , Phys. Rev. Lett. **87**, 142501 (2001).
203. Herfurth, F., J. Dilling, A. Kellerbauer, G. Audi, D. Beck, G. Bollen, S. Henry, H.-J. Kluge, D. Lunney, R.B. Moore, C. Scheidenberger, S. Schwarz, G. Sikler, J. Szerypo, and ISOLDE Collaboration, *Towards Shorter-Lived Nuclides in ISOLTRAP Mass Measurements*, Hyperf. Int. **132**, 309–314 (2001).
204. Herfurth, F., J. Dilling, A. Kellerbauer, G. Bollen, S. Henry, H.-J. Kluge, E. Lamour, D. Lunney, R.B. Moore, C.-. Scheidenberger, S. Schwarz, G. Sikler, and J. Szerypo, *A Linear Radiofrequency Ion Trap for Accumulation, Bunching, and Emittance Improvement of Radioactive Ion Beams*, Nucl. Instr. Meth. A **469**, 254–275 (2001).

205. Kellerbauer, A., G. Bollen, J. Dilling, S. Henry, F. Herfurth, H.-J. Kluge, E. Lamour, D. Lunney, R.B. Moore, C. Scheidenberger, S. Schwarz, G. Sikler, and J. Szerypo, *Improvement of the Applicability, Efficiency, and Precision of the Penning Trap Mass Spectrometer ISOLTRAP*, *Hyperf. Int.* **132**, 511–515 (2001).
206. Beier, T., H. Häffner, N. Hermanspahn, S. Djekic, H.-J. Kluge, W. Quint, S. Stahl, T. Valenzuela, J. Verdú, and G. Werth, *The measurement of the electronic g-factor in hydrogen-like ions — A promising tool for determining fundamental and nuclear constants*, *Eur. Phys. J. A* **15**, 41–44 (2002).
207. Beier, T., H. Häffner, N. Hermanspahn, S. Karshenboim, H.-J. Kluge, W. Quint, S. Stahl, J. Verdú, and G. Werth, *New Determination of the Electron's Mass*, *Phys. Rev. Lett.* **88**, 011603 (2002).
208. Dilling, J., G. Audi, D. Beck, G. Bollen, S. Henry, F. Herfurth, A. Kellerbauer, H.-J. Kluge, D. Lunney, R.B. Moore, C. Scheidenberger, S. Schwarz, G. Sikler, J. Szerypo, and ISOLDE Collaboration, *Direct mass measurements of neutron-deficient xenon isotopes with the ISOLTRAP mass spectrometer*, *Nucl. Phys. A* **701**, 520–523 (2002).
209. Herfurth, F., G. Audi, D. Beck, G. Bollen, J. Dilling, S. Henry, A. Kellerbauer, H.-J. Kluge, V. Kolhinen, D. Lunney, R.B. Moore, C. Scheidenberger, S. Schwarz, G. Sikler, J. Szerypo, and ISOLDE Collaboration, *Extension of Penning-trap mass measurements to very short-lived nuclides*, *Nucl. Phys. A* **701**, 516–519 (2002).
210. Herfurth, F., A. Kellerbauer, F. Ames, G. Audi, D. Beck, K. Blaum, G. Bollen, O. Engels, H.-J. Kluge, D. Lunney, R.B. Moore, M. Oinonen, E. Sauvan, C. Scheidenberger, S. Schwarz, G. Sikler, C. Weber, and ISOLDE Collaboration, *Accurate mass measurements of very short-lived nuclei: Prerequisites for high-accuracy investigation of superallowed  $\beta$ -decays*, *Eur. Phys. J. A* **15**, 17–20 (2002).
211. Kellerbauer, A., G. Bollen, J. Dilling, S. Henry, F. Herfurth, H.-J. Kluge, E. Lamour, R.B. Moore, C. Scheidenberger, S. Schwarz, G. Sikler, and J. Szerypo, *A linear radiofrequency quadrupole ion trap for the cooling and bunching of radioactive ion beams*, *Nucl. Phys. A* **701**, 565–569 (2002).
212. Kluge, H.-J., *Atomic physics techniques applied to nuclear physics*, *Nucl. Phys. A* **701**, 495–502 (2002).
213. Novikov, Y.N., F. Attallah, F. Bosch, M. Falch, H. Geissel, M. Hausmann, T. Kerscher, O. Klepper, H.-J. Kluge, C. Kozhuharov, Y.A. Litvinov, K.E.G. Lobner, G. Münzenberg, Z. Patyk, T. Radon, C. Scheidenberger, A.H. Wapstra, and H. Wollnik, *Mass mapping of a new area of neutron-deficient suburanium nuclides*, *Nucl. Phys. A* **697**, 92–106 (2002).
214. Raimbault-Hartmann, H., G. Audi, D. Beck, G. Bollen, M. de Saint Simon, H.-J. Kluge, M. König, R.B. Moore, S. Schwarz, G. Savard, J. Szerypo, and ISOLDE Collaboration, *High-accuracy mass determination of neutron-rich rubidium and strontium isotopes*, *Nucl. Phys. A* **706**, 3–14 (2002).
215. Scheidenberger, C., G. Bollen, F. Herfurth, A. Kellerbauer, H.-J. Kluge, M. Koizumi, S. Schwarz, and L. Schweikhard, *Production and trapping of carbon clusters for absolute mass measurements at ISOLTRAP*, *Nucl. Phys. A* **701**, 574–578 (2002).
216. Schönfelder, J., D. Ackermann, H. Backe, G. Bollen, J. Dilling, A. Dretzke, O. Engels, J. Estermann, D. Habs, S. Hofmann, F.P. Hessberger, H.-J. Kluge, W. Lauth, W. Ludolphs, M. Maier, G. Marx, R.B. Moore, W. Quint, D. Rodriguez, M. Sewtz, G. Sikler, C. Toader, and C. Weber, *SHIPTRAP—a capture and storage facility for heavy radionuclides at GSI*, *Nucl. Phys. A* **701**, 579–582 (2002).
217. Beier, T., H. Häffner, N. Hermanspahn, S. Djekic, H.-J. Kluge, W. Quint, S. Stahl, T. Valenzuela, J. Verdú, and G. Werth, *The Measurement of the Electronic g-Factor in Hydrogen-like Ions – A Promising Tool for Determining Fundamental and Nuclear Constants*, *Eur. Phys. J. A* **15**, 41–44 (2002).
218. Blaum, K., G. Bollen, F. Herfurth, A. Kellerbauer, H.-J. Kluge, M. Kuckein, E. Sauvan, C. Scheidenberger, and L. Schweikhard, *Carbon Clusters for Absolute Mass Measurements at ISOLTRAP*, *Eur. Phys. J. A* **15**, 245–248 (2002).
219. Toader, C., C. Monsanglant, G. Audi, G. Conreur, H. Doubre, S. Henry, M. Jacotin, J.F. Kepinski, G. Le Scornet, D. Lunney, M. de Saint Simon, C. Thibault, H.-J. Kluge, C. Borcea, M. Duma, and G. Bollen, *First Results of a High Precision Mass Measurement Program for Very Short-lived Nuclides*, *Nucl. Phys. A* **701**, 184C–187C (2002).
220. Attallah, F., M. Hausmann, Y. Litvinov, T. Radon, J. Stadlmann, K. Beckert, F. Bosch, M. Falch, B. Franzke, H. Geissel, T. Kerscher, O. Klepper, H.-J. Kluge, C. Kozhuharov, K.E.G. Löbner, G. Münzenberg, F. Nolden, Y. Novikov, Z. Patyk, W. Quint, H. Schatz, C. Scheidenberger, B. Schlitt, M. Steck, K. Sümmerer, H. Weick, and H. Wollnik, *Mass and Lifetime Measurements at the Storage Ring ESR*, *Nucl. Phys. A* **701**, 561C–564C (2002).
221. Beier, T., S. Djekic, H. Häffner, N. Hermanspahn, H.-J. Kluge, W. Quint, S. Stahl, T. Valenzuela, J. Verdú, and G. Werth, *A new value for the mass of the electron from an experiment on the g factor in  $^{12}\text{C}^{5+}$  and  $^{16}\text{O}^{7+}$* , *Can. J. Phys.* **80**, 1241–1247 (2002).
222. Verdú, J.L., T. Beier, S. Djekic, H. Häffner, H.-J. Kluge, W. Quint, T. Valenzuela, and G. Werth, *Measurement of the g<sub>j</sub> factor of a bound electron in hydrogen-like oxygen  $^{16}\text{O}^{7+}$* , *Can. J. Phys.* **80**, 1233–1240 (2002).
223. Beier, T., H.-J. Kluge, W. Quint, H. Häffner, and G. Werth, *Mass of the Electron from the Electronic g Factor in Hydrogen-like Carbon – The Influence of Other Fundamental Parameters*, *Hyperf. Int.* **146**, 53–57 (2003).
224. Beier, T., S. Djekic, H. Häffner, P. Indelicato, H.-J. Kluge, W. Quint, V.M. Shabaev, J. Verdú, T. Valenzuela, G. Werth, and V.A. Yerokhin, *Determination of the electron's mass from g-factor experiments on  $^{12}\text{C}^{5+}$  and  $^{16}\text{O}^{7+}$* , *Nucl. Instr. Meth. B* **205**, 15–19 (2003).

225. Blaum, K., D. Beck, G. Bollen, F. Herfurth, A. Kellerbauer, H.-J. Kluge, R.B. Moore, E. Sauvan, C. Scheidenberger, S. Schwarz, and L. Schweikhard, *Pushing the relative mass accuracy limit of ISOLTRAP on exotic nuclei below 10 ppb*, Nucl. Instr. Meth. B **204**, 478–481 (2003).
226. Blaum, K., G. Bollen, F. Herfurth, A. Kellerbauer, H.-J. Kluge, M. Kuckein, S. Heinz, P. Schmidt, and L. Schweikhard, *Recent developments at ISOLTRAP: towards a relative mass accuracy of exotic nuclei below  $10^{-8}$* , J. Phys. B **36**, 921–930 (2003).
227. Blaum, K., C. Geppert, H.-J. Kluge, M. Mukherjee, S. Schwarz, and K. Wendt, *A novel scheme for a highly selective laser ion source*, Nucl. Instr. Meth. B **204**, 331–335 (2003).
228. Blaum, K., G. Huber, H.-J. Kluge, and L. Schweikhard, *Laser desorption/ionization cluster studies for calibration in mass spectrometry*, Eur. Phys. J. D **24**, 145–148 (2003).
229. Dilling, J., P. Bricault, M. Smith, H.-J. Kluge, and t. T. Collaboration, *The proposed TITAN facility at ISAC for very precise mass measurements on highly charged short-lived isotopes*, Nucl. Instr. Meth. B **204**, 492–496 (2003).
230. Häffner, H., T. Beier, S. Djekic, N. Hermanspahn, H.-J. Kluge, W. Quint, S. Stahl, J. Verdú, T. Valenzuela, and G. Werth, *Double Penning trap technique for precise g factor determinations in highly charged ions*, Eur. Phys. J. D **22**, 163–182 (2003).
231. Herfurth, F., F. Ames, G. Audi, D. Beck, K. Blaum, G. Bollen, A. Kellerbauer, H.-J. Kluge, M. Kuckein, D. Lunney, R. Moore, M. Oinonen, D. Rodriguez, E. Sauvan, C. Scheidenberger, M. Schwarz, G. Sikler, C. Weber, and ISOLDE Collaboration, *Mass measurements and nuclear physics—recent results from ISOLTRAP*, J. Phys. B **36**, 931–939 (2003).
232. Kellerbauer, A., K. Blaum, G. Bollen, F. Herfurth, H.-J. Kluge, M. Kuckein, E. Sauvan, C. Scheidenberger, and L. Schweikhard, *From direct to absolute mass measurements: A study of the accuracy of ISOLTRAP*, Eur. Phys. J. D **22**, 53–64 (2003).
233. Kellerbauer, A., K. Blaum, G. Bollen, F. Herfurth, H.-J. Kluge, M. Kuckein, E. Sauvan, C. Scheidenberger, and L. Schweikhard, *Carbon Cluster Ions For a Study of the Accuracy of ISOLTRAP*, Hyperf. Int. **146/147**, 307–312 (2003).
234. Kluge, H.-J. and W. Nörtershäuser, *Lasers for nuclear physics*, Spectrochim. Acta B **58**, 1031–1045 (2003).
235. Kluge, H.-J., K. Blaum, F. Herfurth, and W. Quint, *Atomic and Nuclear Physics with Stored Particles in Ion Traps*, Phys. Scripta **T104**, 167–177 (2003).
236. Litvinov, Y.A., F. Attallah, K. Beckert, F. Bosch, D. Boutin, M. Falch, B. Franzke, H. Geissel, M. Hausmann, T. Kerscher, O. Klepper, H.-J. Kluge, Z. Patyk, T. Radon, C. Scheidenberger, J. Stadlmann, M. Steck, M.B. Trzhaskovskaya, and H. Wollnik, *Observation of a dramatic hindrance of the nuclear decay of isomeric states for fully ionized atoms*, Phys. Lett. B **573**, 80–85 (2003).
237. Nörtershäuser, W., A. Dax, G. Ewald, I. Katayama, R. Kirchner, H.-J. Kluge, T. Köhl, R. Sanchez, I. Tanihata, M. Tomaselli, H. Wang, and C. Zimmermann, *A setup for high-resolution isotope shift measurements on unstable lithium isotopes*, Nucl. Instr. Meth. B **204**, 644–648 (2003).
238. Sikler, G., D. Ackermann, F. Attallah, D. Beck, J. Dilling, S.A. Elisseev, H. Geissel, D. Habs, S. Heinz, F. Herfurth, F. Heßberger, S. Hofmann, H.-J. Kluge, C. Kozhuharov, G. Marx, M. Mukherjee, J. Neumayr, Plaß, R., W. Quint, S. Rahaman, D. Rodriguez, C. Scheidenberger, M. Tarisien, P. Thierolf, V. Varentsov, C. Weber, and Z. Zhou, *First on-line test of SHIPTRAP*, Nucl. Instr. Meth. B **204**, 482–486 (2003).
239. Stöhlker, T., H. Backe, H.F. Beyer, F. Bosch, A. Bräuning-Demian, S. Hagmann, D.C. Ionescu, K. Jungmann, H.-J. Kluge, C. Kozhuharov, T. Köhl, D. Liesen, R. Mann, P.H. Mokler, and W. Quint, *Status and perspectives of atomic physics research at GSI: The new GSI accelerator project*, Nucl. Instr. Meth. B **205**, 156–161 (2003).
240. Verdú, J., T. Beier, S. Djekic, H. Häffner, H.-J. Kluge, W. Quint, T. Valenzuela, M. Vogel, and G. Werth, *The magnetic moment anomaly of the electron bound in hydrogen-like oxygen  $^{16}\text{O}^{7+}$* , J. Phys. B **36**, 655–663 (2003).
241. Werth, G., T. Beier, S. Djekic, H.-J. Kluge, W. Quint, T. Valenzuela, J. Verdú, and M. Vogel, *Precision studies in traps: Measurement of fundamental constants and tests of fundamental theories*, Nucl. Instr. Meth. B **205**, 1–8 (2003).
242. Blaum, K., G. Audi, D. Beck, G. Bollen, F. Herfurth, A. Kellerbauer, H.-J. Kluge, E. Sauvan, and M. Schwarz, *Masses of  $^{32}\text{Ar}$  and  $^{33}\text{Ar}$  for Fundamental Tests*, Phys. Rev. Lett. **91**, 260801–4 (2003).
243. Verdú, J., T. Beier, S. Djekic, H. Häffner, H.-J. Kluge, W. Quint, T. Valenzuela, and G. Werth, *Measurement of the g Factor of the Bound Electron in Hydrogen-like Oxygen  $^{16}\text{O}^{7+}$* , Hyperf. Int. **146**, 47–52 (2003).
244. Blaum, K., A. Herlert, G. Huber, H.-J. Kluge, J. Maul, and L. Schweikhard, *Cluster Calibration in Mass Spectrometry: Laser Desorption/Ionization Studies of Atomic Clusters and an Application in Precision Mass Spectrometry*, Anal. Bioanal. Chem. **377**, 1133–1139 (2003).
245. Marx, G., J. Dilling, H.-J. Kluge, M. Mukherjee, W. Quint, S. Rahaman, D. Rodriguez, G. Sikler, M. Tarisien, and C. Weber, *SHIPTRAP is Trapping: A Capture and Storage Device on its Way Towards a RIB-Facility*, Hyperf. Int. **146**, 245–251 (2003).
246. Knaak, K.-M., S. Götte, H.-J. Kluge, G. Ewald, and K.D.A. Wendt, *An evaluation procedure for scanning interferometer based wavemeters*, Opt. Comm. **231**, 1–7 (2004).
247. van Roosbroeck, J., C. Guénaut, G. Audi, D. Beck, K. Blaum, G. Bollen, J. Cederkall, P. Delahaye, A. de Maesschalck, H. de Witte, D. Fedorov, V.N. Fedoseyev, S. Franchoo, H.O.U. Fynbo, M. Górska, F. Herfurth, K. Heyde, M. Huyse, A. Kellerbauer, H.-J. Kluge, U. Köster, K. Kruglov, D. Lunney, V.I. Mishin, W.F. Mueller, S. Nagy, S. Schwarz, L. Schweikhard, N.A. Smirnova, K. van de Vel, P. van Duppen, A. van Dyck, W.B. Walters, L. Weissman, and C. Yazidjian, *Unambiguous Identification of Three  $\beta$ -decaying Isomers in  $^{70}\text{Cu}$* , Phys. Rev. Lett. **92**, 112501–4 (2004).

248. Stadlmann, J., M. Hausmann, F. Attallah, K. Beckert, P. Beller, F. Bosch, H. Eickhoff, M. Falch, B. Franczak, B. Franzke, H. Geissel, T. Kerscher, O. Klepper, H.-J. Kluge, C. Kozhuharov, Y. Litvinov, K.E.G. Löbner, M. Matos, G. Münzenberg, N. Nankov, F. Nolden, Y. Novikov, T. Ohtsubo, T. Radon, H. Schatz, C. Scheidenberger, M. Steck, H. Weick, and H. Wollnik, *Direct mass measurement of bare short-lived  $^{44}\text{V}$ ,  $^{48}\text{Mn}$ ,  $^{41}\text{Ti}$  and  $^{45}\text{Cr}$  ions with isochronous mass spectrometry*, Phys. Lett. B **586**, 27–33 (2004).
249. Götte, S., K.-M. Knaak, G. Ewald, N. Kotovski, K.D.A. Wendt, and H.-J. Kluge, *Test of collinear spectroscopy for precise high-voltage determination*, Review of Scientific Instruments **75**, 1039–1050 (2004).
250. Litvinov, A., H. Geissel, N. Novikov, Z. Patyk, T. Radon, C. Scheidenberger, F. Attallah, K. Beckert, F. Bosch, M. Falch, B. Franzeke, M. Hausmann, T. Kerscher, O. Klepper, H.-J. Kluge, C. Kozhuharov, K.E.G. Löbner, G. Münzenberg, F. Nolden, M. Steck, and H. Wollnik, *Precision Experiments with Time-Resolved Schottky Mass Spectrometry*, Nucl. Phys. A **734**, 473–476 (2004).
251. Ewald, G., W. Nörtershäuser, A. Dax, S. Götte, R. Kirchner, H.-J. Kluge, T. Kühl, R. Sanchez, A. Wojtaszek, B.A. Bushaw, G.W.F. Drake, Z.-C. Yan, and C. Zimmermann, *Nuclear Charge Radii of  $^{8,9}\text{Li}$  Determined by Laser Spectroscopy*, Phys. Rev. Lett. **93**, 113002 (2004).
252. Kretzschmar, M., S. Götte, G. Ewald, K.-M. Knaak, K.D.A. Wendt, and H.-J. Kluge, *Influence of the thermal motion on the line shape and position of resonances in collinear fast beam laser spectroscopy*, Appl. Phys. B **79**, 623–627 (2004).
253. Kluge, H.-J., K. Blaum, and C. Scheidenberger, *Mass Measurement of Radioactive Isotopes*, Nuclear Instruments and Methods A **532**, 48–55 (2004).
254. Beyer, H.F., T. Stöhlker, D. Banas, D. Liesen, D. Protic, K. Beckert, P. Beller, J. Bojowald, F. Bosch, F. Förster, B. Franzke, A. Gumberdize, S. Hagmann, J. Hozowska, P. Indelicato, O. Klepper, H.-J. Kluge, M. König, C. Kozhuharov, X. Ma, B. Manil, I. Mohos, A. Orsic-Muthig, F. Nolden, U. Popp, A. Simionovici, D. Sierpowski, U. Spillmann, Z. Stachura, M. Steck, S. Tachenov, M. Transsinelli, A. Warczak, O. Wehrhan, and E. Ziegler, *FOCAL: X-ray optics for accurate spectroscopy*, Spectrochim. Acta B, 1535–1542 (2004).
255. Dilling, J., F. Herfurth, A. Kellerbauer, G. Audi, D. Beck, G. Bollen, H.-J. Kluge, R. Moore, C. Scheidenberger, S. Schwarz, G. Sikler, and ISOLDE Collaboration, *Direct Mass Measurements of Neutron-deficient Xenon Isotopes Using the ISOLTRAP Mass Spectrometer*, Eur. Phys. J. **A22**, 163–171 (2004).
256. Geissel, H., Y.A. Litvinov, F. Attallah, K. Beckert, P. Beller, F. Bosch, D. Boutin, T. Faestermann, M. Falch, B. Franzke, M. Hausmann, M. Hellström, E. Kaza, T. Kerscher, O. Klepper, H.-J. Kluge, C. Kozhuharov, K.-L. Kratz, S.A. Litvinov, K.E.G. Löbner, L. Maier, M. Matos, G. Münzenberg, F. Nolden, Y.N. Novikov, T. Ohtsubo, A. Ostrowski, Z. Patyk, B. Pfeiffer, M. Portillo, T. Radon, r. Scheidenberge, V. Shishkin, J. Stadlmann, M. Steck, D.J. Viera, H. Weick, M. Winkler, H. Wollnik, and T. Yamaguchi, *New Results with Stored Exotic Nuclei at Relativistic Energies*, Nuclear Physics **A746**, 150c–155c (2004).
257. Herfurth, F., G. Audi, D. Beck, K. Blaum, G. Bollen, P. Delahaye, C. Guénaut, A. Kellerbauer, H.-J. Kluge, D. Lunney, D. Rodriguez, S. Saxena, S. Schwarz, L. Schweikhard, G. Sikler, and C. Yazidjian, *Masses along the rp-Process Path and Large Scale Surveys on Cu, Ni and Ga with ISOLTRAP*, Nucl. Phys. A **746**, 487c–492c (2004).
258. Kluge, H.-J. and K. Blaum, *Trapping Radioactive Ions*, Nucl. Phys. A **746**, 200c–205c (2004).
259. Blaum, K., G. Audi, D. Beck, G. Bollen, C. Guénaut, P. Delahaye, F. Herfurth, A. Kellerbauer, H.-J. Kluge, D. Lunney, D. Rodriguez, S. Schwarz, L. Schweikhard, C. Weber, and C. Yazidjian, *Recent Results from the Penning Trap Mass Spectrometer ISOLTRAP*, Nucl. Phys. A **746**, 305c–310c (2004).
260. Djekic, S., J. Alonso, H.-J. Kluge, W. Quint, S. Stahl, T. Valenzuela, J. Verdú, M. Vogel, and G. Werth, *Temperature measurement of a single ion in a Penning trap*, Eur. Phys. J. D **31**, 451–457 (2004).
261. Bernard, J., J. Alonso, T. Beier, M. Block, S. Djekic, H.-J. Kluge, C. Kozhuharov, W. Quint, S. Stahl, and T. Valenzuela, *Electron and positron cooling of highly charged ions in a cooler Penning trap*, Nucl. Instr. Meth. A **532**, 224–228 (2004).
262. Blaum, K., D. Beck, G. Bollen, P. Delahaye, C. Guénaut, F. Herfurth, A. Kellerbauer, H.-J. Kluge, D. Lunney, S. Schwarz, L. Schweikhard, and C. Yazidjian, *Population inversion of nuclear states by a Penning trap mass spectrometer*, Europhysics Letters **67**, 586–592 (2004).
263. Kellerbauer, A., G. Audi, D. Beck, K. Blaum, G. Bollen, P. Delahaye, F. Herfurth, H.-J. Kluge, V. Kolhinen, M. Mukherjee, D. Rodríguez, and S. Schwarz, *Towards high-precision mass measurements on  $^{74}\text{Rb}$  for a test of the CVC hypothesis and the unitarity of the CKM matrix*, Nucl. Phys. A **746**, 635–638 (2004).
264. Wendt, K., K. Blaum, K. Brück, C. Geppert, H.-J. Kluge, M. Mukherjee, G. Passler, S. Schwarz, and K. Wies, *A highly selective laser ion source for bunched, low emittance beam release*, Nucl. Phys. A **746**, 47c–53c (2004).
265. Rodríguez, D., V.S. Kolhinen, G. Audi, J. Äystö, D. Beck, K. Blaum, G. Bollen, F. Herfurth, A. Jokinen, A. Kellerbauer, H.-J. Kluge, M. Oinonen, H. Schatz, E. Sauvan, and S. Schwarz, *Mass measurement on the rp-process waiting point  $^{72}\text{Kr}$* , Phys. Rev. Lett. **93**, 161104 (2004).
266. Mukherjee, M., A. Kellerbauer, D. Beck, K. Blaum, G. Bollen, F. Carrel, P. Delahaye, J. Dilling, S. George, C. Guénaut, F. Herfurth, A. Herlert, H.-J. Kluge, U. Köster, D. Lunney, S. Schwarz, L. Schweikhard, and C. Yazidjian, *The mass of  $^{22}\text{Mg}$* , Phys. Rev. Lett. **93**, 150801 (2004).

267. Kellerbauer, A., G. Audi, D. Beck, K. Blaum, G. Bollen, B.A. Brown, P. Delahaye, C. Guénaut, F. Herfurth, H.-J. Kluge, D. Lunney, S. Schwarz, L. Schweikhard, and C. Yazidjian, *Direct mass measurements on the superallowed emitter  $^{74}\text{Rb}$  and its daughter  $^{74}\text{Kr}$ : Isospin-symmetry-breaking correction for Standard-Model tests*, Phys. Rev. Lett. **93**, 072502 (2004).
268. Quint, W., J. Alonso, S. Djekic, H.-J. Kluge, S. Stahl, T. Valenzuela, J. Verdú, M. Vogel, and G. Werth, *Continuous Stern-Gerlach effect and the magnetic moment of the antiproton*, Nucl. Instr. Meth. B **214**, 207–210 (2004).
269. Verdú, J., S. Djekic, S. Stahl, T. Valenzuela, M. Vogel, G. Werth, T. Beier, H.-J. Kluge, and W. Quint, *Electronic  $g$  Factor of Hydrogenlike Oxygen  $^{16}\text{O}^{7+}$* , Phys. Rev. Lett. **92**, 093002-1-4 (2004).
270. Verdú, J.L., J. Alonso, S. Djekic, H.-J. Kluge, W. Quint, S. Stahl, T. Valenzuela, M. Vogel, and G. Werth, *Determination of the  $g$ -factor of single hydrogen-like ions by mode coupling in a Penning trap*, Phys. Scripta **T112**, 68 (2004).
271. Scheidenberger, C., F. Attallah, K. Beckert, P. Beller, F. Bosch, D. Boutin, H. Eickhoff, T. Faestermann, M. Falch, B. Franczak, B. Franzke, H. Geissel, M. Hausmann, M. Hellström, E. Kaza, T. Kerscher, O. Klepper, H.-J. Kluge, R. Koyama, C. Kozhuharov, K.-L. Kratz, Y.A. Litvinov, K.E.G. Loebner, L. Maier, M. Matos, G. Muenzenberg, F. Nolden, Y.N. Novikov, T. Ohtsubo, A. Ostrowski, A. Ozawa, Z. Patyk, B. Pfeiffer, M. Portillo, W. Quint, T. Radon, V. Shishkin, J. Stadlmann, M. Steck, K. Sümmerer, T. Suzuki, M.B. Trzhaskovskaja, D.J. Vieira, S. Watanabe, H. Weick, M. Winkler, H. Wollnik, and T. Yamaguchi, *Study of basic nuclear properties of highly-charged, unstable nuclei at the SIS-FRS-ESR complex*, Acta Physica Hungarica **19**, 165–170 (2004).
272. Ewald, G., W. Nörtershäuser, A. Dax, S. Götte, R. Kirchner, H.-J. Kluge, T. Kühl, R. Sanchez, A. Wojtaszek, B.A. Bushaw, G.W.F. Drake, Z.-C. Yan, and C. Zimmermann, *Erratum: Nuclear Charge Radii of  $^{8,9}\text{Li}$  Determined by Laser Spectroscopy*, Phys. Rev. Lett. **94**, 039901 (2005).
273. Herlert, A., D. Beck, K. Blaum, F. Carrel, P. Delahaye, S. George, C. Guénaut, F. Herfurth, A. Kellerbauer, H.-J. Kluge, D. Lunney, M. Mukherjee, L. Schweikhard, and C. Yazidjian, *Mass Spectrometry of Atomic Ions Produced by In-trap Decay of Short-lived Nuclides*, New Journal of Physics **7**, 44–54 (2005).
274. Ewald, G., K.-M. Knaak, S. Götte, K.D.A. Wendt, and H.-J. Kluge, *Development of narrow-linewidth diode lasers by use of volume holographic transmission gratings*, Appl. Phys. B **80**, 483–487 (2005).
275. Blaum, K., G. Audi, D. Beck, G. Bollen, P. Delahaye, S. George, C. Guénaut, F. Herfurth, A. Herlert, A. Kellerbauer, H.-J. Kluge, D. Lunney, M. Mukherjee, S. Schwarz, L. Schweikhard, and C. Yazidjian, *ISOLTRAP Mass Measurements of Exotic Nuclides at  $\delta m/m = 10^{-8}$* , Nucl. Phys. A **752**, 317c–320c (2005).
276. Weber, C., K. Blaum, M. Block, R. Ferrer, F. Herfurth, H.-J. Kluge, C. Kozhuharov, G. Marx, M. Mukherjee, W. Quint, S. Rahaman, S. Stahl, and t.S. Collaboration, *FT-ICR: A non-destructive detection for on-line mass measurements at SHIPTRAP*, Eur. Phys. J. A **25 Supp.1**, 65–66 (2005).
277. Litvinov, Y.A., T.J. Bürvenich, H. Geissel, Y.N. Novikov, Z. Patyik, C. Scheidenberger, F. Attallah, G. Audi, K. Beckert, F. Bosch, M. Falch, B. Franzke, M. Hausmann, T. Kerscher, O. Klepper, H.-J. Kluge, C. Kozhuharov, K.E.G. Löbner, D.G. Madland, J.A. Maruhn, G. Münzenberg, F. Nolden, T. Radon, M. Steck, S. Typel, and H. Wollnik, *Isospin Dependence in the Odd-Even Staggering of Nuclear Binding Energies*, Phys. Rev. Lett. **95**, 042501-1–042501-4 (2005).
278. Litvinov, Y.A., H. Geissel, T. Radon, F. Attallah, G. Audi, K. Beckert, F. Bosch, M. Falch, B. Franzke, M. Hausmann, M. Hellström, T.F. Kerscher, O. Klepper, H.-J. Kluge, C. Kozhuharov, K.E.G. Löbner, G. Münzenberg, F. Nolden, Y.N. Novikov, W. Quint, Z. Patyik, H. Reich, C. Scheidenberger, B. Schlitt, M. Steck, K. Sümmerer, L. Vermeeren, M. Winkler, T. Winkler, and H. Wollnik, *Mass Measurement of Cooled Neutron-Deficient Bismuth Projectile Fragments with Time-Resolved Schottky Mass Spectrometry at the FRS-ESR Facility*, Nucl. Phys. A **756**, 3–38 (2005).
279. Vogel, M., J. Alonso, S. Djekic, H.-J. Kluge, W. Quint, S. Stahl, J. Verdu, and G. Werth, *Towards electronic  $g$ -factor measurements in medium-heavy hydrogen-like and lithium-like ions*, Nucl. Instr. Meth. B **235**, 7–16 (2005).
280. Blaum, K., G. Audi, D. Beck, G. Bollen, M. Brodeur, P. Delahaye, S. George, C. Guénaut, F. Herfurth, A. Herlert, A. Kellerbauer, H.-J. Kluge, D. Lunney, M. Mukherjee, G.C. Rodrigues, M. Schwarz, L. Schweikhard, and C. Yazidjian, *ISOLTRAP Pins Down Masses of Exotic Nuclides*, Journal of Physics G **31**, 1775–1778 (2005).
281. Guénaut, C., G. Audi, D. Beck, K. Blaum, G. Bollen, P. Delahaye, F. Herfurth, A. Kellerbauer, H.-J. Kluge, D. Lunney, S. Schwarz, L. Schweikhard, and C. Yazidjian, *Is  $N = 40$  magic? An analysis of ISOLTRAP mass measurements*, Eur. Phys. J. A **25 Supp.1**, 33–34 (2005).
282. Guénaut, C., G. Audi, D. Beck, K. Blaum, G. Bollen, P. Delahaye, F. Herfurth, A. Kellerbauer, H.-J. Kluge, D. Lunney, S. Schwarz, L. Schweikhard, and C. Yazidjian, *Mass measurements of  $^{56-57}\text{Cr}$  and the question of shell reincarnation at  $N = 32$* , Journal of Physics G **31**, 1765–1770 (2005).
283. Guénaut, C., G. Audi, D. Beck, K. Blaum, G. Bollen, P. Delahaye, F. Herfurth, A. Kellerbauer, H.-J. Kluge, D. Lunney, S. Schwarz, L. Schweikhard, and C. Yazidjian, *Extending the mass “backbone” to short-lived nuclides with ISOLTRAP*, Eur. Phys. J. A **25 Supp.1**, 35–36 (2005).
284. Ohtsubo, T., F. Bosch, H. Geissel, L. Maier, C. Scheidenberger, F. Attallah, K. Beckert, P. Beller, D. Boutin, T. Faestermann, B. Franczak, B. Franzke, M. Hausmann, M. Hellstrom, E. Kaza, P. Kienle, O. Klepper, H.-J. Kluge, C. Kozhuharov, Y.A. Litvinov, M. Matos, G. Munzenberg, F. Nolden, Y.N. Novikov, M. Portillo, T. Radon, J. Stadlmann, M. Steck, T. Stohlker, K. Summerer, K. Takahashi, H. Weick, M. Winkler, and T. Yamaguchi, *Simultaneous Measurement of  $\beta$ -Decay to Bound and Continuum Electron States*, Phys. Rev. Lett. **95**, 052501 (2005).

285. Nörtershäuser, W., B.A. Bushaw, A. Dax, G.W.F. Drake, G. Ewald, S. Götze, R. Kirchner, H.-J. Kluge, T. Kühl, R. Sanchez, A. Wojtaszek, Z.-C. Yan, and C. Zimmermann, *Measurement of the Nuclear Charge Radii of  $^{8,9}\text{Li}$  - The last step towards the determination of the Charge Radius of  $^{11}\text{Li}$* , Eur. Phys. J. A **25 Supp. 1**, 199–200 (2005).
286. Herfurth, F., T. Beier, L. Dahl, S. Eliseev, S. Heinz, O. Kester, H.-J. Kluge, C. Kozhuharov, G. Maero, W. Quint, and t.H. Collaboration, *Highly charged ions at rest: The HITRAP project at GSI*, AIP Conf. Proc. **793**, 278 (2005).
287. Block, M., D. Ackermann, D. Beck, K. Blaum, M. Breitenfeldt, A. Chauduri, A. Doemer, S. Eliseev, D. Habs, S. Heinz, F. Herfurth, F.P. Hessberger, S. Hofmann, H. Geissel, H.-J. Kluge, V. Kolhinen, G. Marx, J.B. Neumayr, M. Mukherjee, M. Petrick, W. Plass, W. Quint, S. Rahaman, C. Rauth, D. Rodriguez, C. Scheidenberger, L. Schweikhard, M. Suhonen, P.G. Thirolf, Z. Wang, C. Weber, and S. Collaboration, *The ion-trap facility SHIPTRAP—Status and perspectives*, Eur. Phys. J. A **25 Supp.1**, 49–50 (2005).
288. Neumayer, P., R. Bock, S. Borneis, E. Brambrink, H. Brand, J. Caird, E.M. Campbell, E. Gaul, S. Goette, C. Haefner, T. Hahn, H.M. Heuck, D.H.H. Hoffmann, D. Javorkova, H.J. Kluge, T. Kühl, S. Kunzer, T. Merz, E. Onkels, M.D. Perry, D. Reemts, M. Roth, S. Samek, G. Schaumann, F. Schrader, W. Seelig, A. Tauschwitz, R. Thiel, D. Ursescu, P. Wiewior, U. Wittrock, and B. Zielbauer, *Status of PHELIX laser and first experiments*, Laser and Particle Beams **23**, 385–389 (2005).
289. Sikler, G., G. Audi, D. Beck, K. Blaum, G. Bollen, F. Herfurth, A. Kellerbauer, H.J. Kluge, D. Lunney, M. Oinonen, C. Scheidenberger, S. Schwarz, and J. Szerypo, *Mass measurements on neutron-deficient Sr and neutron-rich Sn isotopes with the ISOLTRAP mass spectrometer*, Nucl. Phys. A **763**, 45–58 (2005).
290. Stahl, S., J. Alonso, S. Djekic, H.J. Kluge, W. Quint, J. Verdú, M. Vogel, and G. Werth, *Phase-sensitive measurement of trapped particle motions*, J. Phys. B **38**, 297–304 (2005).
291. Weber, C., G. Audi, D. Beck, K. Blaum, G. Bollen, F. Herfurth, A. Kellerbauer, H.J. Kluge, D. Lunney, and S. Schwarz, *Effects of the pairing energy on nuclear charge radii*, Eur. Phys. J. A **25 Supp.1**, 201–202 (2005).
292. Herfurth, F., G. Audi, D. Beck, K. Blaum, G. Bollen, P. Delahaye, S. George, C. Guenaut, A. Herlert, A. Kellerbauer, H.J. Kluge, D. Lunney, M. Mukherjee, S. Rahaman, S. Schwarz, L. Schweikhard, C. Weber, and C. Yazidjian, *Recent high-precision mass measurements with the Penning trap spectrometer ISOLTRAP*, Eur. Phys. J. A **25 Supp.1**, 17–21 (2005).
293. Rodriguez, D., V.S. Kolhinen, G. Audi, J. Aysto, D. Beck, K. Blaum, G. Bollen, F. Herfurth, A. Jokinen, A. Kellerbauer, H.J. Kluge, M. Oinonen, H. Schatz, E. Sauvan, and S. Schwarz, *Mass measurement on the rp-process waiting point  $^{72}\text{Kr}$* , Eur. Phys. J. A **25 Supp.1**, 41–43 (2005).
294. Weber, C., G. Audi, D. Beck, K. Blaum, G. Bollen, F. Herfurth, A. Kellerbauer, H.J. Kluge, D. Lunney, and S. Schwarz, *Weighing excited nuclear states with a Penning trap mass spectrometer*, Phys. Lett. A **347**, 81–87 (2005).
295. Brandau, C., C. Kozhuharov, A. Müller, S. Schippers, H.-J. Kluge, P.H. Mokler, T. Stöhlker, and A. Wolf, *Determination of Nuclear Ground State Properties with Large Atomic Cross Sections—Isotopic Shift Measurements by Means of Dielectronic Recombination. in STORI 2005*. 2005. Jülich: Forschungszentrum Jülich.
296. Beier, T., L. Dahl, H.-J. Kluge, C. Kozhuharov, W. Quint, and t.H. Collaboration, *Trapping ions of hydrogen-like uranium: The HITRAP project at GSI*, Nuclear Instruments & Methods in Physics Research B **235**, 473–478 (2005).
297. Hagmann, S., H. Beyer, F. Bosch, A. Bräuning-Demian, H.-J. Kluge, C. Kozhuharov, T. Kühl, D. Liesen, T. Stöhlker, J. Ullrich, R. Moshhammer, R. Mann, P.H. Mokler, W. Quint, R. Schuch, and A. Warczak, *Challenges and opportunities for atomic physics at FAIR: The new GSI accelerator project*, Nuclear Instruments & Methods in Physics Research B **241**, 5–8 (2005).
298. Kluge, H.-J., T. Beier, K. Blaum, M. Block, L. Dahl, S. Eliseev, F. Herfurth, S. Heinz, O. Kester, C. Kozhuharov, T. Kühl, G. Maero, W. Nörtershäuser, T. Stöhlker, W. Quint, G. Vorobjev, G. Werth, and H. Collaboration, *HITRAP – A facility at GSI for Experiments on Stored and Cooled Highly Charged Ions at Rest. in Memorial Symposium for Gerhard Soff*. 2005. Frankfurt: EP Systema, Budapest.