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Research Area:

Experimental Atomic Physics

List of Scientific Publications

“Spectra of neutral and singly-ionized holmium,” A.E. Livingston and E.H. Pinnington, J. Opt. Soc. Am. 61, 1429-30 (1971).

“Lifetime measurements in Ar II - Ar VIII,” A.E. Livingston, D.J.G. Irwin, and E.H. Pinnington, J. Opt. Soc. Am. 62, 1303-08 (1972).

“Beam-foil studies of oxygen below 2000 Å,” C.C. Lin, D.J.G. Irwin, J.A. Kernahan, A.E. Livingston, and E.H. Pinnington, Can. J. Phys. 50, 2496-2501 (1972).

“Lifetime measurements in fluorine and silicon in the vacuum ultraviolet,” D.J.G. Irwin and A.E. Livingston, Can. J. Phys. 51, 848-51 (1973).

“Radiative mean-life measurements in neon below 1000 Å,” D.J.G. Irwin, A.E. Livingston, and J.A. Kernahan, Can. J. Phys. 51, 1948-55 (1973).

“Recent lifetime measurements for oxygen, fluorine, and neon in the vacuum ultraviolet,” D.J.G. Irwin, A.E. Livingston, and J.A. Kernahan, Nucl. Instrum Meth. 110, 105-110 (1973).

“Beam-foil lifetimes for the third-period elements silicon, sulfur, and argon in the vacuum ultraviolet,” D.J.G. Irwin, A.E. Livingston, and J.A. Kernahan, Nucl. Instrum. Meth. 110, 111-117 (1973).

“Comment on the reliability of experimental atomic mean lives obtained with the beam-foil technique,” E.H. Pinnington, A.E. Livingston, and J.A. Kernahan, Phys. Rev. A 9, 1004-06 (1974).

“Beam-foil mean-life measurements for levels in N I-V,” J.A. Kernahan, A.E. Livingston, and E.H. Pinnington, Can. J. Phys. 52, 1895-1902 (1974).

“Mean-life measurements for some energy levels of O I-IV,” E.H. Pinnington, D.J.G. Irwin, A.E. Livingston, and J.A. Kernahan, *Can. J. Phys.* 52, 1961-70 (1974).

“Homer: A program for the extraction of radiative mean lives from experimental beam-foil decay data,” D.J.G. Irwin and A.E. Livingston, *Comput. Phys. Commun.* 7, 95-113 (1974).

“Radiative lifetime measurements: Effects of configuration mixing and singlet-triplet interaction in singly-ionized nitrogen,” A.E. Livingston, Y. Baudinet-Robinet, and P.D. Dumont, *Phys. Lett.* 55A, 207-08 (1975).

“Beam-foil studies of phosphorus in the vacuum ultraviolet,” A.E. Livingston, J.A. Kernahan, D.J.G. Irwin, and E.H. Pinnington, *Physica Scripta* 12, 223-29 (1975).

“Mean-life measurements for levels in B I-IV,” J.A. Kernahan, E.H. Pinnington, A.E. Livingston, and D.J.G. Irwin, *Physica Scripta* 12, 319-22 (1975).

“Thickness variations and lifetimes of carbon foils under nitrogen-ion bombardment,” P.D. Dumont, A.E. Livingston, Y. Baudinet-Robinet, G. Weber, and L. Quaglia, *Physica Scripta* 13, 122-26 (1976).

“Radiative-lifetime measurements in Si II - Si V,” A.E. Livingston, J.A. Kernahan, D.J.G. Irwin, and E.H. Pinnington, *J. Phys. B* 9, 389-97 (1976).

“Beam-foil spectroscopy of sulfur in the vacuum ultraviolet,” D.J.G. Irwin and A.E. Livingston, *Can. J. Phys.* 54, 805-15 (1976).

“Radiative-lifetime measurements for sulfur and silicon transitions observed in interstellar absorption spectra,” A.E. Livingston, H.P. Garnir, Y. Baudinet-Robinet, P.D. Dumont, E. Biemont, and N. Grevesse, *Astrophys. Lett.* 17, 23-25 (1976).

“Configuration-mixing between 2p3p and 2s4s in N IV,” A.E. Livingston, P.D. Dumont, and Y. Baudinet-Robinet, *JOSA Letters* 66, 375-76 (1976).

“Beam-foil study of nitrogen in the vacuum ultraviolet,” P.D. Dumont, Y. Baudinet-Robinet, and A.E. Livingston, *Physica Scripta* 13, 365-69 (1976).

“Beam-foil studies of nitrogen, silicon, and sulfur in the vacuum ultraviolet,” A.E. Livingston, P.D. Dumont, Y. Baudinet-Robinet, H.P. Garnir, E. Biemont, and N. Grevesse, Beam-Foil Spectroscopy, I.A. Sellin and D.J. Pegg, eds. (Plenum, New York) pp. 339-46 (1976).

“Fluorine mean-life measurements below 1000 CA using the beam-foil technique,” E.H. Pinnington, D.J.G. Irwin, A.E. Livingston, and J.A. Kernahan, *Can. J. Phys.* 54, 1014-21 (1976).

“New identifications in the spectra of Kr IV - Kr VII,” A.E. Livingston, *J. Phys. B* 9, L215-18 (1976).

“Beam-foil spectra and mean-life measurements in krypton,” D.J.G. Irwin, J.A. Kernahan, E.H. Pinnington, and A.E. Livingston, *J. Opt. Soc. Am.* 66, 1396-1400 (1976).

“Radiative-lifetime measurements for Si III $3s4s\ ^3S$, S V $3s4f\ ^3F^o$, and Si IV and S VI $4f\ ^2F^o$,” A.E. Livingston, Y. Baudinet-Robinet, H.P. Garnir, and P.D. Dumont, *J. Opt. Soc. Am.* 66, 1393-95 (1976).

“Effect of the spatial resolution function of the spectrometer on the analysis of multi-exponential beam-foil decay curves,” Y. Baudinet-Robinet, H.P. Garnir, P.D. Dumont, and A.E. Livingston, *Physica Scripta* 14, 224-29 (1976).

“Spectroscopic studies of Si V and Si VI between 500 Å and 1300 Å using the beam-foil method,” H.P. Garnir, A.E. Livingston, Y. Baudinet-Robinet, P.D. Dumont, E. Biemont, and N. Grevesse, *J. Opt. Soc. Am.* 67, 751-54 (1977).

“Spatial distribution of orientation of fast ions excited by surface-grazing collisions,” H.G. Berry, G. Gabrielse, A.E. Livingston, R.M. Schectman, and J. Desesquelles, *Phys. Rev. Lett.* 38, 1473-76 (1977).

“Production of orientation and alignment in heavy-ion surface collisions,” H.G. Berry, G. Gabrielse, and A.E. Livingston, *Phys. Rev. A* 16, 1915-28 (1977).

“Measurement of the stokes parameters of light,” H.G. Berry, G. Gabrielse, and A.E. Livingston, *Applied Optics* 16, 3200-3205 (1977).

“Material-dependent variations of alignment in beam-foil excitation,” H.G. Berry, G. Gabrielse, T. Gay, and A.E. Livingston, *Physica Scripta* 16, 99-104 (1977).

“Orientation of fast ions excited in surface collisions,” H.G. Berry, G. Gabrielse, and A.E. Livingston, *Nucl. Instrum. Meth.* 149, 517-522 (1978).

“Thin carbon foil breakage times under ion-beam bombardment,” A.E. Livingston, H.G. Berry, and G.E. Thomas, *Nucl. Instrum. Meth.* 148, 125-127 (1978).

“Optical observations of the dissociation of fast molecules in thin foils,” H.G. Berry, A.E. Livingston, and G. Gabrielse, *Phys. Lett. A* 64A, 68-70 (1977).

“Lifetime measurements of rydberg states in the $6snd\ ^1D_2$ series of Ba I,” D. Kaiser, P. Kulina, A.E. Livingston, H.H. Radloff, and S. Tudorache, *Zeit, Physik* A285, 111-114 (1978).

“Mean-life measurements for some fluorine transitions in the quartz region,” E.H. Pinnington, D.J.G. Irwin, A.E. Livingston, J.A. Kernahan, K.E. Donnelly, and H.G. Berry, *Can. J. Phys.* 56, 517-21 (1978).

“Fine-structure measurements of the $1s2s2p\ ^4P^o$ and $1s2p^2\ ^4P$ states in lithium-like carbon, nitrogen, and oxygen,” A.E. Livingston and H.G. Berry, *Phys. Rev. A* 17, 1966-75 (1978).

“Lamb shift and fine structure of $n=2$ in $^{35}\text{Cl XVI}$,” H.G. Berry, R. DeSerio, and A.E. Livingston, *Phys. Rev. Lett.* 41, 1652-55 (1978); *J. de Physique* 40, C 1, 27 (1979).

“Energies and lifetimes of excited states in copperlike Kr VIII,” A.E. Livingston, L.J. Curtis, R.M. Schectman, and H.G. Berry, *Phys. Rev. A* 21, 771-81 (1980).

“Wavelength measurements of $1s2s^3S - 1s2p^3P$ transitions in helium-like $^{28}\text{Si}^{12+}$, $^{32}\text{Si}^{4+}$, and $^{35}\text{Cl}^{15+}$,” A.E. Livingston, S.J. Hinterlong, J.A. Poirier, R. Deserio, and H.G. Berry, *J. Phys.* B13, L139-42 (1980).

“Wavelengths and fine structure of $2s-2p$ transitions in two- and three-electron ions,” H.G. Berry, R. DeSerio, and A.E. Livingston, *Phys. Rev. A* 22, 998-1011 (1980).

“Observation of fine structure in the $1s2s2p^2\ ^5P-1s2p^3\ ^5S$ transition of core-excited O V,” A.E. Livingston and S.J. Hinterlong, *Phys. Lett* 80A, 372-4 (1980).

“Summary of experiments on relativistic atomic structure,” A.E. Livingston, Proceedings of Workshop on the Relativistic Theory of Atomic Structure, Argonne National Lab. Report No. ANL-80-126, eds. H.G. Berry, et al pp. (1980).

“The spectrum of Br VII,” A.E. Livingston and S.J. Hinterlong, *Phys. Rev. A* 23, 758-60 (1981).

“Position-sensitive detection of extreme ultraviolet photons,” A.E. Livingston, *IEEE Trans, Nucl. Sci.* NS-28, 1559-62 (1981).

“Energies and lifetimes of excited atomic states in Ar V - AR VIII,” A.E. Livingston, E.H. Pinnington, D.J.G. Irwin, J.A. Kernahan, and R.L. Brooks, *J. Opt. Soc. Am* 71, 442-7 (1981).

“Observation of periodic dispersion error in a vacuum ultraviolet scanning monochromator,” A.E. Livingston and S.J. Hinterlong, *Appl. Optics* 20, 1727-8 (1981).

“ $2S-2P$ transitions in heliumlike ions,” R. DeSerio, H.G. Berry, J. Hardis, A.E. Livingston, and S.J. Hinterlong, *Phys. Rev. A* 24, 1872-88 (1981).

“Fine structure energies and lifetimes of $n=2$ states in heliumlike phosphorus,” A.E. Livingston and S.J. Hinterlong, *Nucl. Instrum. Meth.* 202, 103-105 (1982).

“Measurement of the transition probability of the $2s^2\ ^1S_0-2s3p\ ^3P_1$ intercombination line in Ne VII,” J.E. Hardis, L.J. Curtis, P.S. Ramanujam, A.E. Livingston, and R.L. Brooks, *Phys. Rev.* A27, 257-261 (1983).

“Ultraviolet spectroscopy with highly-stripped heavy ions,” A.E. Livingston, Proceedings of Workshop on Atomic Physics with Fast Heavy-Ion Beams, Argonne National Lab. Report No. CONF-830130, pp. 73-86 (1983).

“The $1s2s2p^2\ ^5P-1s2p^3\ ^5S$ transition in NeVII,” J.E. Hardis, H.G. Berry, L.J. Curtis, and A.E. Livingston, *Phys. Scripta* 30, 189-193 (1984).

“Observation of quartet state fine structures and lifetimes in lithium-like Ne VIII,” A.E. Livingston, J.E. Hardis, L.J. Curtis, R.L. Brooks, and H.G. Berry, *Phys. Rev.* A30, 2089-2092 (1984).

“Fine Structure of Perturbed Rydberg States in Beryllium-Like S^{12+} ,” A.J. Mazure, A.E. Livingston, E.J. Galvez, and S.J. Hinterlong, *Phys. Rev.* A32, 3775 (1985).

“Measurement of the $2\ ^3S_1-2\ ^3P_2$ Transition Wavelength in Helium-like Ti^{20+} , E.J. Galvez, A.E. Livingston, A.J. Mazure, H.G. Berry, L. Engstrom, J.E. Hardis, L.P. Somerville, and D. Zei, Phys. Rev. A33, 3667 (1986).

“The $2s\ ^3S_1-2P\ ^3P_2$ Fine Structure Transition in Two-Electron Ca^{18+} ,” S.J. Hinterlong and A.E. Livingston, Phys. Rev. A33, 4378 (1986).

“Microcomputer Controlled System for the Spectroscopy of Highly-Ionized Atoms,” S.J. Hinterlong, E.J. Galvez, A.J. Mazure, and A.E. Livingston, Nuclear Instruments Methods A249, 408 (1986)

“Spectroscopy of Highly-Ionized Atoms,” A.E. Livingston, Proceedings of International Conference on Atomic Physics Using Slow, High-Charged Ions, Argonne National Laboratory, ANL-PHY-87-1, 37, (1987).

“Measurements of $2s-2p$ Transition Energies in Helium-Like and Lithium-Like Nickel,” A.S. Zacarias, A.E. Livingston, Y.N. Lu and R.F. Ward , H.G. Berry and R.W. Dunford, Nucl. Instrum. Methods B31, 41-42 (1988).

“Structure of Hydrogenic Transitions in High-Z Beryllium-Like Ions,” Y.N. Lu, A.E. Livingston, A.S. Zacarias, R.F. Ward, A.J. Mazure, E.J. Galvez and L. Engström, Nucl. Instrum. Methods B 31, 157-160 (1988).

“Lifetime of the $2\ ^1S_0$ state of heliumlike Ni^{26+} ,” R.W. Dunford, H.G. Berry, K.O. Groeneveld, M. Hass, E. Bakke, M.L.A. Raphaelian, A.E. Livingston, L.J. Curtis, Phys. Rev. A. 38, 5423-5425 (1988).

“Experimental transition probability for the E1 intercombination transition in Be-like Xe^{50+} ,” G. Möller, E. Träbert, V. Lodwig, C. Wagner, P.H. Heckmann, J.H. Blanke, A.E. Livingston, P.H. Mokler, Z. Phys. D. 11, 333-334 (1989).

“Spectroscopy of highly-ionized heliumlike and lithiumlike atoms,” A.E. Livingston, J. de Physique 50 C1, 255-261 (1989).

“The GSI 5m grazing incidence spectrometer,” B. Kraus, K.-H. Schartner, F. Folkmann, A.E. Livingston, and P.H. Mokler, SPIE Proceedings 1159, 217-222 (1989).

“Comment on ‘Satellites to $\Delta n=1$ Transitions of Multiply Ionized Atoms’ ,” A.E. Livingston, E.J. Galvez, and F.G. Serpa, Phys. Rev. Lett. 64, 2335 (1990).

“Evidence for resonant two-electron capture and excitation in H-like Ge with Ne,” A. Warczak, Z. Stachura, A. Szymanski, Th. Stohlker, C. Kozhuharov, A.E. Livingston, P.H. Mokler, and S. Reusch, Phys. Lett. A146, 3, 122-127 (1990).

“The $3d^84s-3d^84p$ transitions in BrIX,” X.T. Zeng, C. Jupen, A.E. Livingston, M. Westerlind, L. Engström and I. Martinson, Physica Scripta 42, 223-226 (1990).

“Wavelength and Lifetime Measurements on Forbidden and Intercombination Lines in the EUV Spectra of Swift Foil-Excited Highly Charged Ions,” E. Träbert, G. Möller, P.H. Heckmann, A.E. Livingston, Physica Scripta 41, 860-863 (1990).

“Wavelengths and Transition Probabilities of Intercombination Lines in the Spectra of Ga- and Ge-like Ag ions,” E. Träbert, G. Möller, P.H. Heckmann, A.E. Livingston and J.H. Blanke, *Physica Scripta* 42, 323-329 (1990).

“Inner-Shell Processes in Heavy, Few-Electron Projectiles,” P.H. Mokler, Th. Stöhlker, Ch. Kozhuharov, J. Ullrich, S. Reusch, Z. Stachura, A. Warczak, A. Müller, R. Schuch, A.E. Livingston, M. Schulz, Y. Awaya, T. Kambara, in *X-Ray and Inner Shell Processes*, AIP Conference Proceedings 215, ed. T.A. Carlson et al., pp. 335-351 (1990).

“Capture of quasifree electrons into highly charged, heavy projectiles,” Th. Stöhlker, P.H. Mokler, C. Kozhuharov, A.E. Livingston and J. Ullrich, *Nucl. Instrum. Meth. B* 56/57, 86-91 (1991).

“Measurement of Long-Range Interaction Effects for Rydberg State Transitions in Berylliumlike Ions,” F.G. Serpa and A.E. Livingston, *Phys. Rev. A* 41, 6447-6450 (1991).

“Quest for Experimental M1 and E1 Intercombination Transition Probabilities in Few-Electron Xe Ions,” G. Moller, E. Trabert, P.H. Heckmann, P. Mokler, and A.E. Livingston, *Zeitschrift für Physik D* 18, 223-229 (1991).

“Lifetime Measurements in Highly-Ionized Silicon,” A.E. Livingston, F.G. Serpa, A.S. Zacarias, L.J. Curtis, H.G. Berry, and S.A. Blundell, *Phys. Rev. A* 43, 7820-7822 (1991).

“Two-photon decay of the $1s2s\ ^1S_0$ state in ${}_{36}\text{Kr}^{34+}$ produced by resonant transfer and excitation,” Th. Stöhlker, Ch. Kozhuharov, A.E. Livingston, P.H. Mokler, J. Ullrich and B. Fricke, *Zeitschrift für Physik D* 21, S233-234 (1991).

“Strong contributions from Rydberg transitions in EUV radiation from beam-foil excited heavy ions at 1.4 MeV/u,” B. Kraus, K.-H. Schartner, F. Folkmann, A.E. Livingston, and P.H. Mokler, *Zeitschrift für Physik D* 21, S305-307 (1991).

“EUV spectra from Ne and Ar recoil ions induced by 1.4 MeV/u heavy ion beams,” B. Kraus, K.-H. Schartner, F. Folkmann, A.E. Livingston and P.H. Mokler, *Zeitschrift für Physik D* 21, S303-304 (1991).

“Radiative electron capture into the K-, L-, and M-Shell of decelerated, hydrogenic Ge projectiles,” Th. Stöhlker, C. Kozhuharov, A.E. Livingston, P.H. Mokler, Z. Stachura, and A. Warczak, *Zeitschrift für Physik D* 23, 121-125 (1992).

“Measurement of the $6p\ ^2P_{3/2}$ state lifetime in atomic cesium,” C.E. Tanner, A.E. Livingston, R.J. Rafac, F.G. Serpa, K.W. Kukla, H.G. Berry, L. Young, and C.A. Kurtz, *Phys. Rev. Lett.* 69, 2765-2767 (1992).

“Comparisons of the QED and relativistic parts of the triplet-state energies in the heliumlike sequence,” H.G. Berry, R.W. Dunford and A.E. Livingston, *Phys. Rev. A* 47, 698-701 (1993).

“Branching Ratio for the M1 Decay of the $2\ ^2S_{1/2}$ State in One-Electron Krypton,” S. Cheng, H.G. Berry, R.W. Dunford, D.S. Gemmell, E.P. Kanter, B.J. Zabransky, A.E. Livingston, L.J. Curtis, J. Bailey, and J.A. Nolen, Jr., *Phys. Rev. A* 47, 903-910 (1993).

“Experimental Transition Probabilities of Intercombination Transitions in Mg-like and Al-like Ions of Bromine,” E. Trabert, J. Suleiman, S. Cheng, H.G. Berry, R.W. Dunford, E.P. Kanter, C. Kurtz, A.E. Livingston, K.W. Kukla, F.G. Serpa, and L.J. Curtis, *Phys. Rev. A*47, 3805-3809 (1993).

“Fine structures and transition rates in highly-charged ions,” A.E. Livingston in Highly-Charged Ions, AIP Conference Proceedings 274, ed. P. Richard et al., pp. 389-393 (1993).

“Fine structure of the 2^3P state in helium-like ions,” A.E. Livingston, E.J. Galvez, A.S. Zacarias, and F.G. Serpa in Highly-Charged Ions, AIP Conference Proceedings 274, ed. P. Richard et al., pp. 402-405 (1993).

“Rydberg transitions in Be-like Si XI,” F.G. Serpa, A.E. Livingston, K. Kukla, and E.J. Galvez, in Highly-Charged Ions, AIP Conference Proceedings 274, ed. P. Richard et al., pp. 419-422 (1993).

“Spectroscopy of highly-ionized atoms using position-sensitive detection,” K.W. Kukla, A.E. Livingston, F.G. Serpa, A.S. Zacarias, H.G. Berry, R.W. Dunford, E. Kanter, S. Cheng, J. Suleiman, L.J. Curtis, and E. Trabert, in Highly-Charged Ions, AIP Conference Proceedings 274, ed. P. Richard et al., pp. 398-401 (1993).

“Two-photon decay of the 2^1S_0 state in He-like bromine,” R.W. Dunford, H.G. Berry, S. Cheng, E.P. Kanter, C. Kurtz, B.J. Zabransky, A.E. Livingston, and L.J. Curtis, *Phys. Rev. A*48, 1929-1936 (1993).

“Lifetime of the $2^2S_{1/2}$ state in hydrogenlike krypton,” S. Cheng, R.W. Dunford, E.P. Kanter, H.G. Berry, D.S. Gemmell, B.J. Zabransky, A.E. Livingston, L.J. Curtis, J. Bailey, and J. Nolen in Highly-Charged Ions, AIP Conference Proceedings 274, ed. P. Richard et al., pp. 394-397 (1993).

“Forbidden transitions in one- and two-electron nickel,” R.W. Dunford, H.G. Berry, D.A. Church, M. Hass, C.J. Liu, M.L.A. Raphaelian, B.J. Zabransky, L.J. Curtis, and A.E. Livingston, *Phys. Rev. A*48, 2729-2745 (1993).

“ $M1$ decay of the 2^3S_1 state in heliumlike krypton,” S. Cheng, R.W. Dunford, C.J. Liu, B.J. Zabransky, A.E. Livingston and L.J. Curtis, *Phys. Rev. A*49, 2347-2353 (1994).

“Beam-foil Spectroscopy in the Extreme UV of Highly Ionized Silicon Si XI and the Isoelectronic Ions Al X, S XIII and Ar XV,” S. Khardi, M.C. Buchet-Poulizac, J.P. Buchet, M. Carre, A. Denis, J. Desesquelles, A.E. Livingston, S. Martin and Y. Ouerdane, *Physics Scripta* 49, 571-577 (1994).

“Precision lifetime measurements of the $6p^2P_{1/2,3/2}$ states in atomic cesium,” R.J. Rafac, C.E. Tanner, A.E. Livingston, K.W. Kukla, H.G. Berry and C.A. Kurtz, *Phys. Rev. A*50, R1976-R1979 (1994).

“Experimental lifetimes for Mg-like chlorine,” L. Engström, P. Bengtsson, C. Jupén, A.E. Livingston, and I. Martinson, *Phys. Rev. A*51, 179-184 (1995).

- “Fine-structure energies for the $1s2s^3S - 1s2p^3P$ transition in heliumlike Ar^{16+} ,” K.W. Kukla, A.E. Livingston, J. Suleiman, H.G. Berry, R.W. Dunford, D.S. Gemmell, E.P. Kanter, S. Cheng, and L.J. Curtis, *Phys. Rev.* **A51**, 1905-1917 (1995).
- “Fine structure energies for the $1s2s^3S-1s2p^3P$ transition in helium-like ions,” A.E. Livingston, K.W. Kukla, C.M. Vogel Vogt, H.G. Berry, R.W. Dunford, D.S. Gemmell, E.P. Kanter, J. Suleiman, R. Ali, S. Cheng and L.J. Curtis, *Nucl. Instrum. Meth.* **B98**, 28-32 (1995).
- “Spectral distribution of the two-photon decay of He-like krypton,” R. Ali, I. Ahmad, H.G. Berry, R.W. Dunford, D.S. Gemmell, E.P. Kanter, P.H. Mokler, A.E. Livingston, S. Cheng, and L.J. Curtis, *Nucl. Instrum. Meth.* **B98**, 69-73 (1995).
- “Precision lifetime measurements using laser excitation of a fast atomic beam,” C.E. Tanner, A.E. Livingston, R.J. Rafac, K.W. Kukla, H.G. Berry, and C.A. Kurtz, *Nucl. Instrum. Meth.* **B99**, 117-120 (1995).
- “The Structure of High-Z Helium-Like Ions,” T. Stoeckler and A.E. Livingston, *Acta Physica Polonica* **B27**, 441-450 (1996).
- “Shape of the two-photon-continuum emission from the $1s2s^1S_0$ state in He-like krypton,” R. Ali, I. Ahmad, R.W. Dunford, D.S. Gemmell, M. Jung, E.P. Kanter, P.H. Mokler, H.G. Berry, A.E. Livingston, S. Cheng and L.J. Curtis, *Phys. Rev.* **A55**, 994-1006 (1997).
- “The Extreme-ultraviolet spectrum of Ne III,” A.E. Livingston, R. Buttner, A.S. Zacarias, B. Kraus, K.-H. Scharfner, F. Folkmann, and P. Mokler, *J. Opt. Soc. Am.* **B14**, 522-525 (1997).
- “E1-M1 Damping Interference in the Electric Field Quenching of Metastable Ar^{17+} Ions,” R.W. Dunford, D.S. Gemmell, M. Jung, E.P. Kanter, H.G. Berry, A.E. Livingston, S. Cheng, and L.J. Curtis, *Phys. Rev. Lett.* **79**, 3359-3362 (1997).
- “Electron bremsstrahlung in collisions of 223 MeV/u He-like uranium ions with gaseous targets,” T. Ludziejewski, Th. Stöhlker, S. Keller, H. Beyer, F. Bosch, O. Brinzaescu, R.W. Dunford, B. Franzke, C. Kozhuharov, D. Liesen, A.E. Livingston, G. Menzel, J. Meier, P.H. Mokler, H. Reich, P. Rymuza, Z. Stachura, M. Steck, L. Stenner, P. Świat, and A. Warczak, *J. Phys.* **B31**, 2601-2609 (1998).
- “Lifetime of the $3p^2P_{3/2}$ level in sodiumlike bromine (BR xxv),” A. Vasilyev, E. Jasper, H.G. Berry, A.E. Livingston, L.J. Curtis, S. Cheng, and R.W. Dunford, *Phys. Rev.* **A58**, 732-735 (1998).
- “Measurements of $2s^2S_{1/2}-2p^2P_{3/2,1/2}$ transition energies in lithiumlike heavy ions: Experiments and results for Ni^{25+} and Zn^{27+} ,” U. Staude, Ph. Bosselmann, R. Büttner, D. Horn, K.-H. Scharfner, F. Folkmann, A.E. Livingston, T. Ludziejewski and P.H. Mokler, *Phys. Rev.* **A58**, 3516-3523 (1998).
- “Measurement of the two-photon spectral distribution from decay of the $1s2s^1S_0$ level in He-like nickel,” H.W. Schaeffer, R.W. Dunford, E.P. Kanter, S. Cheng, L.J. Curtis, A.E. Livingston, and P.H. Mokler, *Phys. Rev.* **A59**, 245-250 (1999).

“Measurement of $2s\ ^2S_{1/2}$ - $2p\ ^2P_{1/2,3/2}$ transition energies in lithiumlike heavy ions. II. Experimental results for Ag^{44+} and discussion along the isoelectronic series,” Ph. Bosselmann, U. Staude, D. Horn, K.-H. Schartner, F. Folkmann, A.E. Livingston, and P.H. Mokler, Phys. Rev. A 59, 1874-1883 (1999).

“Higher Order Photon Transitions in H-like and He-like Ions,” R.W. Dunford, E.P. Kanter, H.W. Schäffer, P.H. Mokler, H.G. Berry, A.E. Livingston, S. Cheng, and L.J. Curtis, Phys. Scripta T80, 143-144 (1999).

“Measurement of $2s$ - $2p$ Transition Energies in Few Electron Heavy Ions,” Ph. Bosselmann, K.-H. Schartner, U. Staude, A.E. Livingston, F. Folkmann, P.H. Mokler, and T. Ludziejewski, Phys. Scripta T80, 145-147 (1999).

“Lifetime Measurements for Allowed and Forbidden Transitions ,” E. Jasper, A. Vasilyev, K. Kukla, C. Vogel Vogt, A.E. Livingston, H.G. Berry, S. Cheng, L.J. Curtis, and R.W. Dunford, Physica Scripta T80, 466-468 (1999).

“Relativistic many-body calculations of electric-dipole transitions between $n = 2$ states in B-like ions,” U.I. Safronova, W.R. Johnson, and A.E. Livingston, Phys. Rev. A 60, 996-1004 (1999).

“Two-photon decay in strong central fields observed for the case of He-like gold ,” H.W. Schäffer, P.H. Mokler, R.W. Dunford, C. Kozhuharov, A. Krämer, A.E. Livingston, T. Ludziejewski, H.-T. Prinz, P. Rymuza, L. Sarkadi, Z. Stachura, Th. Stöhlker, P. Swiat, and A. Warczak, Phys. Lett. A 260, 489-494 (1999).

“Fast-beam laser lifetime measurements of the cesium $6p\ ^2P_{1/2,3/2}$ states ,” Robert J. Rafac, Carol E. Tanner, A. Eugene Livingston, and H. Gordon Berry, Phys. Rev. A 60, 3648-3662 (1999).

“Measurements of $2s\ ^2S_{1/2}$ - $2p\ ^2P_{1/2}$ transition energies in lithiumlike heavy ions. III. Experimental results for Sn^{47+} and Xe^{51+} ,” D. Feili, Ph. Bosselmann, K.-H. Schartner, F. Folkmann, A.E. Livingston, E. Träbert, X. Ma and P.H. Mokler, Phys. Rev. A 62, 022501 (2000).

“Spectroscopy using stimulated electron-ion recombination,” A. Wolf, G. Uhlenberg, U. Schramm, T. Schüssler, A.E. Livingston, G. Gwinner, G. Saathoff, and D. Schwalm, Hyperfine Interactions 127, 203-210 (2000).

“Access to Two-Photon QED Contributions via $2s\ ^2S_{1/2}$ - $2p\ ^2P_{1/2}$ Transitions in Heavy Li-Like Ions,” D. Feili, Ph. Bosselmann, K.-H. Schartner, P.H. Mokler, X. Ma, A.E. Livingston, F. Folkmann, and E. Träbert, Physics Scripta T92, 300-302 (2001).

“The $2s^2p^3s$, $3p$ and $3d$ Configurations in Nine Times Ionized Chlorine, Cl X ,” C. Jupén, P. Bengtsson, L. Engström, and A.E. Livingston, Physica Scripta 64, 329-332 (2001).

“ $1s2s2p^23s\ ^6P-1s2p^33s\ ^6S^0$ Transitions in Orv,” B. Lin, H.G. Berry, T. Shibata, A.E. Livingston, H.-P. Garnir, T. Bastin, J. Désesquelles, and I. Savukov, Phys. Rev. A 67, 062507-062515 (2003).

“ $1s2s2p^23p\ ^6L-1s2p^33p\ ^6P$ transitions in O IV, F V and Ne VI,” B. Lin, H.G. Berry, T. Shibata, A.E. Livingston, H.-P. Garnir, T. Bastin and J. Désesquelles, J. of Phys. B: At. Mol. Opt. Phys. 37, 13, 2797-2809 (2004).

$2s^2\ ^1S_0 - 2s2p\ ^3P_1$ Intercombination Transition Wavelengths in Be-like Ag^{43+} , Sn^{46+} , and Xe^{50+} Ions,” D. Feili, B. Zimmerman, C. Neacsu, Ph. Bosselmann, K.-H. Schartner, F. Folkmann, A.E. Livingston, E. Träbert, and P.H. Mokler, Physica Scripta 71, 48-51 (2005).

“Extreme-ultraviolet wavelength and lifetime measurements in highly-ionized krypton,” K.W. Kukla, A.E. Livingston, C.M. Vogel Vogt, H.G. Berry, R.W. Dunford, L.J. Curtis, and S. Cheng, Can. J. Phys. 83, 1-16 (2005).

“Walter Johnson’s Scientific Career – Forward,” H.G. Berry, K.T. Cheng, A.E. Livingston, J. Sapirstein and C.E. Tanner, Can. J. Phys. 87, V-VI (2009).