

Selected Publications from Kinema Research & Software LLC

(linked to downloadable pdf files when available)

- [“Study of Striations in a Spherically Symmetric Hydrogen Discharge”](#), W. Lowell Morgan and Montgomery W. Childs (February 2015).
- [“Evaporation of Salt Water in a Mist Coflowing With Propane and Air”](#), W. Lowell Morgan and Louis A. Rosocha (December 2015)
- [“Surface Electrical Discharges and Plasma Formation on Electrolyte Solutions”](#), W.L. Morgan and Louis A. Rosocha (2012).
- [“The Physics and Plasma Chemistry of an RF Needle in a Saltwater Aerosol”](#), W. Lowell Morgan and Louis A. Rosocha (December 2012).
- [“Evaporation of Salt Water in a Mist Co-Flowing with Propane and Air”](#), W. Lowell Morgan and Louis A. Rosocha (June 2014).
- [“The Ion Chemistry in Hydrothermal Supercritical Aqueous Sodium Chloride Fluid Ablated From a Liquid Surface”](#), W. Lowell Morgan (December 2012).
- [“Simulation of the Effects of Force and Heat Produced by a Plasma Actuator on Neutral Flow Evolution”](#), G. I. Font, S. Jung, C. L. Enloe, T. E. McLaughlin, W. L. Morgan, and J. W. Baughn, AIAA 2006-0167 (January 2006).
- [“FLYCHK: Generalized population kinetics and spectral model for rapid spectroscopic analysis for all elements”](#), H. K. Chung, M. H. Chen, W. L. Morgan, Y. Ralchenko, and R. W. Lee, High Energy Density Physics 1, 3 (2005).
- [“FLYCHK: An Extension to the K-Shell Spectroscopy Kinetics Model FLY”](#), H.-K. Chung, W.L. Morgan, and R.W. Lee, Journal of Quantitative Spectroscopy and Radiative Transfer 81, 107 (2003).
- [“Population Kinetics Modeling for Non-LTE and Non-Maxwellian Plasmas Generated in Finite Temperature Dense Matter Experiments Arising from Short Pulse X-Ray Sources”](#), H.-K. Chung, W.L. Morgan, and R.W. Lee, Proceedings of the 3rd International Conference on Inertial Fusion Sciences and Applications (September 2003).
- [“Electron Collision Cross Sections for Tetraethoxysilane \(TEOS\)”](#), W.L. Morgan, V. McKoy, and C. Winstead, Journal of Applied Physics 92, 1663 (2002).
- [“Cross Section Set and Chemistry Model for the Simulation of c-C4F8 Plasma Discharges”](#), G.I. Font, W.L. Morgan, and G. Mennenga, Journal of Applied Physics 91, 3530 (2002)
- [“Electron Transport Properties and Collision Cross Sections in C2F4”](#), Yoshida, Goto, Tagashira, Winstead, McKoy, and Morgan, Journal of Applied Physics 91, 2637 (2002).
- [“Electron Cross Section Set for CHF3”](#), W.L. Morgan, C. Winstead, and V. McKoy, Journal of Applied Physics 90, 2009 (2001).
- [“Electron Collision Data for Plasma Chemistry Modeling”](#), W.L. Morgan, Advances in Atomic, Molecular, & Optical Physics 43, 79 (2000).
- [“A Critical Evaluation of Low-Energy Electron Impact Cross Sections for Plasma Processing Modeling I: Cl2, F2, and HCl”](#), W.L. Morgan, Plasma Chemistry and Plasma Processing 12, 449 (1992).
- [“A Critical Evaluation of Low-Energy Electron Impact Cross Sections for Plasma Processing Modeling II: CF4, SiH4, and CH4”](#), W.L. Morgan, Plasma Chemistry and Plasma Processing 12, 477 (1992).
- [“ELENDF: A Time Dependent Boltzmann Solver for Partially Ionized Plasmas”](#), W.L. Morgan and B.M. Penetrante, Computer Physics Communications 58, 127 (1990).